
All you need is ... resources: The effects of justice and support on burnout and turnover

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Abstract

We propose and test a comprehensive model of burnout, as influenced by justice and support, and as it impacts the turnover process. Deriving our conceptual model from Conservation of Resources Theory augmented by several domain-specific theories, we investigate three forms of justice (distributive, procedural, and interactional justice) and two sources of support (from organizations and supervisors) as they influence the development of three dimensions of burnout (emotional exhaustion, depersonalization, and diminished accomplishment) and subsequent forms of attitudinal withdrawal (organizational commitment and turnover intentions) and behavioral withdrawal

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(turnover). In a study of 343 social workers, our theoretical path model was well-supported, providing increased understanding of the distinct roles of each form of justice and support in the development of burnout and the subsequent turnover process. Theoretical contributions and implications in the areas of justice, burnout, and turnover are discussed.

Keywords

burnout, commitment, justice, perceived organizational support, perceived supervisor support, turnover, turnover intentions

Introduction

Today's fast-paced and uncertain world of work causes many employees to experience job burnout, a chronic state of exhaustion, depersonalization, and diminished accomplishment, which can negatively affect physical and psychological health (Greenglass and Burke, 2000). Besides its impact on employees, job burnout may also affect outcomes of interest to managers, including reduced organizational commitment and increased turnover (Babakus et al., 1999; Lee and Ashforth, 1996; Moore, 2000). It is estimated that burnout may cost US corporations alone more than \$300 billion a year (Rosch, 2001). Therefore, it is imperative for researchers to understand the nomological network surrounding job burnout and for managers to understand how to minimize its effects in the workplace.

Current study contributions and model overview

In this study we add insight to the full process of resource-oriented factors leading to burnout, which research has shown is related to withdrawal outcomes (Burke and Richardsen, 1993; Hobfoll and Freedy, 1993). These negative consequences require that applied researchers understand how organizations can intervene to prevent or mitigate these effects. According to Conservation of Resources (COR) Theory (Hobfoll, 1989), when individuals perceive a threat or an actual loss of resources, or fail to receive sufficient return on their investment of resources, they experience stress (Hobfoll, 2001). Thus, resources are key to understanding the development and persistence of burnout, as well as how to reduce or avoid it. Resources are those objects, conditions, energy, or personal characteristics that enable employees to accomplish goals and protect personal well-being (e.g. time, money, status, support, personal resilience; Hobfoll, 1989). One main way that organizations and managers contribute to resource capacity is by their provision (or withholding) of support. Thus, COR Theory provides the essential link in our model of one key factor that can be influenced by managers (i.e. perceived support) in order to reduce burnout and associated withdrawal.

One important way that support may be perceived is through mechanisms of justice. That is, beyond simply offering additional supportive workplace resources, organizations provide support by exhibiting various forms of justice in their management

practices. We generally propose that burnout and its outcomes may be avoided or reduced, in part, through a fair workplace mediated by greater perceptions of support from organizations and managers (e.g. Eisenberger et al., 2002; Lee and Ashforth, 1996; Rhoades and Eisenberger, 2002; Stinglhamber and Vandenberghe, 2003; Wayne et al., 1997).

Although it provides an important foundation with its emphasis on resources, COR Theory does not fully explain theoretical linkages with justice – the first, most distal antecedent of burnout considered in our model. It also does not fully explain the linkages between dimensions of burnout and turnover, nor the perceived *source* from which support resources flow (i.e. one’s immediate manager or the larger organization). Thus, we were compelled to draw on several complementary theoretical traditions from organizational justice, attribution, stress, and turnover to fully explain the linkages between justice constructs and organizational withdrawal in the model that we build here. By taking this approach, we aim to contribute to work on justice and support interrelationships, which have been criticized as lacking comprehensive modeling (e.g. Masterson et al., 2000; Robbins et al., 2012). We also aim to contribute to theory and practice in the area of burnout and its detrimental outcomes (e.g. withdrawal and turnover), also directly addressing the current lack of understanding about the full theoretical progression from justice to turnover (Griffeth and Gaertner, 2001). We assert that burnout is a key mediator of this process. Indeed, burnout may be a previously overlooked explanation for why low justice and low support can lead to withdrawal. By increasing understanding in each of these areas, we aim to provide managers with greater clarity and precision about how to better reduce burnout through use of fair procedures and social support in the workplace.

In the following sections, we describe the specific linkages of our model in turn (see Figure 1 for a summary). Overall, we suggest that COR Theory helps explain how justice provides, or is perceived as, support resources; this, in turn, helps the employee avoid or buffer him/herself against burnout and any related withdrawal. We also propose relevant alternative models against which we competitively test our hypothesized model.

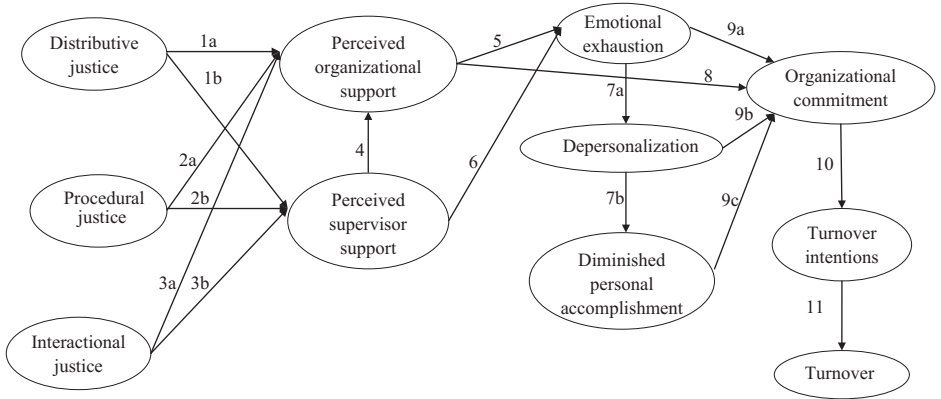


Figure 1 Hypothesized theoretical model

Organizational justice and perceived support

Justice theories suggest that fair distributions (distributive justice), procedures (procedural justice), and interpersonal treatment (interactional justice) affect the assessment of available resources in the form of support (Colquitt et al., 2001; Hobfoll, 2001). Distributive justice refers to what resources are distributed and whether those distributions are equitable compared to a referent other (Adams, 1965; Colquitt et al., 2001). Examples include promotions, pay, recognition, equipment, or any other job-related resources that assist employees in job tasks or maintaining overall well-being. Procedural justice refers to the process used to distribute resources. Interactional justice refers to the degree of sincerity, respectfulness, and consistency present in interactions between employees and management (Aquino et al., 1999).

