

## **Organizational Justice and Individuals' Withdrawal: Unlocking the Influence of Emotional Exhaustion**

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**ABSTRACT** This study examined the relationships between organizational justice and withdrawal outcomes and whether emotional exhaustion was a mediator of these linkages. Data were obtained from 869 military personnel and civil servants; using structural equation modelling techniques, we examined an integrative model that combines justice and stress research. Our findings suggest that individuals' justice perceptions are related to their psychological health. As predicted, emotional exhaustion mediated the linkages between distributive and interpersonal (but not procedural and informational) justice and individuals' withdrawal reactions. Results showed that distributive and interpersonal justice negatively related to emotional exhaustion and emotional exhaustion negatively related to organizational commitment which, in turn, negatively influenced turnover intentions. These findings were observed even when controlling for the presence of contingent-reward behaviours provided by supervisors and individuals' psychological empowerment.

## **INTRODUCTION**

Perceptions of organizational justice, defined as the degree to which individuals believe the outcomes they receive and the ways they are treated within organizations are fair, equitable, and in line with expected moral and ethical standards (Cropanzano et al., 2007), have been applied to investigate a variety of organizationally relevant attitudes and behaviours (Cohen-Charash and Spector, 2001; Colquitt et al., 2001; Latham and Pinder, 2005). Further, this research generally casts organizational 'injustices' as workplace stressors believed to affect individuals' ability to cope with work demands (Maslach and Leiter, 2008; Vermunt and Steensma, 2001). In comparison to those who are justly treated, for example, unjustly treated individuals tend to experience more psychological distress and are less satisfied with their jobs (Judge and Colquitt, 2004; Tepper, 2001).

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Overall, there is substantial evidence that (in)justice perceptions are an important construct affecting individuals' actions and reactions within organizations (Masterson et al., 2000).<sup>[1]</sup>

Yet, researchers' interest in the direct associations between organization justice and various outcomes neglects 'the underlying process of *how* organization justice reactions *motivate* responses' (Gilliland, 2008, p. 271). Ambrose and Schminke (2003) expressed a similar notion, observing that the majority of empirical studies focus on the direct effects of justice and do not examine more integrative models. As a result, both Masterson et al. (2000) and Judge and Colquitt (2004) noted that we still do not fully understand the mechanisms through which justice perceptions influence individuals' attitudes, intentions, and behaviours, and Zapata-Phelan et al. (2009) lamented that, based on the current state of research, it is virtually impossible to understand why fair treatment can have positive consequences.

To further complicate matters, scholars have debated whether there are two justice types (distributive and procedural), three types (adding interactional justice), or four types (detaching interactional justice into interpersonal and informational justice). Recent research has clarified this debate by offering a validated measure assessing four different types of justice (Colquitt, 2001; Judge and Colquitt, 2004). First, *distributive justice* assesses individuals' perceived fairness of decision outcomes (i.e. perceived equity; Adams, 1965). Second, *procedural justice* assesses fairness in the way decisions are made and outcomes are allocated (e.g. consistency, lack of bias, and accuracy; Leventhal, 1980; Thibaut and Walker, 1975). Third, *interpersonal justice* reflects the extent to which individuals in the organization are treated with respect, sensitivity, and consideration (Bies and Moag, 1986). Fourth and finally, *informational justice* gauges the adequacy, truthfulness, timeliness, and honesty of the information individuals receive from organizational authorities (Colquitt, 2001).

Interestingly, a few recent studies have examined mediating mechanisms (e.g. Coyle-Shapiro et al., 2004; Karriker and Williams, 2009; Stinglhamber et al., 2006; Zapata-Phelan et al., 2009), yet they continue to employ a more narrow view, wherein one or more of the justice types are omitted. One exception to this general practice is a study by Judge and Colquitt (2004). These researchers examined work-family conflict as a mediator of the relationships between all four justice types and work stress. Their results demonstrated that the four justice types were differentially related to individuals' stress perceptions such that procedural and interpersonal justice were the primary drivers. Consistent with these findings, we maintain that extant research based on a subset of justice perceptions does not offer a complete picture of how organizational (in)justice shapes individuals' attitudes and behaviours. Further, echoing prior sentiments, we suspect that the omission of one or more justice types might lead a researcher to observe significant relationships that would not otherwise exist if the respective variable were included (Cropanzano et al., 2002; Masterson et al., 2000).

