

Organizational Commitment, Organization-Based Self-Esteem, Emotional Exhaustion and
Turnover: A Conservation of Resources Perspective

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Abstract

We examined the relationship of four commitment dimensions (affective, normative, continuance-perceived sacrifices, and continuance-lack of alternatives) to emotional exhaustion over time under the lens of Conservation of Resources Theory (Hobföll, 1989). Using data from 260 employees, Time 1 lack of alternatives and normative commitment contributed positively to Time 2 emotional exhaustion, controlling for Time 1 emotional exhaustion. Organization-based self-esteem (OBSE) moderated the relationship of lack of alternatives commitment to emotional exhaustion such that the relationship was stronger when OBSE was high. We further theorized that the resource drain engendered by emotional exhaustion would cause OBSE to be positively related to turnover, controlling for commitment dimensions. Results supported this prediction. The implications of these findings for future research on commitment, emotional exhaustion, and turnover are discussed.

Keywords: organizational commitment, emotional exhaustion, organization-based self-esteem, turnover, conservation of resources.

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Organizational commitment has been the subject of considerable research attention during the past two decades (Klein, Molloy, & Cooper, 2009). Meta-analyses (Cooper-Hakim & Viswesvaran, 2005; Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Riketta, 2002) have consistently shown that organizational commitment is related to a wide range of organization-relevant outcomes, such as turnover, performance, and organizational citizenship behaviors. However, it has also been established that the strength of these relationships varies depending on which component of commitment is measured. Affective commitment (AC), which represents commitment based on identification to the goals and values of the organization, generally displays the strongest relationships to work outcomes, followed by normative commitment (NC) – i.e., commitment out of perceived obligation towards the organization – and continuance commitment (CC) – i.e., commitment based on the perceived cost associated with leaving (Meyer et al., 2002).

Social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) have been the dominant frameworks used to theorize the mechanisms through which AC and NC develop and contribute to work outcomes. Specifically, employees who believe that their organization values them and cares about their well-being are likely to reciprocate such favorable treatment through increased AC and NC (e.g., Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Lee & Peccei, 2007; Meyer & Allen, 1997; Rhoades & Eisenberger, 2002; Rhoades, Eisenberger, & Armeli, 2001). As a result of this fulfilling relationship, employees behave in ways that are beneficial to the organization (Lavelle, Rupp, & Brockner, 2007; Meyer & Herscovitch, 2001) which may be achieved, for instance, via stronger performance and less turnover. In contrast, CC was originally conceptualized as deriving from the side-bets

accumulated through organizational membership and the lack of employment alternatives (Becker, 1960; Powell & Meyer, 2004), and is hence based on more instrumental considerations. Further work on the dimensionality of CC revealed that it subsumes two separate components: the perceived sacrifice associated with leaving, or “perceived high sacrifice” (HS) and the “perceived lack of employment alternatives” (LA) (e.g., Bentein, Vandenberg, Vandenberghe, & Stinglhamber, 2005; McGee & Ford, 1987; Meyer, Allen, & Gellatly, 1990). HS and LA represent distinct bases or motives that are used by employees to make sense of their behavior within and towards the organization.

As research is moving towards exploring the role of organizational commitment in employee-relevant outcomes such as health-related consequences (see Meyer & Maltin, 2010), a renewed conceptualization of the commitment construct may be in order. This is reflected by scholars’ recent calls for looking beyond social exchange theory in explaining the development of commitment dimensions and their relationships with work outcomes (e.g., Grant, Dutton, & Rosso, 2008). Along these lines, Panaccio and Vandenberghe (2009) suggested that commitment components differ in the extent to which they grant individuals access to valued resources that may help them complete their job duties. Using Conservation of Resources theory (COR theory; Hobföll, 1989), which is rooted in the stress and burnout literature, they argued that AC would be associated with the most valuable resources and LA with a perceived threat to resources. Of importance, they found AC and LA to be uniquely related to psychological well-being (the relationship of AC to well-being being positive and that of LA, negative), controlling for role stressors.

This study intends to extend this line of research by highlighting the importance of resource gains and losses as unique and specific mechanisms that explain the relationships among commitment, emotional exhaustion, and turnover. First, we will examine the role of

organizational commitment in emotional exhaustion, the central dimension of burnout (Lee & Ashforth, 1996, Maslach, Schaufeli, & Leiter, 2001; Taris, Le Blanc, Schaufeli, & Schreurs, 2005). This research endeavor is worthwhile in our view as few studies have addressed commitment components' relationships to employee-relevant outcomes in general and burnout in particular, and prior work on organizational commitment and burnout has been limited by the extensive use of cross-sectional designs (see Meyer & Maltin, 2010). The present study uses two measurement points spaced one year apart to examine the relationship of commitment components to emotional exhaustion.

Second, expanding the same theoretical grounds, we assess the moderating role of organization-based self-esteem (OBSE; Pierce & Gardner, 2004) in the relationship between organizational commitment and emotional exhaustion. More precisely, we theorize that OBSE interacts with LA in producing heightened resource depletion, hence higher emotional exhaustion. Finally, we further test the usefulness of COR theory in predicting work-related behavior by assessing the incremental contribution of emotional exhaustion in the prediction of turnover, above and beyond commitment components. In the next few sections, we discuss our research model and present our hypotheses.

Organizational Commitment and Emotional Exhaustion

Meyer and Herscovitch (2001) defined commitment as “a force that binds an individual to a course of action of relevance to one or more targets” (p. 301) that can be accompanied by different rationales which influence behavior. These rationales reflect *desire* for AC, *perceived obligation* for NC and *perceived cost* for CC. Further work has proposed to refine the rationale underlying CC to reflect *perceived cost* for HS (i.e., the core essence of CC) and *perceived lack of alternatives* for LA (Bentein et al., 2005; McGee & Ford, 1987; Meyer et al., 1990; Powell & Meyer, 2004). Generally, studies that explored the relationship between organizational

commitment and emotional exhaustion focused on the affective component only. Yet, given that commitment dimensions have different underpinnings and, as we argue below, different implications in terms of resource gain or loss, their relationships with burnout and emotional exhaustion likely differ. Moreover, the extensive usage of cross-sectional designs in prior research makes it difficult to determine whether organizational commitment is really a determinant of emotional exhaustion (e.g., Babakus, Cravens, Johnston, & Moncrief, 1999; Cole & Bedeian, 2007; Kalliath, O'Driscoll, & Gillespie, 1998; Lee & Ashforth, 1996; Schmidt, 2007).

To further investigate the commitment-emotional exhaustion relationship, we used a time-lagged design and examined whether the four commitment dimensions described above incrementally predicted emotional exhaustion, *controlling for initial levels of emotional exhaustion*. From a conceptual standpoint, we draw on COR theory (Hobföll, 1989, 2002) as a basis for theorizing how and why organizational commitment components may influence emotional exhaustion. COR theory postulates that people strive to retain, protect, and build resources, conceived as “objects, personal characteristics, conditions or energies that are valued in their own right or that (...) act as conduits to the achievement or protection of valued resources” (Hobföll, 2001, p. 339). The theory further states that stress results from a threat to resources, a loss of resources, or an imbalance between resource investment and expected gain of resources (Halbesleben, 2006). When individuals experience continuous losses or expect severe resource losses, they come to suffer from resource depletion which ultimately leads to (emotional) exhaustion (Hobföll & Freedy, 1993).

Recent conceptual work on the commitment construct by Meyer, Becker, and Vandenberghe (2004) suggests commitment acts as an energizing force for motivated behaviors. As such, commitment indirectly shapes the resources necessary for employees to perform their work roles.