Although a recent meta-analysis supports a consistent relationship between these three forms of justice and burnout (Robbins et al., 2012), we focus on one mechanism through which this correlation may occur (i.e. perceived support). Fair distributions of outcomes (i.e. distributive justice) lead to satisfaction with past resources allocated (Adams, 1965). Procedural fairness (i.e. procedural justice) ensures more predictability and promise of access to future resources (Leventhal, 1976). Fairness expressed in interactions (i.e. interactional justice) buoy the self-concept, increasing personal resources (Masterson et al., 2000). In turn, these support resources may help with the maintenance of well-being (Hobfoll, 1989; Wayne et al., 2002) that is relationship-focused (e.g. my personal needs were considered), task-focused (e.g. my task requirements were considered), or contractually focused (e.g. my contributions were considered).

The support resources that flow from various forms of fair treatment are likely to be attributed to some source, most likely the immediate supervisor (perceived supervisor support; PSS; Eisenberger et al., 2002; Stinglhamber and Vandenberghe, 2003; Wayne et al., 1997) or the organization (i.e. perceived organizational support (POS); Rhoades and Eisenberger, 2002). Attribution theory (Kelley, 1973; Weiner, 1985) can help explain which source gets 'credit' for support in various situations. It suggests that events are generally attributed to external or internal causes, depending on how consistent the events are across time, persons, and settings. Recent work expanding this theory suggests that such attributions may also be rooted in interpersonal relationships (Eberly et al., 2011). Using the same tenets as traditional attribution theory, Eberly et al. (2011) suggest that the quality of the relationship with another person may also be 'credited' or 'blamed' when an event occurs that cannot be explained solely by oneself, the other party, or the situation. Based on this, we suggest that when employees experience fair outcomes, procedures, and interpersonal encounters, they likely perceive the party or relationship most closely associated with the decision-making and control in that situation as providing needed support resources, and through external, internal, or relational attribution, assess cause for those support resources to that target.


When outcomes are distributed equitably, employees may perceive a good return on their investment of resources (e.g. effort or time), especially as compared to referent others (Hobfoll, 1989; Robbins et al., 2012). Extant research has emphasized that employees seem to consider distribution of outcomes as controlled by upper management, which is most closely tied to support from the organization itself (i.e. POS:

Masterson et al., 2000; Moorman et al., 1998; Rhoades and Eisenberger, 2002; Wayne et al., 1997). Based on the tenets of traditional attribution theory (Kelley, 1973), this is most likely to occur when employees have observed fair outcome distribution across the organization. In day-to-day operations, however, the supervisor may control distribution of assignments and rewards. If this is distinctive for their supervisor compared to other supervisors in the organization, then an employee may particularly associate that fair treatment with support offered just from that supervisor (i.e. PSS: Kelley, 1973); this is most plausible in decentralized work environments. Thus, we posit that distributive justice may impact perceptions of support from either supervisors or the organization, but with a comparatively strong association with POS.

Hypothesis 1a: Distributive justice will be positively related to POS, and this relationship will be stronger than with PSS.

Hypothesis 1b: Distributive justice will be positively related to PSS.

The processes leading to the distribution of outcomes (i.e. procedural justice) are also important to justice perceptions, in particular because fair procedures ensure confidence and predictability for the way future outcomes will be distributed (Leventhal, 1976), thereby reducing the need to spend cognitive resources worrying about future outcomes. Similar to distributive justice, fair procedures may also allow employees to experience peace of mind that their personal investment of resources will pay off now and in the future (Robbins et al., 2012).

In line with attribution theory (Kelley, 1973), individuals may be more likely to perceive processes as being controlled by the organization as a whole when they see standardized procedures in writing or clearly used across departments, leading us to propose a stronger relationship between procedural justice and support from the organization as a whole (i.e. POS: Cohen-Charash and Spector, 2001; Colquitt et al., 2001). However, if employees see evidence of the supervisor controlling day-to-day distribution procedures, particularly in ways that are distinct from other supervisors, they may attribute the support they receive directly to the supervisor (i.e. PSS). Thus, procedural justice may be associated with perceptions of support from both the organization and supervisor, but more with the .

Hypothesis 2a: Procedural justice will be positively related to POS and this relationship will be stronger than with PSS.

Hypothesis 2b: Procedural justice will be positively related to PSS.

When consistently treated fairly at an interpersonal level, employees are likely to feel a sense of confidence that they will continue to be supported by the individuals involved in such interactions (Masterson et al., 2000). This is distinct from procedural justice in that it involves the tone with which interactions are conducted and the information provided in those interactions, rather than the specific processes used in deciding how outcomes are distributed (Robbins et al., 2012). For instance, when a supervisor is respectful in daily encounters, the employee likely attributes the support they feel to

that supervisor, as if that supervisor values the contribution and supports his/her daily efforts (i.e. PSS). Eberly et al.'s (2011) work on relational attribution further suggests this fair treatment may be attributed to the relationship with the supervisor, rather than resulting only from the supervisor or the organizational situation. Similarly, when upper managers are consistently seen treating employees well (e.g. making an effort to meet employees or instituting company-wide recognitions), employees likely attribute that support to the organization as a whole (i.e. POS: Cohen-Charash and Spector, 2001). Because interpersonal interactions are more frequent with supervisors than upper-level managers (Robbins et al., 2012), however, we expect the relationships between interactional justice and support will be stronger for PSS than POS.