In this study we set out to advance research on organizational (in)justice by exploring individuals' emotional exhaustion as an intervening mechanism that may account for the proposed relationships between *all* four justice types and organizationally-relevant withdrawal outcomes. In this regard, we make two important contributions to the literature. First, we constructively replicate and extend prior justice and stress research. Whereas

previous research has shown relationships between *some* justice types and emotional exhaustion (Tepper, 2000, 2001), no study has examined the separate contributions of distributive, procedural, interpersonal, and informational justice. Second, we maintain that emotional exhaustion (i.e. the feeling of being emotionally overextended and exhausted by one's work; Wright and Cropanzano, 1998, p. 486) is among the most proximal reactions to perceived inequity or a lack of justice (Schaufeli, 2006). We further contend that individuals' justice perceptions are key factors for explaining their engagement in or withdrawal from their organizations (Cohen-Charash and Spector, 2001; Coyle-Shapiro et al., 2004). Based on these notions, we present an integrated model that combines the justice and stress domains and report on the results of a field study that tested emotional exhaustion's role as a mediating mechanism between individuals' (in)justice perceptions and their withdrawal attitudes (viz., reduced organizational commitment) and behaviour (viz., turnover intentions). Towards this end, the present study addresses recent calls for research on the specific mechanisms by which individuals' justice perceptions influence their actions and reactions and, in doing so, we advance a finer-grained understanding of how particular forms of (in)justice may affect individuals' commitment and turnover intentions. Further, we place our integrated model within the context of the existing literature by controlling for potential covariates (i.e. supervisors' contingent-reward behaviour and individuals' psychological empowerment; Liden et al., 2000; Rupp and Cropanzano, 2002). As such, this study aligns pieces of a previously jumbled puzzle into a more comprehensive and complete picture.

## **THEORETICAL CONSIDERATIONS AND HYPOTHESES DEVELOPMENT**

### **Organizational Justice and Emotional Exhaustion**

We draw on conservation of resources theory (COR; Hobfoll, 1989) as an underlying framework for understanding the linkages between (in)justice perceptions and emotional exhaustion. Emotional exhaustion, as noted, refers to the depletion of an individual's capacity to maintain the coping resources necessary to meet job demands and to fulfil performance expectations (Maslach and Leiter, 2008; Shirom, 2003). Emotional exhaustion is characterized by physical fatigue and a persistent sense of mental weariness (Wright and Cropanzano, 1998). According to the COR perspective, individuals have a certain number of valued resources (including emotional energy and socio-emotional support) in their possession and they strive to obtain, retain, and protect such resources. COR theory further proposes that the workplace demands individuals face require them to tap into available resources. When valued resources are lost or when the investment of resources does not lead to resource gain, individuals are likely to experience negative consequences that include emotional exhaustion (Tepper, 2000, 2001; Wright and Cropanzano, 1998). In fact, Wilk and Moynihan (2005) demonstrated a downward spiral of energy loss when individuals expend resources without replenishing them.

We argue that individuals perceive just acts to be gestures of goodwill on the part of the organization or its agents and, as such, contribute to the replenishment of their

socio-emotional resources. By the same token, perceptions of injustice will impose severe demands on individuals and cause a depletion of valued resources (e.g. Barclay et al., 2005; Weiss et al., 1999), thereby increasing individuals' susceptibility to psychological distress (Vermunt and Steensma, 2001). This line of conjecture is, in part, supported by Hakanen et al. (2008) who found a lack of resources predicted individuals' psychological distress three years later. Coupling these findings with evidence for the distinctiveness and predictive validity of the four justice constructs (e.g. Colquitt, 2001; Colquitt et al., 2001), we propose that it is worthwhile to conceptually and empirically examine the specific linkages between distributive, procedural, interpersonal, and informational justice on the one hand and emotional exhaustion on the other.

We begin by predicting a negative association between distributive justice and emotional exhaustion. Individuals experiencing distributive justice hold the perception that they are receiving adequate returns on their resource investments (Adams, 1965). From a COR perspective, this should lower individuals' vulnerability to exhaustion because expended resources are appropriately regenerated (Hobfoll, 1989). Alternatively, individuals confronting distributively unjust settings would have a lack of resource replenishment and be left with fewer assets at their disposal, leaving them more open to distress (Schaufeli, 2006; Walster et al., 1973). Tentative support for this expected relationship is provided by Johnson and O'Leary-Kelly (2003). They found a positive association between perceptions of psychological contract breach (as a form of distributive injustice; Kickul et al., 2002, p. 472) and emotional exhaustion.