For example, from a COR theory perspective, AC provides a sense of direction and purpose to individuals' work (Ashforth & Mael, 1989; Irving & Coleman, 2003; Kobasa, 1982). Indeed, as Meyer and Maltin (2010) suggested, AC is associated with a strong belief that one is behaving in accord with one's intrinsic interests or values, which creates a sense of autonomy. The psychological state associated with AC allows individuals to function with minimal expenditure of energy and without fearing a loss of resources, which should reduce the likelihood of emotional exhaustion. This is because autonomy is a key resource individuals naturally value and seek to preserve (Hobföll, 2002; Ryan & Deci, 2000). Moreover, by fostering identification and attachment towards the organization, AC gives employees a sense of stability, security, and belonging (Schmidt, 2007), which should prevent them from expecting future losses of resources. These arguments are in line with past cross-sectional studies that found AC to be negatively related to emotional exhaustion (e.g., Babakus et al., 1999; Cole & Bedeian, 2007; Kalliath et al., 1998; Lee & Ashforth, 1996; Schmidt, 2007). In the context of the present investigation, we expect AC to explain incremental variance in emotional exhaustion, controlling for initial levels of emotional exhaustion. This leads to the following hypothesis:

Hypothesis 1a: Time 1 AC will be negatively related to Time 2 emotional exhaustion, controlling for Time 1 emotional exhaustion.

Scant research has examined the relationship between CC and emotional exhaustion. Bakker, Demerouti, de Boer, and Schaufeli (2003) reported a correlation of .16 between the two variables while King and Sethi (2007) reported a correlation of .29. However, these authors did not distinguish among the two subcomponents of CC. We argue that LA, more so than HS, may account for the positive relationship observed between CC and emotional exhaustion. Employees who experience LA believe that the external environment holds few or no opportunities of employment and justify to themselves their membership in the organization for that reason.

Accordingly, they tend to feel trapped in their organization (Meyer et al., 2002). It is known that such purely externally regulated behaviors are associated with feelings of alienation and are generally perceived to be uninteresting and unfulfilling (deCharms, 1968; Ryan & Deci, 2000). As such, feelings of entrapment, which represent the core component of LA, are inherently stressful (Meyer et al., 2002) and may drain employees' resources by focusing attention on the threat of job loss (Panaccio & Vandenberghe, 2009; Spector, 1982). Indeed, while employment is, in itself, a valued resource (Hobföll, 1989), the threat of job loss (which underlies LA) may instill the fear of losing many valued resources, such as regular salary, social status, and social network, associated with holding a job (Ashford, Lee, & Bobko, 1989; Blau, 2007; Hobföll, 1989; Kinicki, Prussia, & McKee-Ryan, 2000). The preceding argument leads to the following hypothesis:

Hypothesis 1b: Time 1 LA will be positively related to Time 2 emotional exhaustion, controlling for Time 1 emotional exhaustion.

The other component of CC, i.e., HS, reveals a very different rationale. HS reflects the feeling of being attached to the organization due to instrumental reasons such as the accumulation of advantages and valued perks. Given its instrumental basis, this commitment dimension should not have implications for people's emotional resources. Indeed, contrary to LA, which involves negative emotions such as fear and anxiety, HS is more cognitively driven, and hence should not relate to "emotional drain". Therefore, we do not expect HS to be related to emotional exhaustion.

With regards to NC, research has shown that it relates to the same outcomes than AC, albeit less strongly. NC is driven by a sense of reciprocity and reflects the perceived obligation to "do the right thing" (Meyer & Parfyonova, 2010). Research has also demonstrated that NC can lead to more positive outcomes when combined with AC (e.g., Herscovitch & Meyer, 2002; Somers,

2009). Conceptually, people with a high sense of NC experience feelings of obligation because they believe their organization has supported them in some way. This suggests NC is inherently tied to individuals' sense of self-worth (Meyer et al., 2004). As self-worth is a well-known resource individuals can capitalize on during tough times (Hobföll, 2001), we may expect NC to be negatively related to emotional exhaustion. This leads to the following hypothesis:

Hypothesis 1c: Time 1 NC will be negatively related to Time 2 emotional exhaustion, controlling for Time 1 emotional exhaustion.

Organization-Based Self-Esteem as a Moderator

In this section, we make the point that OBSE will exacerbate the effect of LA on emotional exhaustion, hence contributing to drain individuals' emotional resources. OBSE reflects the self-perceived value that individuals have of themselves as important, competent, and capable individuals within their employing organizations (Pierce & Gardner, 2004). Although it is mainly built through work experiences (Pierce, Gardner, Cummings, & Dunham, 1989), OBSE is also strongly associated with global self-esteem (e.g., Jex & Elacqua, 1999; Pierce et al., 1989) and shares much of its functioning. According to self-verification theory (e.g., Swann, 1983), self-esteem – and, by extension, OBSE – basically serves a self-regulatory function. This theory states that “people are motivated to verify, validate, and sustain their existing self-concepts” (Leary, 2007, p. 324).

As an example of the operation of self-verification theory, Stinson et al. (2010) demonstrated that when the environment's feedback (e.g., feedback concerning one's relational value to others) is consistent with one's self-esteem, people experience feelings of authenticity, control and certainty. In contrast, when the feedback is inconsistent, feelings of discomfort are generated, resulting in efforts to solve the discrepancy between feedback and self-esteem. Over time, these efforts ultimately draw on one's emotional resources. Furthermore, self-verification

has been shown to operate the same way with OBSE as with generalized self-esteem (Wiesenfeld, Swann, Brockner, & Bartel, 2007).

Among the four dimensions of commitment examined in this study, LA represents the most externally regulated dimension. In a recent study, LA was found to strongly correlate with externally regulated motivation, while AC, NC, and HS primarily correlated with more internalized forms of regulation (Gagné, Chemolli, Forest, & Koestner, 2008). Thus, while other forms of commitment are mainly driven by internal motives and could thus hardly be seen as a form of social feedback from the environment, LA stems from individuals' assessment of the extent to which the environment offers valuable employment alternatives (Meyer et al., 2002; Meyer & Herscovitch, 2001). In the terms of self-verification theory, LA involves a judgment about the extent to which the individual's competencies are sought after in the labor market. Such a judgment, as perceived by the individual, thus incorporates a feedback from the environment regarding one's value in the market. This feedback may result either in consistency or inconsistency with one's self-view. If the feedback is incongruent, the individual will engage in intense regulatory efforts to make sense of the feedback in order to reduce the discrepancy, resulting over time in regulatory or resource depletion (Stinson et al., 2010).

Thus, consistent with Stinson et al. (2010) emphasis on the regulatory function of self-esteem, we reasoned that individuals' OBSE will interact with LA in the prediction of emotional exhaustion. Specifically, for low-OBSE individuals, LA should be interpreted as being consistent with their self-view. In other words, the perception that their competencies are not sought after in the job market (LA) is consistent with the negative evaluation they hold of themselves (low OBSE). In contrast, for high-OBSE individuals, LA is likely to be incongruent with their self-view. That is to say, the acknowledgment of few job opportunities will be inconsistent with their view of themselves as important and competent employees. Therefore, the regulatory efforts

expected to be exerted to solve the discrepancy will be important, and over time, will lead to resource depletion. Thus, in line with COR theory principles, LA should lead to more severe emotional drain over time among high-OBSE individuals due to intense self-regulatory efforts (e.g., actively seeking alternatives or attempting to make oneself more attractive for potential employers) (Hobföll, 1989; Stinson et al., 2010). This leads to the following hypothesis:

Hypothesis 2: Organization-based self esteem moderates the relationship of Time 1 LA to Time 2 emotional exhaustion, controlling for Time 1 emotional exhaustion, such that this (positive) relationship will be stronger when organization-based self esteem is high.