Hypothesis 3a: Interactional justice will be positively related to POS.

Hypothesis 3b: Interactional justice will be positively related to PSS, and this relationship will be stronger than with POS.

Perceived organizational support (POS) and perceived supervisor support (PSS)

PSS may be the most salient form of support in an employee's mind, as it originates from day-to-day contact with lower-level supervisors and is most likely to be rooted in relationships as well as internal and external events (Eberly et al., 2011). In contrast, perceptions of organizational support may take longer to develop and may be largely affected by PSS because employees' access to the organization as a whole may occur largely through their immediate supervisor. Consistent with this idea, researchers have found that PSS leads to POS, not vice versa (Hutchinson, 1997; Rhoades et al., 2001; Yoon et al., 1996). We therefore propose a hypothesis consistent with this evidence:

Hypothesis 4: PSS will be positively related to POS.

Justice, support, and job burnout

Based on the tenets of COR, justice, and attribution theories, we have proposed that justice increases perceived support and employees link that support to their organization and/or supervisor. Support is one valued job resource that may prevent or impede the development of job burnout. Burnout is a chronic state of exhaustion, depersonalization, and diminished personal accomplishment resulting from involvement with demanding people or work situations (Leiter and Maslach, 1988; Schaufeli and Greenglass, 2001). Emotional exhaustion refers to feeling overextended, overloaded, and generally drained from contact with people or work tasks (Wright and Bonett, 1997). Depersonalization is characterized by a negative, callous, and cynical attitude toward people or work tasks. Finally, diminished personal accomplishment reflects a decline in one's feelings of competence in the job or in general (Leiter and Maslach, 1988). Each component can contribute to health- and work-related decrements that imply costs for the organization and the individual (Toppinen-Tanner et al., 2002). COR Theory posits that any sustained drain on limited resources can lead to burnout

(Halbesleben and Buckley, 2004). That is, actual and even expected depletion of resources, here considered in the form of perceived support, can cause work stress and a plethora of harmful consequences (Hobfoll, 1989).

As a resource, COR Theory posits that support protects personal well-being and assists employees in the accomplishment of goals and professional development (Halbesleben and Buckley, 2004). Further, perceived support should have effects throughout the two phases of the stress appraisal process (i.e. what is at stake and what coping options are available; Folkman and Lazarus, 1985). When threats or actual resource depletion are first noted by the individual, perceptions of strong support from the supervisor or organization can reduce the perceived severity of the threat (what is at stake). As threat analysis continues, perceptions of strong support can also provide more coping options for the individual (i.e. relying on the source of support for assistance), thereby helping employees to avoid burnout (Folkman et al., 1986). In contrast, weak support should increase the perceived severity of threats in the environment and reduce the available coping options, thereby increasing the likelihood of burnout. In support of these propositions, empirical research has shown that social support may reduce job burnout, particularly emotional exhaustion, even when demands are high or other resources are scarce (Halbesleben and Buckley, 2004; Pei et al., 2009; Walters and Raybould, 2007). Therefore, we examine the direct effects of perceived organizational and supervisor support only on emotional exhaustion (Leiter and Maslach, 1988).

Hypothesis 5: POS will be negatively related to emotional exhaustion.

Hypothesis 6: PSS will be negatively related to emotional exhaustion.

Although there is some debate over the ordering of the three components of job burnout (Babakus et al., 1999; Leiter and Maslach, 1988; Van Dierendonck et al., 2001), Leiter and Maslach's progression model is well-supported (Cordes and Dougherty, 1993; Toppinen-Tanner et al., 2002; Wright and Bonett, 1997). This model argues that as employees try to cope with emotional exhaustion, they develop negative attitudes and distance themselves from their work (i.e. depersonalization; Leiter and Maslach, 1988). This means that exhausted employees become cynical toward work tasks and individuals with whom they interact, decreasing workers' chances of reaching their goals, resulting in diminished personal accomplishment. COR Theory also supports the idea that as energy resources are depleted (exhaustion), other negative states may ensue (depersonalization and diminished accomplishment; Hobfoll, 1989). Thus, in line with the progression of burnout model and COR Theory, we propose the following:

Hypothesis 7a: Emotional exhaustion will be positively related to depersonalization.

Hypothesis 7b: Depersonalization will be positively related to diminished personal accomplishment.

POS, burnout, and organizational commitment

Another negative effect of the chronic state of insufficient resources experienced in burnout is reduced organizational commitment (Hobfoll, 1989; Leiter and Maslach, 1988), or

the loyalty employees feel toward their employers (Meyer and Allen, 1991). When it is low, organizations may experience lower production levels and a negative work environment. COR Theory suggests that individuals use withdrawal-based coping mechanisms as they face resource loss and subsequent burnout. That is, one way exhausted employees try to preserve remaining resources is by withdrawing psychologically (i.e. decreased commitment to the organization). Cynical employees experiencing depersonalization are likely to become less loyal to their employer as their negative attitudes increase. Likewise, employees who feel that they have not had the opportunity to grow or prove their competence within their organization (i.e. diminished personal accomplishment) are not likely to feel loyalty or positive identification to that organization. In support of these theoretical propositions, research provides consistent empirical support for the negative relationship between emotional exhaustion and organizational commitment (Babakus et al., 1999; Lee and Ashforth, 1996; Moore, 2000). Although less studied, depersonalization and diminished personal accomplishment have also been empirically linked to reduced organizational commitment (Hollet-Haudebert et al., 2011).

Hypothesis 8a: Emotional exhaustion will be negatively related to commitment.

Hypothesis 8b: Depersonalization will be negatively related to commitment.

Hypothesis 8c: Diminished personal accomplishment will be negatively related to commitment.