*Hypothesis 1a:* Distributive justice is negatively related to emotional exhaustion.

We also anticipate that individuals' procedural justice perceptions will reduce the likelihood of experiencing emotional exhaustion. As Judge and Colquitt (2004) noted, 'procedural justice is valued because it makes long-term outcomes more controllable and predictable' (p. 396), whereas an absence of procedural justice should induce insecurity about the availability of important resources and may even signify a lack of resources. Based on COR theory, individuals' emotional exhaustion should increase in such situations because valued resources are threatened or have been lost as a result of unjust procedures. In this connection, researchers have found procedural justice violations to promote several forms of emotional distress, including resentment, ill will, anger, and aggravation (Barclay et al., 2005; Folger, 1993).

*Hypothesis 1b:* Procedural justice is negatively related to emotional exhaustion.

Past research has also shown that interactional justice (a combination of interpersonal and informational justice) can lower exhaustion levels (Tepper, 2000). Following Colquitt (2001), however, we detach interactional justice into interpersonal and informational facets and explore the possibility that both types of justice may separately relate to emotional exhaustion. Unfair or degrading interactions, which are inconsistent with the key features of interpersonal justice (Colquitt, 2001), may embody affectively relevant events that impose high demands and diminish a target's sense of dignity and self-worth (Barclay et al., 2005; Elfenbein, 2007), thereby depleting emotional resources and

evoking emotional exhaustion (Wright and Cropanzano, 1998). Although this anticipated relationship is previously unexplored, it is consistent with stress models that consider interpersonal stressors such as inadequate leader support and supervisory misbehaviour as key sources of strain (Spector and Jex, 1998).

*Hypothesis 1c:* Interpersonal justice is negatively related to emotional exhaustion.

Empirical research on informational justice and stress-related concerns is sparse. It seems reasonable to expect, however, that individuals' self-evaluations and self-worth would benefit when organizational agents engage in open, trustworthy, and honest communication (Colquitt, 2001). A lack of informational justice may, in turn, diminish individuals' trust in management and thus lower their self-esteem (Colquitt, 2001); further, informational injustice may evoke perceptions of ambiguity among targets because they lack sufficient information about how resources are being allocated (Cropanzano et al., 2007). If such scenarios hold true, it only follows that individuals with informational injustice perceptions are likely to deplete resources and be left vulnerable to emotional exhaustion.

*Hypothesis 1d:* Informational justice is negatively related to emotional exhaustion.

### **Emotional Exhaustion and Organizational Withdrawal**

As Maslach et al. (2001) stated, 'Exhaustion is not something that is simply experienced – rather, it prompts actions to distance oneself emotionally and cognitively from one's work' (p. 403). This pattern of events is conceptually consistent with the COR perspective; that is, emotionally exhausted individuals should attempt to minimize further resource loss (Hobfoll, 1989; Shirom, 2003) and, when unsuccessful, they engage in withdrawal coping mechanisms (Deery et al., 2002; Wright and Cropanzano, 1998). Such employee withdrawal may take a number of forms; from an organization's perspective, two of the more costly withdrawal-related outcomes include lower commitment, defined as individuals' emotional attachment to and involvement in an employing organization (Cole and Bruch, 2006, p. 588) and increased turnover intentions (Podsakoff et al., 2007). A growing body of research supports the contention that emotional exhaustion will be related to both of these withdrawal outcomes. For example, meta-analytic evidence has shown that emotionally exhausted individuals report lower organizational commitment ( $r_c = -0.43$ ) and higher turnover intentions ( $r_c = 0.44$ ; Lee and Ashforth, 1996). Thus, our tests of Hypotheses 2a and 2b were developed to replicate previous findings and are proposed here as part of a larger integrative model being tested in this study.

*Hypothesis 2a:* Emotional exhaustion is negatively related to organizational commitment.

*Hypothesis 2b:* Emotional exhaustion is positively related to turnover intentions.