Emotional Exhaustion and Turnover

Understanding the factors that lead to employee turnover is a critical issue for organizations (Steel, Griffeth, & Hom, 2002). Some researchers have argued that emotional exhaustion counts among those factors that make employees more likely to withdraw from the organization (e.g., Cropanzano, Rupp, & Byrne, 2003; Westman & Eden, 1997). Supporting this view, reviews and meta-analytic findings reveal that emotional exhaustion is consistently positively related to turnover intentions and actual turnover (Cordes & Dougherty, 1993; Lee & Ashforth, 1996; Swider & Zimmerman, 2010). From a COR theory perspective, emotional exhaustion's role in turnover relates to the resource depletion process it entails (Hobföll, 1989). Indeed, when people are exhausted, their personal resources are spent, and as a consequence, they engage in avoidant and withdrawal coping strategies to protect themselves from further damages to their health (Cole & Bedeian, 2007; Halbesleben, 2006; Hobföll, 2002; Wright & Cropanzano, 1998). In fact, if employees reason that feelings of exhaustion and frustration with their work conditions will not subside, they may decide to leave in order to protect themselves (Siegall & McDonald, 2004; Swider & Zimmerman, 2010).

Our purpose in this study is to demonstrate that the “resource depletion” process (i.e., emotional exhaustion) described above has a unique contribution to turnover that should not be confounded with the “social exchange” process that explains organizational commitment’s influence on turnover. Prior empirical research has generally failed to distinguish these two processes as sources of influence on turnover. This issue is worth clarifying because research has demonstrated that organizational commitment, particularly AC, correlates significantly with emotional exhaustion (e.g., Cole & Bedeian, 2007; Lee & Ashforth, 1996). Therefore, it is unclear whether the relationship of emotional exhaustion to turnover which has been observed in past research (e.g., Wright & Cropanzano, 1998) is actually due to its shared variance with organizational commitment. As stated by commitment theory (Meyer & Allen, 1991), low levels of commitment (e.g., AC) are associated with increased turnover because the underlying social exchange relationship with the organization is disappointing (e.g., the employee perceives having low support and poor job conditions). In contrast, following COR theory principles (Hobföll, 1989), emotional exhaustion leads to turnover because resource depletion makes leaving a behavior that protects the individual from further damage (Siegall & McDonald, 2004; Swider & Zimmerman, 2010). The two mechanisms are conceptually distinguishable. Therefore, the following, remaining hypothesis is proposed:

Hypothesis 3: Time 1 emotional exhaustion will be positively related to Time 2 turnover, controlling for Time 1 organizational commitment components.

Method

Sample and Procedure

As part of a larger survey, 57 prospective participants – employees and managers from the third author’s network – were contacted for participation in a longitudinal study of work attitudes. They were also asked to forward an introductory message to employees and managers

from their own network. Email invitations containing a link to the online questionnaire were sent to 1060 individuals. The introductory message explained the purpose of the study and that participants would have to complete two online surveys spaced one year apart, and assured them that responses would be kept confidential. In total, 403 participants provided valuable responses to the first questionnaire, for a 38% response rate. One year later, respondents were contacted via email to complete the second survey. Among them, 260 provided usable responses, for a 65% response rate. Organizational commitment components (AC, NC, HS, and LA), OBSE, and demographics were measured at Time 1 while emotional exhaustion was measured at Time 1 and Time 2. Turnover data were collected at Time 2. Respondents had the option of answering the Time 1 questionnaire either in French or in English, and were invited to complete the Time 2 questionnaire in the language which they had chosen at Time 1. One sample *t* tests of the effect of language on responses to substantive variables of the study were found to be non significant.

Among respondents for whom complete data were available across Time 1 and Time 2 for purpose of analysis ($N = 260$), average age was 34.60 years ($SD = 8.51$), average organizational tenure was 7.61 years ($SD = 6.98$), 46% were male, and 82% answered the French versions of the surveys. Among participants, 32.8% held managerial positions, with the remainder holding non managerial positions; and 49.8% of them worked in the public sector. A large variety of industries and occupations was represented in the sample, including information technology (11.2%), health services (10.8%), engineering and architecture (9.2%), human resources management (7.7%), education (7.3%), consulting (5.0%), and marketing (5.0%).

To determine whether subject attrition led to non-random sampling across time, we tested whether the probability of remaining in the sample at Time 2 was predicted by Time 1 variables (see Goodman & Blum, 1996). The criterion was a dummy-coded variable classifying respondents as stayers vs. leavers, and the predictors were the Time 1 substantive variables

(commitment, OBSE, and emotional exhaustion) and demographics (gender, age, language, and tenure). The result for the overall equation was non significant and none of the predictors were significant (the complete results are available upon request). This suggests that data attrition across time was randomly distributed in this study.

Measures

Organizational commitment. The four components of organizational commitment were measured using Bentein et al.'s (2005) version of Meyer, Allen, and Smith's (1993) commitment scales. AC (e.g., "I feel like part of the family at my organization"; $\alpha = .90$) and NC (e.g., "I think I would be guilty if I left my current organization now"; $\alpha = .90$) scales comprised 6 items, while HS (e.g., "I would not leave this organization because of what I would stand to lose"; $\alpha = .78$) and LA (e.g., "I stay with this organization because I can't see where else I could work"; $\alpha = .72$) scales included 3 items.

OBSE. Pierce et al.'s (1989) measure of OBSE was used. This scale comprises 10 items (e.g., "I count for this organization") and displayed a good reliability in this study ($\alpha = .91$).

Emotional exhaustion. Five high-loading items from Schaufeli, Leiter, Maslach, and Jackson's (1996) MBI-GS (Maslach Burnout Inventory – General Survey) were used to measure emotional exhaustion (e.g., "I feel emotionally drained by my work"). The reliability for this scale was .89 at Time 1 and .87 at Time 2.

Turnover. Turnover data were collected at Time 2 (i.e., one year after Time 1). Among those who left their organization between Time 1 and Time 2 ($N = 40$), 9 were qualified as cases of involuntary turnover. The remainder ($N = 31$) represented voluntary turnover cases. The voluntary turnover rate was thus 12.4%. For purpose of analysis, voluntary turnover was defined as a dichotomous outcome (i.e., stay was coded as 1 while voluntary leaving was coded as 2).

Control variables. We followed Becker's (2005) recommendations to determine whether

demographics should be controlled for in our substantive analyses. As demographics were uncorrelated to Time 2 emotional exhaustion (see Table 2), they were not included in analyses predicting this variable (see Table 3). In contrast, as two demographic variables (age and organizational tenure) were significantly associated with turnover (see Table 2), we initially included these variables as controls in our analyses predicting turnover. However, as the inclusion of these controls did not affect the significance of the effects of our substantive variables, we dropped them. Results of the logistic regression analysis predicting turnover are thus reported without the inclusion of controls (see Table 4). Results of the analyses including the controls are available upon request.

Results

Confirmatory Factor Analyses

INSERT TABLE 1 ABOUT HERE

Prior to testing hypotheses, we examined the distinctiveness of our study variables using confirmatory factor analysis (CFA) via LISREL 8.72 (Jöreskog, Sörbom, Du Toit, & Du Toit, 2001) and the maximum likelihood method of estimation. We examined the structure of the data obtained at Time 1 as threats to discriminant validity may particularly appear when variables are measured at the same occasion. Results are shown in Table 1. As can be seen, the six-factor model of Time 1 variables yielded a good fit to the data, $\chi^2(480) = 1132.19, p < .01$, NNFI = .95, CFI = .95, SRMR = .08, RMSEA = .08. Moreover, any more parsimonious model obtained by combining variables on a two-by-two basis resulted in significant decrements in fit ($p < .01$) (see Table 1). These results suggest our Time 1 variables were distinguishable.