In addition to its indirect effects through burnout, POS may also have a direct impact on organizational commitment. COR Theory purports that plentiful resources include the availability of cognitive resources, which can be dedicated toward the organization in terms of loyalty. Additionally, social exchange theory suggests that individuals may feel indebted to an organization that they perceive is fully supporting them; many may express this by increasing their loyalty (Adams, 1965; Blau, 1964; Hobfoll, 1989). In contrast, when the organization does not provide enough support, an individual is likely to withdraw psychologically (i.e. lower commitment), both in an attempt to conserve limited cognitive resources and because they simply do not feel indebted. Numerous empirical studies support this theoretical reasoning (Masterson et al., 2000; Rhoades and Eisenberger, 2002; Settoon et al., 1996). Therefore, we also propose a direct effect of POS on organizational commitment.

Hypothesis 9: POS will be positively related to organizational commitment.

Turnover intentions and behavior

As it reduces commitment on the part of employees experiencing it, job burnout may also eventually result in other costly forms of withdrawal – turnover intentions and actual turnover (Hom and Griffeth, 1995). Organizational commitment has the strongest negative relationship with turnover intentions of any major attitude construct (Tett and Meyer, 1993). Consistent with extant theory and meta-analytic research on turnover, we model the effect of commitment on turnover behavior as mediated through turnover intentions

(Hom and Griffeth, 1995). Both theory and empirical research agree that turnover intentions are the most proximal cause of turnover behavior (e.g. Maertz and Campion, 1998; Mobley, 1977; Steel and Ovalle, 1984), as intentions are the strongest predictors of corresponding behavior (Ajzen and Fishbein, 1974).

Hypothesis 10: Organizational commitment will be positively related to turnover intentions.

Hypothesis 11: Turnover intentions will be positively related to turnover behavior.

Alternative models

Anderson and Gerbing (1988) suggest that the best way to provide stronger tests of a model is to compare the theoretical model with plausible nested alternative models. These models should be posited a priori and be either more or less constrained. Therefore, we propose six alternative models against which to test our hypothesized model. We know there are many other possibilities but we think these are the most relevant/interesting to our proposed model.

First, we suggested that the effects of justice on burnout are fully mediated by POS and PSS; however, a case could also be made for direct effects of justice. Meta-analytic research shows that burnout develops as employees are chronically immersed in stressful situations, including inequitable work environments (Robbins et al., 2012). Consistent with COR Theory, injustice may represent a situation in which employee resources are invested with insufficient return, thereby inhibiting an individual's ability to complete work tasks and maintain overall well-being (Hobfoll, 1989). Inequitable treatment (in the form of distributive, procedural, or interactional) may therefore deplete energy, induce frustration, and reduce self-esteem (i.e. affect the three dimensions of burnout). Consistent with our original approach and the progression of burnout hypothesis (Leiter and Maslach, 1988), in Alternative Model 1, we posit direct paths from distributive, procedural, and interactional justice to emotional exhaustion.

Social exchange theory (Adams, 1965; Blau, 1964) suggests other direct paths in the proposed model. This theory predicts that people are motivated to reciprocate perceived benefits, such as fair treatment, by exhibiting more loyalty to the organization (Bateman and Organ, 1983; Cohen-Charash and Spector, 2001; McFarlin and Sweeney, 1992; Simons and Roberson, 2003). Thus, we compare alternative models positing direct paths from each justice construct to organizational commitment (Alternative Model 2) and to turnover intentions (Alternative Model 3).

Because there has been disagreement about whether emotional exhaustion is the first indicator of burnout to develop when resources are scarce or threatened (Leiter and Maslach, 1988; Van Dierendonck et al., 2001), we also compare an alternative model with both POS and PSS leading directly to all three burnout dimensions (Alternative Model 4) instead of just emotional exhaustion. Because interactional justice deals explicitly with interpersonal treatment, it may only be directly related to perceptions of support from a supervisor with whom employees interact, and not to perceptions of the organization (Colquitt et al., 2001). In line with our previous predictions, PSS may still directly influence POS as it develops more slowly over time. Thus, Alternative Model 5 drops the

path from interactional justice to POS, suggesting instead full mediation by PSS of the effects of interactional justice on POS.

Finally, we propose Alternative Model 6 to determine whether the ordering of the justice and support variables we originally proposed in our hypothesized model is most appropriate. Namely, we explore the possibility that support predicts justice instead of vice versa. Therefore, we test the fit of a model in which POS and PSS predict each of the three justice dimensions, which partially mediate these effects on emotional exhaustion. In the absence of longitudinal data this is one way to initially explore correct directionality in the model.

Method

Sample

Three hundred and seventy-five surveys were distributed to small groups of social workers during working hours of a state's department of family and children's services (DFACS) in counties from around a large US metropolitan area in the Southeastern United States. In these particular locations, social workers saw a wide range of cases and had a very heavy case load. All supervisors were social workers first before they were promoted to supervisor. Additionally, there was a culture of mutual respect and trust, possibly because the structure was flat at the local levels and there were relatively high education levels; but, the structure became fairly hierarchical at the state level. Because of local, state, and federal laws regulating their work, and because it was a public sector state department, supervisors and social workers did not have a lot of discretion. Further, there was a sense of constant judgment in the vertical organizational structure, which was also mandated by laws. Social workers and supervisors could transfer to another county or city, but there were very few private sector jobs for these employees, resulting in few overall job alternatives for social workers in the region. Also, jobs did not vary in any substantial way across locations. Further contributing to these challenging work conditions, the pay system/structure was low for professionals with college (and some advanced) degrees.

We obtained usable survey and turnover data on 343 individuals (91% of the distributed surveys). The average age of respondents in this final sample was 39.8 years ($SD = 10.5$) and 84 per cent were female. Of our respondents, 66 per cent were Caucasian, 29 per cent were African American, 2 per cent were Hispanic, and 3 per cent selected 'Other'.