### **The Mediating Role of Emotional Exhaustion**

As we have described above, injustices as workplace stressors are thought to promote a number of undesirable consequences for individuals. As such, we anticipate individuals' justice perceptions will be negatively associated with their emotional exhaustion (Hypotheses 1a–d) which, in turn, will be negatively associated with organizational commitment (Hypothesis 2a) and positively associated with turnover intentions (Hypothesis 2b). This conceptual scheme is consistent with a mediation model. Although empirical research has not yet tested this mediation prediction, it is consistent with COR theory (Hobfoll, 1989). In terms of the stressor–strain relationship, COR theory holds that negative situations deplete valued resources. This depletion of resources hinders individuals' capacity to cope with future stressful events, eventually evoking a state of emotional exhaustion (Tepper, 2000, 2001). This exhaustion, in turn, is suggested to trigger emotional detachment and defensive behaviour, as individuals try to avoid further resource depletion (Hobfoll and Shirom, 2000). Emotional exhaustion, then, is likely to serve as a key mechanism linking stressful, resource depleting stimuli (such as a perceived lack of organizational justice) with individuals' withdrawal attitudes and behavioural intentions.

The social exchange model of burnout (Schaufeli, 2006) arrives at a similar conclusion. This model suggests that injustice perceptions involving social and organizational relations stimulate psychological distress and drain individuals' emotional resources because the respective investments do not produce adequate returns (Buunk and Schaufeli, 1993). As a result, Schaufeli (2006) has argued that individuals are likely to decrease their investments in order to deal with their emotional exhaustion and restore equity, with reduced commitment and increased turnover intentions offered as exemplars. Based on this logic, the social exchange model of burnout offers conceptual support for our contention of a mediated process from organizational (in)justices via emotional exhaustion to withdrawal reactions. While these social exchange considerations specifically refer to 'the balance of give and take' in employee relations (i.e. distributive justice; Schaufeli, 2006), it seems plausible to extend this reasoning to the other justice types. Building on both COR theory and the social exchange model of burnout, we therefore cast emotional exhaustion as a key mechanism linking all four types of organizational justice with individuals' withdrawal.

*Hypothesis 3a:* Emotional exhaustion mediates the relationships between the four types of organizational justice and organizational commitment.

*Hypothesis 3b:* Emotional exhaustion mediates the relationships between the four types of organizational justice and turnover intentions.

### **The Mediating Role of Organizational Commitment**

As detailed earlier, past research has demonstrated the relationship of individuals' emotional exhaustion with their withdrawal attitudes and behavioural intentions, including turnover intentions (Lee and Ashforth, 1996). In addition, researchers have consis-



tently found an inverse relationship between organizational commitment and turnover intentions (Mathieu and Zajac, 1990; Tett and Meyer, 1993). More recent models associated with the withdrawal process have differentiated distal and proximal precursors, with meta-analytic evidence indicating that organizational commitment is among the best proximal predictors of turnover intentions (Griffeth et al., 2000). Given these findings, we propose that organizational commitment provides one explanation for the emotional exhaustion-to-turnover intentions linkage. Nevertheless, because other mechanisms may also influence this relationship (Cole and Bruch, 2006), we propose a partial mediation hypothesis. Supporting this logic, Cropanzano et al. (2003) demonstrated that individuals' organizational commitment partially mediated the linkage between emotional exhaustion and turnover intentions. We seek to constructively replicate this pattern of findings in the present study.

*Hypothesis 4:* Organizational commitment partially mediates the relationship between emotional exhaustion and turnover intentions.

## METHOD

### The Organization

The US Air Force Material Command (AFMC) is comprised of roughly 85,000 military and civilian employees located across 10 major US military installations from Massachusetts to California, where they conduct research related to developing advanced technology. Additional AFMC roles include acquiring new weapon systems, providing logistics functions, and maintaining existing and newly developed weapon systems. The operating budget of AFMC represents 57 per cent of the Air Force budget, and AFMC employs more than 40 per cent of the Air Force's total civilian workforce.

Over the last five years, AFMC leaders have overseen a Congressionally-mandated downsizing and the outsourcing of several functions. The personnel reductions associated with these initiatives were largely realized by limiting the number of new hires and offering financial incentives to leave government service. As a result, the remaining workforce has rapidly approached retirement age. While recruiting plays a key role in overcoming the challenges posed by an aging workforce, the importance of current practices on morale and retention has been recognized as part of the AFMC's 'generational gap' initiative.