Descriptive Statistics and Intercorrelations

INSERT TABLE 2 ABOUT HERE

Descriptive statistics, internal consistency reliabilities, and intercorrelations for the study variables are presented in Table 2. As can be seen, all variables displayed good internal consistency ($\alpha s > .70$). Of interest, Time 1 AC was negatively, and Time 1 LA positively, related to Time 2 emotional exhaustion ($r = -.13, p < .05$, and $r = .23, p < .01$, respectively). Furthermore, among substantive variables measured at Time 1, AC ($r = -.15, p < .05$), NC ($r = -.14, p < .05$) and HS ($r = -.27, p < .01$) were negatively associated with turnover while emotional exhaustion was positively related to it ($r = .16, p < .05$).

Hypothesis Testing

INSERT TABLE 3 ABOUT HERE

Hypotheses 1a-c. We used multiple regression analysis to examine the relationships of commitment components to Time 2 emotional exhaustion. In a first step, we introduced Time 1 emotional exhaustion. As can be seen from Table 3 (Model 1), Time 1 emotional exhaustion was significantly related to Time 2 emotional exhaustion ($\beta = .46, p < .001$), accounting for 21% of its variance. Next, we entered the commitment components and OBSE. Altogether, these variables accounted for 4% of incremental variance. As can be seen from Table 3 (Model 2), AC was not significantly related to Time 2 emotional exhaustion ($\beta = .07, ns$). Hypothesis 1a is thus rejected. In contrast, LA was positively related to Time 2 emotional exhaustion ($\beta = .13, p < .05$), as predicted by Hypothesis 1b. Finally, NC was significantly related to Time 2 emotional

exhaustion ($\beta = .14, p < .05$), yet the sign of the relationship was positive rather than negative. Hypothesis 1c which predicted a negative relationship between the two is thus rejected.

Hypothesis 2. As Hypothesis 2 predicted a moderating effect of OBSE on the relationship between Time 1 LA to Time 2 emotional exhaustion, controlling for Time 1 emotional exhaustion, a moderated multiple regression approach was used. Following Aiken and West (1991), we centered predictors (i.e., Time 1 commitment components and OBSE) prior to creating the interaction terms. We controlled for interactions of OBSE with the other commitment components (see Model 3 in Table 3) prior to introducing the Time 1 LA x OBSE product term (see Model 4 in Table 3). As can be seen, the interaction terms introduced at step 3 were non significant and did not account for significant variance in Time 2 emotional exhaustion ($\Delta R^2 = .02, ns$). In contrast, at step 4, Time 1 LA interacted significantly with OBSE ($\beta = .14, p < .05$) and accounted for a significant portion of the variance of Time 2 emotional exhaustion ($\Delta R^2 = .02, p < .05$).

To understand the form of this interaction, we plotted the regression line for Time 2 emotional exhaustion on Time 1 LA at 1 *SD* below and 1 *SD* above the mean of OBSE (cf. Aiken & West, 1991). Figure 1 provides the graphic depiction of this interaction. The regression line for Time 2 emotional exhaustion on Time 1 LA was significantly positive when OBSE was high, $t(258) = 3.21, p < .01$, but non significant when OBSE was low, $t(258) = -.16, ns$. Post-hoc probing of the interaction revealed that the slopes of these regression lines differed significantly from each other, $t(258) = 2.51, p < .05$. Based on Preacher, Curran, and Bauer (2006), we also calculated the region of significance of the relation between Time 1 LA and Time 2 emotional exhaustion as a function of OBSE. The region of significance on OBSE ranged from -3.12 to -0.10, revealing that the relationship between LA and emotional exhaustion was significant outside this range. However, as the observed values on centered OBSE ranged from

-2.53 to 1.17, this indicates that the effect of LA on emotional exhaustion was significant (and positive) only for OBSE values that exceeded -.10. Overall, Hypothesis 2, which predicted that the relationship of Time 1 LA to Time 2 emotional exhaustion, controlling for Time 1 emotional exhaustion, would be stronger and positive when OBSE is high, is thus supported.

INSERT FIGURE 1 ABOUT HERE

Hypothesis 3. As Hypothesis 3 involved the prediction of a dichotomous outcome variable (i.e., turnover), we tested it using logistic regression. Time 1 commitment components and OBSE were entered as controls at step 1 while Time 1 emotional exhaustion was entered at step 2. The results are reported in Table 4. As can be seen, commitment components and OBSE accounted for significant variance in turnover (Δ Nagelkerke $R^2 = .14, p < .01$) and among these predictors, HS was the sole variable to exert a significant and reducing effect on turnover likelihood ($B = -.72, p < .001$; see Table 4, Model 1). Of utmost importance, Time 1 emotional exhaustion, which was introduced at step 2, was significantly and positively related to turnover ($B = .41, p < .05$; see Table 4, Model 2) and accounted for significant incremental variance in turnover (Δ Nagelkerke $R^2 = .03, p < .05$). Hypothesis 3, which predicted that Time 1 emotional exhaustion would be positively related to turnover, controlling for the effects of organizational commitment components, is thus supported.

INSERT TABLE 4 ABOUT HERE

Discussion

In a time-lagged study of the relationships among four components of organizational commitment (AC, NC, HS, and LA), emotional exhaustion, and turnover, we found (a) LA and NC to be positively related to Time 2 emotional exhaustion, controlling for Time 1 emotional exhaustion, (b) OBSE to exacerbate LA's relationship to emotional exhaustion, and (c) emotional exhaustion to account for unique variance in turnover, over and above commitment. These findings bear important implications for research and practice that we outline below.

Theoretical Implications

Our findings provide some valuable insights into how commitment dimensions and emotional exhaustion relate to one another over time. First, while prior research has generally reported a negative association between AC and emotional exhaustion (e.g., Babakus et al., 1999; Cole & Bedeian, 2007; Kalliath et al., 1998; Lee & Ashforth, 1996; Schmidt, 2007), this research has been limited by its cross-sectional nature. In contrast, the present study controlled for prior levels of emotional exhaustion. We see this as the primary reason as to why Time 1 AC was unrelated to Time 2 emotional exhaustion in this study. Nonetheless, future research should examine whether AC to closer targets (e.g., the supervisor) is a more critical determinant of emotional exhaustion than AC to the organization. Indeed, researchers have generally conceived burnout as being determined by conditions present in the immediate work environment (Maslach et al., 2001). One's level of AC to a supervisor or a work team may be part of those proximal factors that affect health more directly.

Second, we found NC to be positively related to Time 2 emotional exhaustion (controlling for Time 1 emotional exhaustion). The few studies on the relationship between NC and health-related variables have generally reported nonsignificant associations between the two (e.g., Somers, 2009). However, one study by Tan and Aktar (1998) found a positive correlation between NC and emotional exhaustion in China. The authors argued that this relationship could

be explained by the fact that, in China, high levels of NC involve a normative pressure towards working harder, which ultimately may drain individuals' resources. It is unclear whether this phenomenon is particular to China or whether it is an integral aspect of NC. Future research should clarify this issue. Relatedly, research by Gellatly, Meyer, and Luchak (2006) has highlighted the dual nature of NC. Indeed, NC may in some cases refer to an *indebted* obligation, i.e., an obligation one owes to an organization, and in other cases, to a *moral imperative* (see also Meyer & Parfyonova, 2010). The indebted obligation facet appears to be more externally regulated and constrained than the moral imperative facet. Gellatly et al. found that the former tends to emerge when NC is associated with high levels of CC while the latter emanates from a combination with high levels of AC. Although it is unclear which facet emerged in the present study, the notion of perceived obligation that underlies NC may simply be experienced by individuals as a source of constraint, hence a lack of autonomy in general, which may be emotionally draining over time. Obviously, more work is needed on NC, particularly on how it affects individuals' well-being and emotional resources.