Measures

Justice All three types of justice were measured using relevant items from measures in the empirical research. Construct validity and reliability for our measures were displayed in previous research (Dittrich and Carrell, 1976). Respondents used a five-point Likert-type scale (1 = strongly disagree to 5 = strongly agree). Distributive justice was measured with five items. Following extant research (Dittrich and Carrell, 1979; Masterson et al., 2000; Moorman, 1991; Moorman et al., 1998; Wayne et al., 1997), the items asked

respondents how their pay, education, and experience related to those of referent others in their current job and organization (e.g. 'Some people in my department get by without meeting work standards' [reverse-coded]). Procedural justice was also assessed using five items. Following extant procedural justice measures (e.g. Dittrich and Carrell, 1979; McFarlin and Sweeney, 1992), the items asked respondents to report how consistently procedures governing work standards, effort expended, and behavior were applied within the organization (e.g. 'The rules that are used to give pay raises in the organization are fair'). Interactional justice was measured with four items. Also following previous measures (Dittrich and Carrell, 1979; Moorman, 1991), the items asked respondents to rate their supervisors' behavior with regard to sincerity, respectfulness, and consistency (e.g. 'My supervisor will get after workers if they are late to work, play around in the office, or behave badly in other ways').

Perceived organizational support (POS) We used the 16-item short form of the Survey of Perceived Organizational Support developed by Eisenberger et al. (1986; e.g. 'The organization values my contribution to its well-being'). Eisenberger et al. (1986) provided reliability and validity evidence in two samples of 458 participants, including credit bureau and telephone company employees. Respondents used a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree).

Perceived supervisor support (PSS) We used three items to assess PSS. We adapted POS (Eisenberger et al., 1986) in the same manner as Hutchison (1997), Kottke and Sharafinski (1988), Rhoades et al. (2001), and others, by replacing the word 'organization' with the term 'supervisor'. Our measure captured an employee's perception that the supervisor cares for his/her well-being and is supportive of his/her concerns (e.g. 'My supervisor is willing to listen to my job-related problems'). All items were measured using a five-point Likert-type scale (1 = strongly disagree to 5 = strongly agree).

Burnout We used Maslach and Jackson's (1981) 22-item Maslach Burnout Inventory (MBI), including all three subscales. Maslach and Jackson (1981) provided reliability and validity evidence in two samples of 473 nurses, teachers, social workers, probation officers, counselors, mental health workers, and agency administrators. The subscales were emotional exhaustion (nine items; 'I feel emotionally drained from my work'), depersonalization (five items; 'I worry that this job is hardening me emotionally'), and personal accomplishment (eight items; 'I feel I'm positively influencing other people's lives through my work'). Items for personal accomplishment were reverse-scored so that high scores reflected diminished personal accomplishment (i.e. higher burnout). Respondents were asked to read each statement and decide if/how often they had that feeling about their job (0 = never or 1 = a few times a year or less to 6 = every day).

Organizational commitment We used the nine-item short form (Bozeman and Perrewé, 2001; e.g. 'I am proud to tell others that I am part of this organization') of the Organizational Commitment Questionnaire (OCQ; Mowday et al., 1979), which removes items that are possibly confounded with turnover intentions (1 = strongly disagree to 7 = strongly agree). Bozeman and Perrewé (2001) provided reliability and validity evidence

in three samples of 542 participants, including subject matter experts, MBA alumni, and middle and upper level hospitality managers.

Turnover intentions Turnover intentions were measured with a three-item scale (Hom and Griffeth, 1991) with a five-point Likert-type scale (1 = definitely not to 5 = definitely yes; e.g. ‘What are the chances that you will leave DFACS during the next 12 months?’). Coverdale and Terborg (1980) provided reliability and validity evidence in a small sample of university clerical employees.

Turnover One year after surveys were administered, the organization provided the researchers with a list of individuals who had left voluntarily. No involuntary leavers were included in that count. Respondents were coded as 0 for stayers and 1 for leavers. In total, 26 individuals (8%) left voluntarily in that time.

Analyses

To test the model presented in Figure 1, we used path modeling within a structural equation model (SEM) framework in LISREL 8.30 (Joreskog and Sorbom, 1993). A covariance matrix was used as input for estimation of the measurement and path models. In the path models, we used scale scores as indicators of our constructs (see below for more description).

Results

Table 1 shows the scales’ means, standard deviations, reliabilities (coefficient alpha) and correlations. All reliabilities were in the acceptable range (Nunnally and Bernstein, 1994).

First, following the procedure outlined by Anderson and Gerbing (1988), a confirmatory factor analysis (CFA) was conducted on the measurement model using LISREL. For the measurement model, we created multiple (3) indicators for each construct as suggested by Settoon et al. (1996). Although there has been some debate about this approach (i.e. partial disaggregation) vs total disaggregation (Williams et al., 2009), an important reason for using the former approach is when a study includes many indicators with a modest sample size. In our case, we had 67 items but only 343 individuals in our sample. The number of items precluded us from testing a total disaggregation model in LISREL (LISREL’s computing limitations does not allow more than 30 manifest indicators), so we tried analyzing the model in MPLUS. Still, this ratio did not allow us to achieve an identified model using the total disaggregation approach, even in MPLUS; thus we report the results of the partial disaggregation approach in LISREL here. (Other advantages of the partial disaggregation approach include accounting for non-normality, reducing correlations among uniqueness estimates, and providing more intervals among scale points.) We examined the chi-square test (χ^2), root-mean-square residuals (RMR), root-mean-square error of approximation (RMSEA), the goodness-of-fit index (GFI), the adjusted goodness-of-fit index (AGFI), the normed fit index (NFI), and the comparative fit index (CFI). All were in the recommended ranges ($\chi^2 = 581.1$, d.f. = 332; $p = .00$; RMSEA = .047; RMR = .06; GFI = .90; AGFI = .86; NFI = .92; CFI = .96).