### Study Procedures

As a part of the 'generational gap' initiative, this research effort was designed to gain insights into the views of a cross-section of the AFMC's junior military and civilian employees. Unit representatives from each of the ten bases were contacted and asked to randomly identify personnel from each functional occupation in their command, specifically targeting those who were under the age of 30 and had 1–8 years of service. Additionally, a small number (approximate  $n = 150$ ) of field grade officers with more than 8 years of service that held mid-level management positions were randomly selected

to participate. Once identified, potential participants were sent a memorandum that described the purpose of the study and explained that they were chosen, at random, to voluntarily participate in a study concerning morale and retention. The memorandum closed by informing targeted recipients of the time and place of a group meeting at which the study would be discussed and data collected. During the meetings, trained individuals provided participants with a general overview of the research and administered standardized paper-and-pencil surveys. All participants were guaranteed complete anonymity.<sup>[2]</sup>

## Participants

In total, 1350 individuals were invited to participate. The final study sample ( $n = 869$ ; response rate = 64%) was comprised of both active duty military members (76%) and civil servants (24%). Participants were primarily male (70%); about half were married (54%); about half were under the age of 25 (48%); and the majority had no children (65%). Tenure was measured categorically, with 68% reporting that they had worked for the government for four years or less (i.e. 1–2 years, 43%; 3–4 years, 25%; 5–7 years, 16%; and 8+ years, 16%). Respondents' ranks were: company grade officer, 17%; science and technology company grade officer, 25%; field grade officer, 12%; enlisted airman, 22%; civilian salaried employee, 20%; and civilian hourly employee, 5%.

## Measures

To avoid confusing the respondents, all measures (unless otherwise noted) used a six-cell response format ranging from 1 (strongly disagree) to 6 (strongly agree). Past research has suggested that relatively minor alterations to response formats do not affect the respective measures' validity (Matell and Jacoby, 1971).

*Organizational justice.* We assessed organizational justice perceptions using Colquitt's (2001) four-dimensional measure. When referring to 'processes' in these items, respondents were told to consider the policies and procedures used by their immediate supervisor when making decisions related to pay, promotions, and recognition. When referring to 'outcomes', respondents were told to consider the actual pay, promotions, and recognition received from their job. Distributive justice was measured with three items (e.g. 'Is your [outcome] justified, given your performance?'). Procedural justice was measured with four items (e.g. 'Has the administration of these policies and procedures been based on accurate information?'). Interpersonal justice was measured with three items (e.g. 'Has he/she treated you in a polite manner?'). Finally, informational justice was measured with three items (e.g. 'Has he/she been candid in their communications with you?'). The reliability estimates and associated 95% confidence intervals (CI) (Duhachek and Iacobucci, 2004) were: distributive justice,  $\alpha = 0.95$ , with 95% CI = 0.94 to 0.95; procedural justice,  $\alpha = 0.84$ , with 95% CI = 0.82 to 0.85; interpersonal justice,  $\alpha = 0.97$ , with 95% CI = 0.96 to 0.97; and informational justice,  $\alpha = 0.82$ , with 95% CI = 0.79 to 0.84.



*Emotional exhaustion.* We assessed emotional exhaustion using eight items from Maslach and Jackson's (1981) measure. An example item includes 'I am emotionally drained from my work'. The reliability estimate was  $\alpha = 0.90$ , with 95% CI = 0.89 to 0.91.

*Organizational commitment.* Organizational commitment was assessed using eight positively worded items taken from Porter et al.'s (1974) attitudinal commitment measure. An example item includes 'I am proud to tell others that I am a part of the US Air Force'. We selected these items because Settoon et al. (1996) suggested the negatively keyed items tap a separate intent-to-quit factor. The reliability estimate for our commitment measure was  $\alpha = 0.78$ , with 95% CI = 0.75 to 0.80.

*Turnover intentions.* Turnover intentions were assessed using a three-item measure (see, e.g. Randall et al., 1999). An example item includes 'I intend to remain with the US Air Force indefinitely' (reverse-scored). In the present study, the reliability estimate was  $\alpha = 0.76$ , with 95% CI = 0.73 to 0.78.

*Control variables.* Data relating to two covariates were collected as control variables. We assessed immediate supervisors' *contingent-reward behaviour*, using Bass and Avolio's (2000) four-item measure (1 = not at all; 5 = frequently, if not always;  $\alpha = 0.83$ , with 95% CI = 0.82 to 0.85). According to social exchange theory, work environments are forums for transactions (Cole et al., 2002), with critical transactions occurring between supervisors and subordinates (Cropanzano et al., 2002). For example, Rupp and Cropanzano (2002) found that subordinates' perceptions of supervisory social exchange mediated the relationships between interactional (i.e. interpersonal + informational) justice and organizationally relevant outcomes. Further, prior studies have shown that insufficient rewards and imbalanced social exchange processes increase individuals' vulnerability to emotional exhaustion (Maslach and Leiter, 2008). A contingent-reward supervisor provides subordinates with appropriate rewards (e.g. valued information, resources, and recognition) in exchange for task accomplishment (Walumbwa et al., 2008). Given both theory and prior findings, we anticipated that supervisors' contingent-reward behaviour might confound the relationships between individuals' justice perceptions and withdrawal outcomes.