Third, it is difficult to compare our results regarding the role of CC in emotional exhaustion with previous research on this issue, because past studies generally used a unidimensional CC scale that merged the HS and LA dimensions (e.g., Somers, 2009; Wasti, 2005). These studies generally showed that CC was positively related to emotional exhaustion (e.g., Bakker, et al., 2003; King & Sethi, 1997). However, the present study reveals that LA may bear stronger implications for emotional exhaustion than HS. In fact, individuals with high levels of LA experience feelings of entrapment and justify their membership in the organization to themselves by the perceived lack of employment opportunities. As a result, their commitment reflects purely external regulation, and is therefore associated with a lack of a key individual resource, autonomy (Hobföll, 2002; Ryan & Deci, 2000). In addition, as suggested by COR theory

(Hobföll, 1989), LA affects another important resource, employment, which contributes to shape individuals' identities. Thus, high LA threatens a major role involvement in individuals' life, which may drain their emotional resources. Our findings are consistent with the view that resource loss and gain are different psychological experiences, and that resource loss or the threat of such loss (herein represented by LA) is more likely than the presence of valuable resources (herein associated with AC) to impact emotional exhaustion (Halbesleben & Buckley, 2004). Future research on relationships between LA and HS and emotional exhaustion should explore which resources are affected by these CC components and determine whether resource loss is a mediator of these relationships.

The importance of LA in the resource depletion process is also illustrated by the moderating role played by OBSE. We found that LA was associated with more emotional exhaustion among high-OBSE individuals, signaling that these individuals found it more difficult to perceive a lack of employment alternatives, as such a perception is not consistent with their self-views as important and competent people. In fact, LA inherently suggests one's competencies are not sought after in the labor market, which represents perceived negative feedback from the environment. According to self-verification theory (Swann, 1983), negative feedback is experienced more negatively by high-OBSE people because such feedback is not consistent with their self-view. Therefore, these people engage in efforts at solving the discrepancy. These efforts ultimately result in performance deficits (Stinson et al., 2010) and emotional drain over time. This helps explain why LA led to more emotional exhaustion among high-OBSE individuals in this study. Future research should examine whether such emotional drain mediates the effects of self-regulatory efforts on task performance.

It would be worthwhile to examine whether the effect of LA on emotional exhaustion is partly mediated by state negative affectivity. Feelings of entrapment that accompany LA may

indeed engender negative emotions which are known to be associated with burnout and stress (e.g., Alarcon, Eschleman, & Bowling, 2009; Schaubroeck, Ganster, & Fox, 1992). Along that line, emotional exhaustion has been found to be the strongest meta-analytical correlate of negative affectivity (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). Further, as negative affectivity involves negative and pessimistic views of the external environment, it does seem to be a natural fit to LA which refers to negative perceptions of one's opportunities in the job market.

Similarly, the controversy as to whether LA is a form of commitment or an antecedent to other forms of commitment such as HS (Powell & Meyer, 2004) requires attention. In our view, as far as organizational commitment is conceived of as a perceived bond with the organization (Klein et al., 2009), a variety of rationales – among which perceived lack of employment is but one example – may serve as “sense makers” of one's membership in the organization. As prior research has sometimes reported LA to be uncorrelated to turnover cognitions and turnover (Bentein et al., 2005; Meyer et al., 2002), it is tempting to conclude that LA does not really tap into the commitment construct. Our argument at this point is that, because LA is based on a purely external regulation of the behavior (i.e., perceptions of employment opportunities), it may engender negative emotions which in turn may drain individuals' resources, and hence lead to emotional exhaustion. This COR theory perspective has rarely been applied to the commitment construct but our data show that this perspective provides a novel understanding of commitment's workings, particularly its LA component.

To further pursue this line of research, it would be worth looking at whether LA increases turnover likelihood over time via its resource draining effects. Our data did not allow us to test such a proposition. To examine this, one should have at least two measurement points where LA and emotional exhaustion are measured and a later time at which turnover data are collected. It

would then be possible to determine whether LA influences turnover via change in emotional exhaustion over time. As our data revealed that resource depletion adds to the prediction of turnover beyond what is explained by commitment components, and that LA contributes incrementally to drain regulatory reserves, this prediction makes sense. Moreover, it would open a new avenue, aside from the social exchange approach (Blau, 1964), to the understanding and prediction of turnover.

Our finding that emotional exhaustion contributed incrementally to increase turnover likelihood, controlling for organizational commitment, adds to the literature in several ways. First, past research that reported emotional exhaustion to contribute to turnover did not generally control for organizational commitment (e.g., Wright & Cropanzano, 1998). This study may thus be the first illustration of the unique contribution of the resource depletion explanation based on COR theory (Hobföll, 1989) aside from the social exchange view embodied by organizational commitment (Meyer et al., 2002) to turnover likelihood. More research is however needed to determine whether part of the effect of commitment on turnover could be mediated by emotional exhaustion or whether it is the reverse, as Cropanzano et al. (2003) suggested. To disentangle this issue, one needs to collect data on commitment and emotional exhaustion at multiple occasions and on turnover at a later time. Such a design would lead to stronger conclusions with regard to how commitment and emotional exhaustion relate to one another in influencing subsequent turnover.

Second, of utmost interest, AC was not a significant predictor of turnover in this study, an unusual finding (Meyer et al., 2002). This has important theoretical implications. While research has shown that AC is strongly associated with positive affectivity (Thoresen et al., 2003) and is thus emotion-laden, the fact that emotional exhaustion taps into that aspect of the commitment concept and offsets the effect of AC suggests the identification basis of AC does not suffice to

predict turnover. Rather, the sole commitment component to explain turnover was HS, which refers to the side bets accumulated through organizational membership (Becker, 1960), reflecting an instrumental/calculative rather than an emotional attachment. Future research is obviously needed to replicate our findings and disentangle the respective roles of emotional and instrumental processes as captured by emotional exhaustion, AC, and HS, in the explanation of turnover behavior.

Practical Implications

This study's findings suggest organizations may be well advised to prevent LA from occurring. This can be done by updating employees' competencies through training and development. Indeed, higher perceived competencies may lead to career mobility and help employees remaining confident in their value on the job market (Ito & Brotheridge, 2005). This may ultimately result in lower LA. Alternatively, organizations may wish to fight the devastating effects of emotional exhaustion. Indeed, our data support the view that resource depletion acts as a key mechanism through which turnover occurs over time. For example, recent meta-analytical work (Crawford, LePine, & Rich, 2010) suggests that reducing hindrance demands (e.g., administrative hassles, emotional conflict, resource inadequacies, etc.) and fostering resources (e.g., autonomy, feedback, rewards and recognition, etc.) are two measures that should pay off in terms of burnout reduction.

As NC was positively associated with emotional exhaustion over time, organizations would be well advised to look at ways that facilitate the emergence of its positive facet (i.e., a sense of "moral imperative"), for example by fostering both AC and NC. Indeed, as Gellatly et al. (2006) have shown, such a combination is experienced as being more autonomously driven, hence less demanding. In fact, the positive association between NC and emotional exhaustion may be counteracted in contexts where AC is concomitantly fostered. This may happen in organizations

that provide employees with a sense of socioemotional support and the feeling of being cared about (Rhoades et al., 2001). Indeed, perceived support has been shown to be a strong driver of AC as well as NC (Meyer et al., 2002; Rhoades, & Eisenberger, 2002). Therefore, organizations that are generally supportive of their employees may ultimately elicit the positive facet of NC by encouraging the development of AC. In the end, this may reduce the positive association – as observed in this study – between NC and emotional exhaustion.