Table 1 Means, standard deviations, reliabilities, and correlations

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Distributive justice	2.97	.77	.80									
2. Procedural justice	2.73	.73	.34*	.76								
3. Interactional justice	3.74	.73	.60*	.22*	.74							
4. Perceived organizational support	3.83	1.09	.40*	.54*	.27*	.94						
5. Perceived supervisor support	3.45	.97	.49*	.33*	.47*	.57*	.89					
6. Emotional exhaustion	2.74	1.47	-.31*	-.38*	-.22*	-.55*	-.45*	.92				
7. Depersonalization	1.63	1.21	-.32*	-.27*	-.28*	-.45*	-.38*	.67*	.79			
8. Diminished personal accomplishment	1.81	1.06	-.09	-.16*	-.10	-.25*	-.20*	.24*	.31*	.76		
9. Organizational commitment	4.32	1.19	.32*	.39*	.24*	.68*	.44*	-.61*	-.55*	-.45*	.91	
10. Turnover intentions	2.35	1.18	-.19*	-.22*	-.21*	-.39*	-.26*	.47*	.40*	.25*	-.55*	.93
11. Turnover	.08	.27	-.14*	.14*	-.19*	-.06	-.04	.04	.12	.10	-.08	.18*

Reliabilities (coefficient alphas) are reported on the diagonal.

n = 343

*p < .05

After confirming the fit of the measurement model, we evaluated the structural model. We chose to use scale scores as indicators of our measures rather than the individual items, again owing to LISREL's computing limitations fitting models with more than 30 manifest indicators (we had 67: Bentler and Chou, 1987; Moorman, 1991; Williams and Hazer, 1986). Following the procedure outlined by Williams and Hazer (1986), we calculated the measurement loadings and error variances. Namely, we used the variance-covariance matrix as input, calculated the measurement loadings for each latent variable (square-root of the scale reliability), and set the error variances for each latent variable to one minus reliability times the scale variance (Williams and Hazer, 1986). Following the work of Allen et al. (2003), we assumed that voluntary turnover was measured without error.

We tested five alternative nested models (plus the null model) using chi-square difference tests (i.e. Anderson and Gerbing, 1988) and one additional non-nested model. First, the theoretical model was compared with the null model. Next, the theoretical model was compared to three less-constrained models where three additional paths were added, one less-constrained model where four additional paths were added, and one more-constrained model where one path was removed. Finally, the theoretical model was compared to the non-nested model.

Our hypothesized model provided a good overall fit to the data ($\chi^2 = 73.97$, d.f. = 35, $p < .001$; RMSEA = .06; RMR = .04; GFI = .96; AGFI = .93; NFI = .95; CFI = .97), with all fit statistics exceeding the benchmarks set in the literature. Standardized parameter estimates for this model are shown in Figure 2. The results of our nested model comparison are shown in Table 2. First, we compared the theoretical model to the null model. The theoretical model provided a significant improvement over the null model ($\chi^2_d = 1817.94$, d.f. = 52, $p < .001$). Next, our theoretical model was compared with four less-constrained alternatives, all of which failed to provide a significant improvement: Alternative Model 1 ($\chi^2_d = 2.73$, d.f. = 32, $p > .05$), Alternative Model 2 ($\chi^2_d = .23$, d.f. = 32, $p > .05$), Alternative Model 3 ($\chi^2_d = 4.06$, d.f. = 32, $p > .05$), and Alternative Model 4 ($\chi^2_d = 7.19$, d.f. = 31, $p > .05$). Our theoretical model was compared with one more-constrained alternative with no path from interactional justice to POS. Model fit was significantly worse for Alternative Model 5 ($\chi^2_d = 3.47$, d.f. = 36, $p < .05$). Finally, the non-nested model, Alternative Model 6, was compared to our theoretical model. The Expected Cross-Validation Index (ECVI), one method for comparing non-nested models, was used as a decision criterion (Browne and Cudeck, 1989). Our theoretical model had the lower ECVI value, indicating that it fit the data better than Alternative Model 6. Thus, our theoretical model is the best fit of all the models. Next, we present results of the hypothesis tests based on our theoretical model.

In Hypothesis 1a and 1b, we predicted distributive justice to be positively related to both POS and PSS, respectively, including a stronger association with POS. Hypothesis 1a was not supported, but Hypothesis 1b received support. Therefore, in contrast to our hypothesis that distributive justice would be more strongly related to POS, it was actually only significantly related to PSS. We found that procedural justice was positively related to both POS and PSS, and this association was stronger for POS, supporting Hypotheses 2a and 2b, respectively. We found no support for a relationship between interactional justice and POS, failing to support Hypothesis 3a. Hypothesis 3b was supported,