We controlled for *psychological empowerment* because an empowered individual believes that 'he or she possesses work-related competence and control over work decisions and derives meaning and a sense of impact from the job' (Liden et al., 2000, p. 410). Research has acknowledged contextual factors such as organizational practices and social interactions with supervisors as influencing empowerment sentiments (Conger and Kanungo, 1988; Spreitzer, 1996). Further, it is through feelings of empowerment that individuals derive a sense of satisfaction and commitment to the organization (Liden et al., 2000), and feelings of empowerment have been shown to translate into lower levels of stress and strain (Spreitzer et al., 1997). We assessed individuals' empowerment beliefs using Spreitzer's (1995) 12-item empowerment measure ( $\alpha = 0.90$ , with 95% CI = 0.89 to 0.91). By controlling for contingent-reward behaviour and psychological empowerment, we reasoned that our parameter estimates should yield a more accurate (and conservative)

assessment of emotional exhaustion as a possible generative mechanism linking organizational (in)justice and withdrawal outcomes.

### Analytical Overview

We applied Anderson and Gerbing's (1988) two-step, structural equation modelling approach to test the hypotheses using AMOS 7.0. First, we fit a confirmatory factor analytical (CFA) measurement model followed by a series of structural models testing our hypothesized relationships. As a general rule of thumb, Stevens (1996) recommended a minimum 15:1 subject-to-item ratio in structural equation modelling. In the present application the subject-to-item ratio was 18:1. To impute missing values, we used the full-information maximum likelihood (FIML) technique. FIML estimation is superior to other imputation techniques, including listwise deletion, as it provides unbiased and more efficient estimates, has a lower rate of convergence failures, and provides near-optimal Type 1 error rates (Enders and Bandalos, 2001; Schafer and Graham, 2002).

We employed the root mean square error of approximation (RMSEA) to assess goodness-of-fit, while also taking into account indicator-to-construct loadings and associated *t*-values. The RMSEA uses a non-centrality approach to estimate fit (Steiger, 2000). Consequently, rather than assuming perfect fit (Fan et al., 1999), the RMSEA is in fact testing how well a model reasonably fits the population (Brown, 2006; Steiger, 2000). Assuming a null hypothesis of close fit ( $H_0$ : RMSEA = 0.05) and an alternative hypothesis of unacceptable fit ( $H_a$ : RMSEA = 0.10), a power analysis with  $\alpha = 0.05$  indicated that the level of statistical power (1.00) was adequate to test our prediction that the proposed model exactly fits the observed data (Preacher and Coffman, 2006). In other words, because of the power associated with our large field sample, it appears reasonable to conclude that our findings provide an adequate approximation of the real-world relationships and effects (MacCallum et al., 1996). We also report the comparative fit index (CFI), an incremental goodness-of-fit index that assumes perfect population fit.

### RESULTS

Table I depicts descriptive statistics and intercorrelations among the study variables. As shown, the pattern of correlations is supportive of our conceptual scheme. All four organizational justice types were negatively correlated with emotional exhaustion (*r*'s ranged between  $-0.28$  and  $-0.35$ ,  $p < 0.01$ ), and emotional exhaustion was negatively correlated with organizational commitment ( $r = -0.25$ ,  $p < 0.01$ ) and positively correlated with turnover intentions ( $r = 0.42$ ,  $p < 0.01$ ). Also, as expected, organizational commitment and turnover intentions were negatively correlated ( $r = -0.29$ ,  $p < 0.01$ ). Finally, the four types of organizational justice were positively correlated with commitment (*r*'s ranged between  $0.20$  and  $0.31$ ,  $p < 0.01$ ) and negatively correlated with turnover intentions (*r*'s ranged between  $-0.13$  and  $-0.19$ ,  $p < 0.01$ ).