Finally, organizations should pay attention to situations where individuals come to develop high levels of both LA and OBSE, as this may engender particularly detrimental effects in terms of resource depletion. As research has established that organizational practices can be the source of higher OBSE (e.g., Bowling, Eschleman, Wang, Kirkendall, & Alarcon, 2010; Scott, Shaw, & Duffy, 2008), organizations should take care that such effects are not accompanied by high levels of LA. In fact, some work practices may be associated with both enhanced OBSE and reduced LA. For example, job complexity and autonomy, high-quality leader-member exchanges, and organizational support have all been found to be positively (and strongly) associated with OBSE (Bowling et al., 2010). At the same time, job complexity and autonomy may increase employees' actual competencies and stronger leader-member exchange and organizational support may increase employees' confidence that their skills are valuable on the job market. As a result, LA should be reduced. Along this line, practitioners working in career development may focus on providing employees with job assignments that help employees develop marketable competencies and offer decision latitude. These work devices are likely to lead to stronger OBSE and lower LA. Similarly, line managers may want to create higher quality relationships with their employees through mentoring practices for example, and convey messages regarding the support employees may expect to get from the organization. These actions may also lead to stronger OBSE and lower LA.

Limitations

This study has limitations. First, our data were collected from a convenient sample of employees from a variety of organizations. Findings thus need to be replicated in other samples, from various occupational settings. For example, as burnout is thought to be prevalent in human service organizations, it would be worth conducting similar research among nurses, teachers, and other professionals, and determine whether our findings still hold. Second, our study included relatively few cases of voluntary turnover ($n = 31$), which may have reduced our ability to detect some effects in our sample. Third, although our study used a time-lagged design, the precise time interval that needs to be kept between measurement occasions for effects to be detectable is unknown. Pursuing longitudinal studies with different time frames is necessary to get a more precise knowledge of the appropriate time lag between times. Fourth, the present study should be replicated using more sophisticated longitudinal designs that include enough measurement occasions to use statistical techniques such as random coefficient modeling or latent growth modeling (Ployhart & Vandenberg, 2010). These techniques are designed to track variables' change trajectories across time and examine how antecedent variables may affect such changes.

Fifth, some variables may mediate the commitment-emotional exhaustion relationship. As discussed previously, negative emotions represent such a potential mediating mechanism that future research should explore. Sixth, there might be moderators (other than OBSE) of this relationship as well. For example, individuals' coping mechanisms (e.g., Carmona, Buunk, Peiro, Rodriguez, & Bravo, 2006) have been shown to play a role in the development of burnout. Finally, our data did not allow us to examine organizational influences on our study variables. Future research should examine whether such variables as leader-member exchange and perceived organizational politics, to name a few, influence relationships among commitment,

emotional exhaustion and turnover. This endeavor may have important practical implications for organizations.

Conclusion

Using a COR theory perspective, the present study breaks new ground by examining the contribution of organizational commitment to emotional exhaustion over time. Among four commitment dimensions, LA and NC were found to relate to increased emotional exhaustion over time. In addition, LA's effect was exacerbated by individuals' OBSE. Further, we found emotional exhaustion to exert unique effects on turnover, over and above organizational commitment. Our findings demonstrate the importance of COR theory (Hobföll, 1989) as a framework to understand the relationships among organizational commitment, emotional exhaustion, and turnover. The present study also highlights the dark side of organizational commitment by showing that when commitment is solely based on external regulation, employees and organizations alike sustain negative outcomes.

References

- Aiken LS, West SG (1991) *Multiple Regression: Testing and Interpreting Interactions*. Thousand Oaks, CA: Sage.
- Alarcon G, Eschleman KJ, and Bowling NA (2009) Relationships between personality variables and burnout: A meta-analysis. *Work and Stress* 23(3): 244-263.
- Ashford SJ, Lee C, and Bobko P (1989) Content, causes, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal* 32(4): 803-829.
- Ashforth BE, Mael F (1989) Social identity theory and the organization. *Academy of Management Review* 14(1): 20-39.
- Babakus E, Cravens DW, Johnston M, and Moncrief WC (1999) The role of emotional exhaustion in sales force attitude and behavior relationships. *Journal of the Academy of Marketing Science* 27(1): 58-70.
- Bakker A, Demerouti E, de Boer E, and Schaufeli WB (2003) Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior* 62(2): 341-356.
- Becker HS (1960) Notes on the concept of commitment. *American Journal of Sociology* 66(1): 32-40.
- Becker TE (2005) Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods* 8(3): 274-289.
- Bentein K, Vandenberg RJ, Vandenberghe C, and Stinglhamber F (2005) The role of change in the relationship between commitment and turnover: A latent growth modeling approach. *Journal of Applied Psychology* 90(3): 468-482.

- Blau G (2007) Partially testing a process model for understanding victim responses to an anticipated worksite closure. *Journal of Vocational Behavior* 71(3): 401-428.
- Blau PM (1964) *Exchange and Power in Social Life*. New York: Wiley.
- Bowling NA, Eschleman KJ, Wang QA, Kirkendall C, and Alarcon G (2010) A meta-analysis of the predictors and consequences of organization-based self-esteem. *Journal of Occupational and Organizational Psychology* 83(3): 601-626.
- Carmona C, Buunk AP, Peiro JM, Rodriguez I, and Bravo MJ (2006) Do social comparison and coping styles play a role in the development of burnout? Cross-sectional and longitudinal findings. *Journal of Occupational and Organizational Psychology* 79(1): 85-99.
- Cole MS, Bedeian AG (2007) Leadership consensus as a cross-level contextual moderator of the emotional exhaustion-work commitment relationship. *Leadership Quarterly* 18(5): 447-462.
- Cooper-Hakim A, Viswesvaran C (2005) The construct of work commitment: Testing an integrative framework. *Psychological Bulletin* 131(2): 241-259.
- Cordes CL, Dougherty TW (1993) A review and an integration of research on job burnout. *Academy of Management Review* 18(4): 621-656.
- Crawford ER, LePine JA, and Rich BL (2010) Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology* 95(5): 834-848.
- Cropanzano R, Rupp DE, and Byrne ZS (2003) The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology* 88(1): 160-169.
- deCharms R (1968) *Personal Causation: The Internal Affective Determinants of Behavior*. New York: Academic Press.

- Eisenberger R, Armeli S, Rexwinkel B, Lynch, PD, and Rhoades L (2001) Reciprocation of perceived organizational support. *Journal of Applied Psychology* 86(1): 42-51.
- Gagné M, Chemolli E, Koestner R, and Forest J (2008) A temporal analysis of the relation between organizational commitment and work motivation. *Psychologica Belgica* 48(2-3): 219-241.
- Gellatly IR, Meyer JP, and Luchak (2006) Combined effects of the three commitment components on focal and discretionary behaviors: A test of Meyer and Herscovitch's propositions. *Journal of Vocational Behavior* 69(2): 331-345.
- Goodman JS, Blum TC (1996) Assessing the non-random sampling effects of subject attrition in longitudinal research. *Journal of Management* 22(4): 627-652.
- Gouldner AW (1960) The norm of reciprocity: A preliminary statement. *American Sociological Review* 25(2): 161-178.
- Grant AM, Dutton JE, and Rosso BD (2008) Giving commitment: Employee support programs and the prosocial sensemaking process. *Academy of Management Journal* 51(5): 898-918.
- Halbesleben JRB (2006) Sources of social support and burnout: A meta-analytic test of the conservation of resources model. *Journal of Applied Psychology* 91(5): 1134-1145.
- Halbesleben JRB, Buckley MR (2004) Burnout in organizational life. *Journal of Management* 30(6): 859-879.
- Herscovitch L, Meyer JP (2002) Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology* 87(3): 474-487.
- Hobföll SE (1989) Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist* 44(3): 513-524.