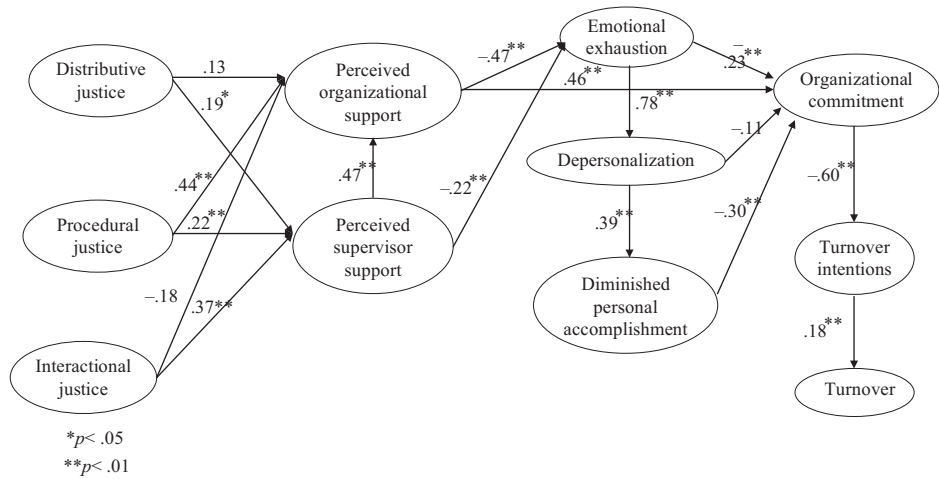


Figure 2 Theoretical model results

Table 2 Goodness-of-fit indices for alternative models

Model	χ^2	d.f.	p	RMSEA	RMR	GFI	AGFI	NFI	CFI	ECVI	$\Delta\chi^2$
Null model	1891.91	52	< .01	.32	.38	.50	.36	.14	.14		–
Theoretical model	73.97	35	< .01	.06	.04	.96	.93	.95	.97	.40	1817.94***
Alternative Model 1	71.21	32	< .01	.06	.04	.96	.93	.95	.97	.40	2.73
Alternative Model 2	73.68	32	< .01	.06	.04	.96	.92	.95	.97	.41	.23
Alternative Model 3	69.88	32	< .01	.06	.04	.96	.93	.95	.97	.40	4.06
Alternative Model 4	66.75	31	< .01	.06	.03	.97	.93	.95	.97	.40	7.19
Alternative Model 5	77.41	36	< .01	.06	.04	.96	.93	.95	.97	.39	3.47*
Alternative Model 6	162.55	35	< .01	.10	.04	.92	.85	.89	.91	.65	

n = 343
 *p < .05
 ***p < .001

however, which stated that there is a positive relationship between interactional justice and PSS, and that this would be stronger than for POS. Consistent with Hypothesis 4, PSS was positively related to POS. POS had a significant negative relationship with emotional exhaustion, providing support for Hypothesis 5. Furthermore, PSS was found to have a negative relationship with emotional exhaustion, supporting Hypothesis 6. Supporting Hypotheses 7a and 7b, emotional exhaustion was positively related to depersonalization, and depersonalization was positively related to diminished personal accomplishment. Emotional exhaustion and diminished personal accomplishment were both significantly related to organizational commitment, supporting Hypotheses 8a and 8c, respectively. Hypothesis 8b, however, was not supported, as a non-significant relationship emerged between depersonalization and organizational commitment. POS was positively related to organizational commitment, supporting Hypothesis 9. Organizational commitment

was negatively related to turnover intentions, which was positively related to later turnover behavior, supporting Hypotheses 10 and 11. In sum, 14 of 17 (82%) hypothesized linkages were supported and after comparing our theoretical model with five alternative nested models and one non-nested model, our theoretical model exhibited the best fit, and all model fit statistics were in acceptable ranges.

Discussion

Our theoretical model was strongly supported as the best explanation for the data, with support for 14 of the 17 proposed linkages. In this model, we used COR Theory as a foundation augmented by domain-specific theories to propose a comprehensive model of justice and support as antecedents of burnout, and commitment and turnover as outcomes of burnout. Namely, drawing on COR Theory, we proposed that justice influences the level of perceived support, which acts as a key resource to prevent or reduce burnout. We asserted that the source of this support (supervisor or organization) is largely determined by attribution processes. Then we proposed that the specific dimensions of burnout are likely to induce psychological withdrawal, as a result of individuals protecting their remaining resources, potentially ending with an employee leaving the organization. By putting these pieces together and testing a more comprehensive model, we hope to offer new insights to several different literatures and research streams.

Organizational justice, POS, and PSS

PSS demonstrated robust significant relationships with all three forms of justice and with emotional exhaustion. Unexpectedly, however, distributive justice was not related to POS. This lack of a relationship contrasts with much extant research that links these two 'organization-focused' constructs (e.g. Wayne et al., 2002). The null relationship with POS here may indicate that in this sample of social workers, salient outcomes (e.g. department funding, raises, promotions, layoffs) were perceived as coming more from the supervisor than the organization. The items were focused at the department level, which would support this possibility. Attribution theory suggests that the support resources garnered from distributive justice would be credited to the department if it is distinctive in providing fair outcomes (Kelley, 1973; Weiner, 1985). However, we originally suggested in our theorizing that this may depend on organizational context; in some organizations, employees may perceive outcomes as determined by the organization for their department (not controlled by their supervisor), but this does not appear to be true for our sample. Future research should investigate whether different occupations and organizational cultures have differential susceptibility to different dimensions of justice and support, or to different sources from which they come. The answer may provide specific recommendations for each level of management in different occupations regarding their role in minimizing burnout.

Procedural justice was strongly related to both POS and PSS, but more strongly with POS, as expected. Attribution theory suggests that this may be the case when all departments are perceived as using consistent procedures across the organization, thus pointing

to the organization as the source of the support resources that result (Kelley, 1973; Weiner, 1985). From anecdotal responses in an open-ended section of the survey, our respondents seemed to view the procedural justice as partly a function of organizational policy or practice (Masterson et al., 2000) and partly a function of supervisor procedures. Thus, in assessing support, fairness of procedures in our sample was apparently attributed to both organizations and supervisors. Future research should directly investigate these attributions for different forms of justice and how these translate into POS and PSS, as well as subsequent employee outcomes.

Also as predicted, interactional justice was most strongly associated with PSS, but unexpectedly, it was not significantly associated with POS at all. This contrasts with what was found by DeConinck and Johnson (2009), but is consistent with recent advances in attribution theory (Eberly et al., 2011). That is, day-to-day interactions with the supervisor are more common and personal than interactions with top managers, who may represent the broad organization for the vast majority of employees who never interact with them. Therefore, when assessing the source of resources garnered from interpersonal interactions, employees are likely to highlight their relationship with their supervisor. We believe this underscores the importance of the immediate supervisor's management and distribution of resources as a salient source of interactional, procedural, and distributive justice through the day-to-day support of this office.

Support, job burnout, and withdrawal

We found that POS has a strong, negative relationship with emotional exhaustion, as predicted by COR Theory (Hobfoll, 2001) and stress appraisal theory (Folkman and Lazarus, 1985) and consistent with empirical work by Lee and Ashforth (1996). We also found that PSS was negatively related to emotional exhaustion, which was positively related to depersonalization, and in turn, diminished personal accomplishment. This lends indirect support to the progression of burnout hypothesis, compared to alternative conceptualizations of burnout (Toppinen-Tanner et al., 2002). Emotional exhaustion and diminished personal accomplishment both had significant negative relations with organizational commitment, but depersonalization did not. Although it contradicts our expectations based on the effects of resource depletion in an individual (Hobfoll, 1989), this null finding is in line with work by Leiter and Maslach (1988). They suggested that the role of depersonalization, particularly when considered in conjunction with the other two burnout dimensions, may simply be as a mediator of the effect of exhaustion on diminished personal accomplishment rather than to directly affect organization commitment. Indeed, in their study and ours, depersonalization was not a significant predictor of commitment when considered with the other two dimensions in the equation, despite its significant bivariate correlation.