#### Step 1: Measurement Model Testing

To assess the overall goodness-of-fit for the suggested measurement model, we estimated the focal constructs as correlated first-order factors, with all items loading on their

Table I. Means, standard deviations, and intercorrelations of study variables

Variable	Mean	SD	r							
			1.	2.	3.	4.	5.	6.	7.	8.
1. Procedural justice	4.20	1.04								
2. Distributive justice	4.16	1.29	0.68							
3. Interpersonal justice	5.08	1.12	0.53	0.45						
4. Informational justice	4.36	1.13	0.63	0.58	0.62					
5. Emotional exhaustion	3.33	1.13	-0.35	-0.34	-0.35	-0.28				
6. Organizational commitment	4.04	0.82	0.31	0.28	0.20	0.25	-0.25			
7. Turnover intentions	3.68	0.88	-0.18	-0.17	-0.19	-0.13	0.42	-0.29		
8. Contingent-reward behaviour	2.31	1.04	0.54	0.48	0.56	0.66	-0.28	0.27	-0.18	
9. Psychological empowerment	4.49	0.95	0.33	0.26	0.32	0.32	-0.26	0.47	-0.25	0.35

Note: ns = 824–865. All correlations are significant at the  $p < 0.01$  level.

respective factors and no item cross-loadings permitted (baseline model). Although the chi-square test ( $\chi^2 = 2143.5$ ,  $df = 443$ ,  $n = 869$ ) was significant ( $p < 0.01$ ), the RMSEA (0.067) and its 90% confidence interval (0.064 to 0.069) suggested a good fit to the observed data. Similarly, the CFI was 0.90, demonstrating that the measurement model achieved conventionally acceptable fit. We also note that all item indicator loadings were significant ( $p < 0.01$ ) and the average standardized item loadings onto each of the focal variables were as follows: distributive justice = 0.93, procedural justice = 0.76, interpersonal justice = 0.95, informational justice = 0.78, emotional exhaustion = 0.73, organizational commitment = 0.53, and turnover intentions = 0.72.

We then compared the baseline measurement model with a series of restricted models that each constrained the correlation of one pair of constructs to 1.0. First, because the four justice constructs have rarely been assessed in the same study (Judge and Colquitt, 2004), we deemed it important to verify the viability of the proposed four-factor conceptualization. We estimated the fit of six restricted measurement models, collapsing two of the justice dimensions in each of these models and then comparing the fit of the collapsed models against the baseline measurement model. Chi-square difference tests indicated that the baseline measurement model was a significantly better fit to the observed data. Second, an inspection of the baseline model revealed a moderately strong correlation between commitment and turnover intentions ( $\phi = -0.64$ ).<sup>[3]</sup> Thus, we compared the fit of the baseline model to a measurement model that forced the commitment and turnover intention items to load on a single latent variable. The chi-square difference test demonstrated that the baseline measurement model was a significantly better fit to the observed data. In sum, measurement model results supported the convergent and discriminant validity of the measures used in this study (Anderson and Gerbing, 1988).

## Step 2: Structural Model Testing

The first structural model specified and evaluated for fit was the hypothesized model (Model 1; see Figure 1). We obtained an appropriate degree of fit for Model 1