- Hobföll SE (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): 337–370.
- Hobföll SE (2002) Social and psychological resources and adaptation. *Review of General Psychology* 6(4): 307-324.
- Hobföll S, Freedy J (1993) Conservation of resources: A general stress theory applied to burnout. In: Schaufeli W, Maslach C, Marek T (eds) *Professional Burnout: Recent Developments in Theory and Research*. Washington, DC: Taylor & Francis, 115-134.
- Irving PG, Coleman DF (2003) The moderating effect of different forms of commitment on role ambiguity-job tension relations. *Canadian Journal of Administrative Sciences* 20(2): 97–106.
- Ito JK, Brotheridge CM (2005) Does supporting employees' career adaptability lead to commitment, turnover, or both? *Human Resource Management* 44(1): 5–19.
- Jex SM, Elacqua TC (1999) Self-esteem as a moderator: A comparison of global and organization-based measures. *Journal of Occupational and Organizational Psychology* 72(1): 71-81.
- Jöreskog KG, Sörbom D, Du Toit S., and Du Toit M (2001) *LISREL 8: New Statistical Features*. Chicago, IL: Scientific Software International.
- Kalliath TJ, O'Driscoll MP, and Gillespie D (1998) The relationship between burnout and organizational commitment in two samples of health professionals. *Work and Stress* 12(2): 179-185.
- King RC, Sethi V (1997) The moderating effect of organizational commitment on burnout in information systems professionals. *European Journal of Information Systems* 6(2): 86–96.
- Kinicki AJ, Prussia GE, and McKee-Ryan FM (2000) A panel study of coping with involuntary job loss. *Academy of Management Journal* 43(1): 90-100.

- Klein HJ, Molloy JC, and Cooper JT (2009) Conceptual foundations: Construct definitions and theoretical representations of workplace commitments. In: Klein HJ, Becker TE, Meyer JP (eds) *Commitment in Organizations: Accumulated Wisdom and New Directions*. Florence, KY: Routledge/Taylor and Francis Group, 3–36.
- Kobasa SC (1982) Commitment and coping in stress resistance among lawyers. *Journal of Personality and Social Psychology* 42(4): 707–717.
- Lavelle JJ, Rupp DE, and Brockner J (2007) Taking a multifoci approach to the study of justice, social exchange, and citizenship behavior: The Target Similarity Model. *Journal of Management* 33(6): 841-866.
- Leary MR (2007) Motivational and emotional aspects of the self. *Annual Review of Psychology* 58: 317–44.
- Lee J, Peccei R (2007) Perceived organizational support and affective commitment: The mediating role of organization-based self-esteem in the context of job insecurity. *Journal of Organizational Behavior* 28(6): 661-685.
- Lee RT, Ashforth BE (1996) A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology* 81(2): 123-133.
- Maslach C, Schaufeli WB, and Leiter MP (2001) Job burnout. *Annual Review of Psychology* 52: 397-422.
- Mathieu JE, Zajac DM (1990) A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin* 108(2): 171-194.
- McGee GW, Ford RC (1987) Two (or more?) dimensions of organizational commitment: Reexamination of the Affective and Continuance Commitment Scales. *Journal of Applied Psychology* 72(4): 638-642.

Meyer JP, Allen NJ (1991) A three-component conceptualization of organizational commitment.

Human Resource Management Review 1(1): 61-89.

Meyer JP, Allen N (1997) *Commitment in the Workplace: Theory, Research, and Application*.

Thousand Oaks, CA: Sage.

Meyer JP, Allen NJ, and Gellatly IR (1990) Affective and continuance commitment to the organization: Evaluation of measures and analysis of concurrent and time-lagged relations.

Journal of Applied Psychology 75(6): 710-720.

Meyer JP, Allen, NJ, and Smith CA (1993) Commitment to organizations and occupations:

Extension and test of a three-component conceptualization. *Journal of Applied Psychology* 78(4): 538-551.

Meyer JP, Becker TE, and Vandenberghe C (2004) Employee commitment and motivation: A conceptual analysis and integrative model. *Journal of Applied Psychology* 89(6): 991-1007.

Meyer JP, Herscovitch L (2001) Commitment in the workplace: Towards a general model.

Human Resource Management Review 11(3): 299-326.

Meyer JP, Maltin ER (2010) Employee commitment and well-being: A critical review,

theoretical framework and research agenda. *Journal of Vocational Behavior* 77(2): 323-337.

Meyer JP, Parfyonova NM (2010) Normative commitment in the workplace: A theoretical

analysis and re-conceptualization. *Human Resource Management Review* 20(4): 283-294.

Meyer JP, Stanley DJ, Herscovitch L, and Topolnytsky L (2002) Affective, continuance and normative commitment to the organization: A meta-analysis of antecedents, correlates, and

consequences. *Journal of Vocational Behavior* 61(1): 20-52.

Panaccio A, Vandenberghe C (2009) Perceived organizational support, organizational

commitment and psychological well-being: A longitudinal study. *Journal of Vocational*

Behavior 75(2): 224-236.

- Pierce JL, Gardner DG (2004) Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management* 30(5): 591-622.
- Pierce JL, Gardner DG, Cummings LL, and Dunham RB (1989) Organization-based self-esteem: Construct definition, measurement, and validation. *Academy of Management Journal* 32(3): 622-648.
- Ployhart RE, Vandenberg RJ (2010) Longitudinal research: The theory, design, and analysis of change. *Journal of Management* 36(1): 94-120.
- Powell DM, Meyer JP (2004) Side-bet theory and the three-component model of organizational commitment. *Journal of Vocational Behavior* 65(1): 157-177.
- Preacher KJ, Curran PJ, and Bauer DJ (2006) Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics* 31(4): 437-448.
- Ricketta M (2002) Attitudinal organizational commitment and job performance: A meta-analysis. *Journal of Organizational Behavior* 23(3): 257-266.
- 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, and Armeli S (2001) Affective commitment to the organization: The contribution of perceived organizational support. *Journal of Applied Psychology* 86(5): 825-836.
- Ryan RM, Deci EL (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* 55(1): 68-78.
- Schaubroeck J, Ganster DC, and Fox ML (1992) Dispositional affect and work-related stress. *Journal of Applied Psychology* 77(3): 322-335.