Finally, as predicted by turnover theory and supported by much research on turnover (Bozeman and Perrewe, 2001; Hom et al., 1992; Mathieu and Zajac 1990), organizational commitment was associated with turnover intentions, which in turn predicted turnover behavior. Overall, this model firmly establishes in the literature a guide with the most precise connections to date between justice dimensions, support dimensions, burnout dimensions, and the turnover process.

Management implications

The first practical lesson of our model is that if managers treat employees fairly, this may serve as an important resource for employees. Indeed, fair treatment may even supplement other supportive behaviors (e.g. showing concern and providing assistance). As a result of these support resources, employees may be less likely to become emotionally exhausted in the first place. This begins through day-to-day distributive, procedural, and interactional justice from immediate supervisors. By following a set of procedural justice rules (e.g. Gilliland, 1993), supervisors can be trained to appropriately distribute outcomes, as well as effectively communicate to improve perceptions of justice, regardless of the outcomes distributed. Supervisors can also provide personal encouragement, treating employees with dignity and respect during all interactions. Critically, our findings suggest that these supervisor actions cannot be fully substituted for at the organizational level. That is, most workers cannot escape injustice or non-support from their immediate manager, even if the organization is generally seen as just or supportive. So, based on our results, we emphasize that intervention must start at the first-line manager level.

Still, the next phase is for upper management in the organization to reward such supervisors and reinforce their efforts through organization-wide policies that emphasize procedural justice. In addition to fair policies, the organization can explicitly provide support by providing opportunities for growth (e.g. training or job rotations) or flexible work benefits (e.g. flextime or telecommuting options), or by making sure employees know about counseling opportunities available in employee assistance programs. Over time, this all should result in better average perceptions of distributive justice, and potentially, a noticeable climate of justice and support as part of the organizational culture transmitted through time to future managers.

Another lesson of our model is that, if such steps are not affirmatively taken, workers are more likely to become emotionally exhausted. Even one salient experience of emotional exhaustion may act as a trigger to start a process of withdrawal, which tends to be highly undesirable to managers and organizations (Wright and Cropanzano, 1998). Moreover, if managers can assess employee exhaustion, this metric may act as an early warning sign to trigger interventions (e.g. one-on-one time with the manager, time off, counseling, a revised work schedule, clear communication about fairness of procedures) to aid in coping, and thereby, preventing subsequent withdrawal.

Limitations and conclusion

Although objectively-measured turnover was assessed at a time period after the predictors were measured using a classical prediction design, two limitations of this study are the use of cross-sectional and self-report data for the predictors. While this design is not uncommon, it prevents firm conclusions about the causal nature of the relationships within this study. However, we did conduct alternative model tests with different causal ordering of the variables, and none showed a significant increase in model fit. This, combined with the strong fit of our model, the significant improvement of the theoretical model over the competing alternative models (see Table 2),

and previous empirical support for several of our linkages, all suggest that the order of the relationships we proposed is appropriate. Further, we conducted popular tests to examine the influence of common method bias over our results (Podsakoff et al., 2003; Williams et al., 1989) and found that only 26 per cent of the variance was explained by a latent method factor. This is within normal range for published studies (Williams et al., 1989). This, combined with the fact that we found several non-significant but plausible linkages, leads us to conclude that common method bias did not unduly threaten our results (Liao and Chuang, 2004).

Three other limitations concerned the dependent variable, turnover. First, we had a relatively low base rate (8%) of turnover. While still significant, it may have attenuated the observed relationship of turnover intentions with turnover. This poses a challenge to any claims here of practical predictive validity with respect to turnover behavior. Fortunately, maximizing prediction of turnover was not an intended contribution of this article. Instead, our contribution lies in our modeling key constructs in a new way and competitive tests vs plausible alternatives. Second, turnover was dichotomous, so it potentially violates assumptions underlying LISREL. However, in a fully mediated model, 'the dichotomous nature of the turnover variable primarily affects only the relationship between turnover intentions and turnover' (Allen et al., 2003: 115), minimizing the effect of this violation. Still, we followed the recommendation outlined by Kupek (2006) for handling binary dependent variables in SEM using a Yule transformation. The significance and magnitude of the paths did not change, thereby reducing this concern. Third, the determination for 'voluntary' turnover was made by the organization. This means we did not have access to verify that the 26 individuals listed by the organization actually quit voluntarily, nor did we have access to those who left involuntarily during that time period. Future research should consider Hom et al.'s (in press) suggestion to expand the turnover criterion.

As a final limitation, our results provide insight into a profession that carries high risk of burnout (i.e. social work: Leiter and Maslach, 1988), but further research in other contexts is needed to help clarify the generalizability of these findings – non-health-care settings and less bureaucratic organizations may exhibit a different pattern of results, and we urge caution in generalizing our results without further empirical testing.

Despite these limitations, this study supports the most comprehensive model of justice, support, burnout, and withdrawal to date, overcoming under-specification problems of past models. By including three dimensions of justice and highlighting the three dimensions of burnout as important factors linking justice and support to turnover, our findings provide new insight for researchers working in these topic areas and for managers, particularly those who are concerned that burnout may be leading to the costly outcomes of psychological withdrawal and quitting.

Our research has provided organizations with a few inexpensive tips that could have a significant payoff. To achieve these benefits, managers must simply remember to treat employees like they want to be treated, considering how their actions are perceived by employees. In turn, when employees perceive that fairness exists, they will be more likely to find the necessary support needed to accomplish their tasks, and will experience less burnout and turnover.

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