- Schaufeli WB, Leiter MP, Maslach C, and Jackson SE (1996) The Maslach Burnout Inventory-General Survey. In: Maslach C, Jackson SE, Leiter MP (eds) *Maslach Burnout Inventory* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Schmidt K-H (2007) Organizational commitment: A further moderator in the relationship between work stress and strain? *International Journal of Stress Management* 14(1): 26-40.
- Scott KL, Shaw JD, and Duffy MK (2008) Merit pay raises and organization-based self-esteem. *Journal of Organizational Behavior* 29(7): 967-980.
- Siegall M, McDonald T (2004) Person-organization value congruence, burnout and diversion of resources. *Personnel Review* 33(3): 291-301.
- Somers MJ (2009) The combined influence of affective, continuance, and normative commitment on employee withdrawal. *Journal of Vocational Behavior* 74(1): 75-81.
- Spector PE (1982) Behavior in organizations as a function of employees' locus of control. *Psychological Bulletin* 91(3): 482-497.
- Steel RP, Griffeth RW, and Hom PW (2002) Practical retention policy for the practical manager. *Academy of Management Executive* 16(2): 149-162.
- Stinson DA, Logel C, Holmes JG, Wood JV, Forest AL, Gaucher D, Fitzsimons GM, and Kath J (2010) The regulatory function of self-esteem: Testing the epistemic and acceptance signaling systems. *Journal of Personality and Social Psychology* 99(6): 993-1013.
- Swann WB Jr. (1983) Self-verification: Bringing social reality into harmony with the self. In: Suls J, Greenwald AG (eds) *Psychological Perspectives on the Self*, Vol. 2. Hillsdale, NJ: Erlbaum, 33-66.
- Swider BW, Zimmerman RD (2010) Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior* 76(3): 487-506.

- Tan DSK, Akhtar S (1998) Organizational commitment and experienced burnout: An exploratory study from a Chinese cultural perspective. *International Journal of Organizational Analysis* 6(4): 310-333.
- Taris TW, LeBlanc PM, Schaufeli WB, and Schreurs PJG (2005) Are there causal relationships between the dimensions of the Maslach Burnout Inventory? A review and two longitudinal tests. *Work and Stress* 19(3): 238-255.
- Thoresen CJ, Kaplan SA, Barsky AP, Warren CR, and de Chermont K (2003) The affective underpinnings of job perceptions and attitudes: A meta-analytic review and integration. *Psychological Bulletin* 129(6): 914–945.
- Wasti SA (2005) Commitment profiles: Combinations of organizational commitment forms and job outcomes. *Journal of Vocational Behavior* 67(2): 290-308.
- Westman M, Eden D (1997) Effects of a respite from work on burnout: Vacation relief and fade-out. *Journal of Applied Psychology* 82(4): 516-527.
- Wiesenfeld BM, Swann WB Jr, Brockner J, and Bartel CA (2007) Is more fairness always preferred? Self-esteem moderates reactions to procedural justice. *Academy of Management Journal* 50(5): 1235-1253.
- Wright TA, Cropanzano R (1998) Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology* 83(3): 486-493.

Table 1

Confirmatory Factor Analysis of Measurement Models (Time 1): Fit Indices

Model	$\chi^2(df)$	NNFI	CFI	SRMR	RMSEA	Model	
						comparison	$\Delta\chi^2(\Delta df)$
1. Hypothesized six-factor model	1132.19* (480)	.95	.95	.08	.08	–	–
2. Combining affective and normative commitment	1682.64* (485)	.90	.91	.10	.12	2 vs. 1	550.45*
3. Combining affective commitment and organization-based self-esteem	1686.97* (485)	.90	.91	.10	.12	3 vs. 1	554.78*
4. Combining affective commitment and emotional exhaustion	1704.69* (485)	.90	.91	.10	.12	4 vs. 1	572.50*
5. Combining continuance-sacrifices and continuance-alternatives commitment	1373.47* (485)	.93	.93	.11	.09	5 vs. 1	241.28*
6. Combining continuance-alternatives commitment and emotional exhaustion	1307.15* (485)	.93	.94	.09	.09	6 vs. 1	174.96*

Note. $N = 260$. NNFI = non-normed fit index; CFI = comparative fit index; SRMR = standardized root mean square residual; RMSEA = root-mean-square error of approximation.

* $p < .001$.

Table 2

Descriptive Statistics and Correlations among Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Age (years)	34.60	8.51	–										
2. Sex	1.46	0.50	.11	–									
3. Tenure (years)	7.61	6.98	.71**	.04	–								
4. Affective commitment (Time 1)	2.99	1.01	.05	-.06	.04	(.90)							
5. Normative commitment (Time 1)	2.27	1.01	-.03	.02	.07	.54**	(.90)						
6. Continuance-sacrifices commitment (Time 1)	3.16	1.06	.24**	-.09	.26**	.28**	.21**	(.78)					
7. Continuance-alternatives commitment (Time 1)	2.25	0.98	.17**	.02	.22**	-.13*	.03	.22**	(.72)				
8. Organization-based self-esteem (Time 1)	3.83	0.69	.03	.06	-.07	.58**	.24**	.18**	-.23**	(.91)			
9. Emotional exhaustion (Time 1)	2.50	1.06	-.08	-.05	.01	-.33**	-.09	-.14*	.17**	-.39**	(.89)		
10. Emotional exhaustion (Time 2)	2.48	1.00	-.03	.05	.03	-.13*	.09	.05	.23**	-.20**	.45**	(.87)	
11. Turnover	1.12	0.33	-.16*	-.04	-.22**	-.15*	-.14*	-.27**	-.06	-.06	.16*	-.06	–

Note. *N*s = 218-260. For Sex, 1 = Female, 2 = Male; for Turnover: 1 = Stayers, 2 = Voluntary leavers. Reliability coefficients are reported in parentheses on the diagonal.

p* < .05; *p* < .01.

Table 3

Results of Moderated Multiple Regression for Time 2 Emotional Exhaustion

Step	Variable(s) entered	Model 1		Model 2		Model 3		Model 4	
		β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2
1	Emotional exhaustion (Time 1)	.46***		.43***		.42***		.43***	
			.21***						
2	Affective commitment (Time 1)			-.07		-.07		-.07	
	Normative commitment (Time 1)			.14*		.14*		.14*	
	Continuance-sacrifices commitment (Time 1)			.06		.07		.07	
	Continuance-alternatives commitment (Time 1)			.13*		.13*		.13*	
	OBSE (Time 1)			-.02		-.05		-.05	
					.04*				
3	OBSE x Affective commitment (Time 1)					-.11		-.08	
	OBSE x Normative commitment (Time 1)					-.03		-.06	
	OBSE x Continuance-sacrifices commitment (Time 1)					.03		-.01	
							.02		
4	OBSE x Continuance-alternatives commitment (Time 1)							.14*	
									.02*

Note. OBSE = Organization-based self-esteem. Model statistics: Model 1: $F(1, N = 258) = 68.77, p < .001$; Model 2: $F(6, N = 258) = 14.36, p < .001$; Model 3: $F(9, N = 258) = 10.21, p < .001$; Model 4: $F(10, N = 258) = 10.00, p < .001$.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 4

Results of Logistic Regression Analysis for Turnover

Step	Variable(s) entered	Model 1		Model 2	
		B	Exp(B)	B	Exp(B)
1	Affective commitment (Time 1)	-.22	0.80	-.14	0.87
	Normative commitment (Time 1)	-.17	0.85	-.23	0.80
	Continuance-sacrifices commitment (Time 1)	-.72***	0.49	-.69**	0.50
	Continuance-alternatives commitment (Time 1)	-.02	0.98	-.04	0.96
	Organization-based self-esteem (Time 1)	.14	1.15	.30	1.35
2	Emotional exhaustion (Time 1)			.41*	1.50
	ΔR^2	.14**		.03*	

Note. For Sex, 1 = Female, 2 = Male. The ΔR^2 row includes Nagelkerke ΔR^2 values. Model statistics: Model 1: $\chi^2(5, N = 249) = 19.42, p < .01, -2LL = 163.79, \text{Constant} = .58$; Model 2: $\chi^2(6, N = 249) = 23.67, p < .001, -2LL = 159.53, \text{Constant} = -1.26$.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Figure Caption

Figure 1. Interaction between Time 1 continuance-alternatives commitment and organization-based self-esteem in predicting Time 2 emotional exhaustion.

Note. OBSE = Organization-based self-esteem.