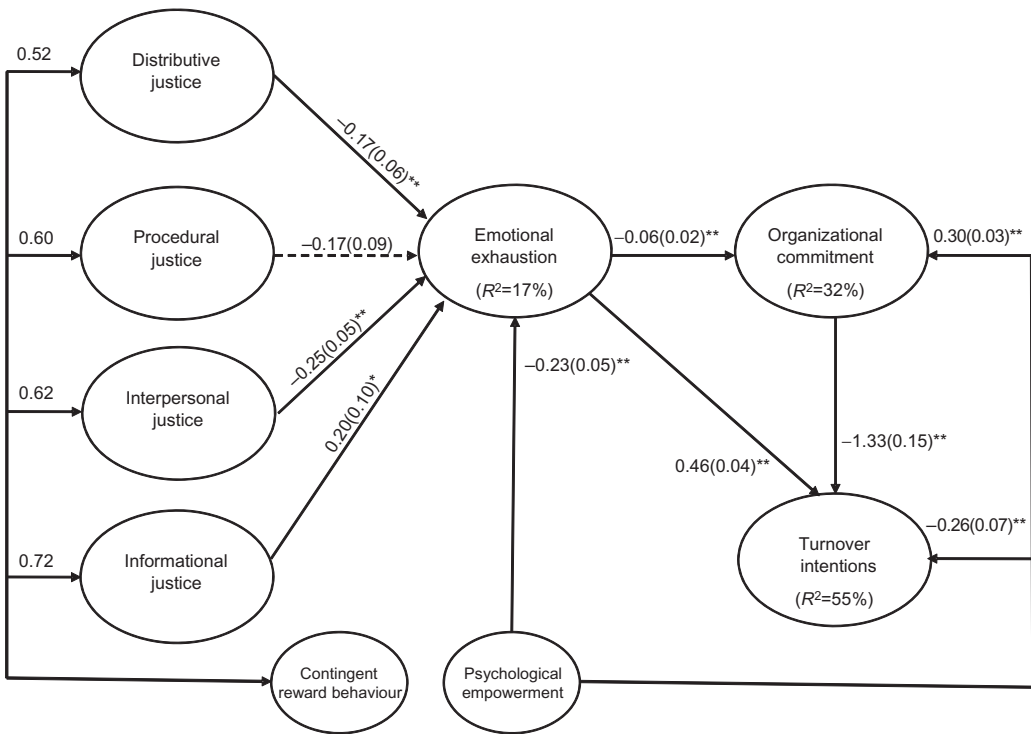


Figure 1. Hypothesized model results of intervening relationships

*Notes:* Unstandardized regression weights are reported. Standard errors are provided in parentheses. Consistent with Spreitzer (1995), psychological empowerment was operationalized as a second-order construct.

\* $p < 0.05$ . \*\* $p < 0.01$ .

(RMSEA = 0.060, 90% CI = 0.058 to 0.062). Although the model obtained a slightly lower degree of incremental fit (CFI = 0.88), this result should be interpreted cautiously given the tendency of the CFI to penalize for model complexity. The unstandardized parameter estimates for Model 1 are provided in Figure 1.<sup>[4]</sup> The figure shows that most of the hypothesized links were statistically significant and in the expected direction. Specifically, Hypotheses 1a and 1c (suggesting negative linkages between distributive and interpersonal justice and emotional exhaustion) and Hypotheses 2a and 2b (suggesting a negative linkage between emotional exhaustion and organizational commitment and a positive linkage between emotional exhaustion and turnover intentions) were supported. Hypothesis 1b, which predicted a negative relationship between procedural justice and emotional exhaustion was not supported. Even though the coefficient was in the expected direction, it did not reach conventional levels of significance ( $p = 0.07$ ). Figure 1 also shows a significant, but unexpected, positive linkage between informational justice and emotional exhaustion (disconfirming Hypothesis 1d). The variance explained in each endogenous variable was as follows: 17 per cent of emotional exhaustion, 32 per cent of organizational commitment, and 55 per cent of turnover intentions.

Hypotheses 3a and 3b predicted that emotional exhaustion mediates the relationships between the four organizational justice types and commitment (Hypothesis 3a) and

turnover intentions (Hypothesis 3b). To allow for an assessment of the nature of these mediated relationships, we compared Model 1 with a partially mediated structural model (i.e. Model 2). In Model 2, we added direct paths from each of the four organizational justice types to both commitment and turnover intentions. The chi-square difference test indicated that Model 2 was a better fit to the data ( $\Delta\chi^2_{(8)} = 30.9, p < 0.01$ ). An inspection of the path estimates showed that of the four justice types, only distributive justice exhibited a direct (and positive) relationship with commitment. A Sobel (1982) test revealed that the indirect association of distributive justice with commitment (through emotional exhaustion) was also significant (Sobel = 2.06,  $p < 0.05$ ). Additionally, the indirect relationship between interpersonal justice and commitment was significant (Sobel = 2.57,  $p = 0.01$ ). Thus, results were consistent with the notion of full mediation for the interpersonal justice-organizational commitment linkage, and emotional exhaustion partially mediated the distributive justice-commitment linkage. No direct linkages were observed between the four justice types and turnover intentions. Corresponding Sobel (1982) tests demonstrated that the indirect relationships between distributive justice (Sobel = -2.75,  $p < 0.01$ ) and interpersonal justice (Sobel = -4.59,  $p < 0.01$ ) and turnover intentions (through emotional exhaustion) were significant. These results are therefore consistent with the idea of full mediation. In contrast, Hypotheses 3a and 3b received only partial support because the path from procedural justice to emotional exhaustion was not significantly different from zero and the path from informational justice to emotional exhaustion was positive, contrary to expectations (a point we will return to later).

Hypothesis 4 predicted that organizational commitment partially mediates the relationship between emotional exhaustion and turnover intentions. To receive support, we would expect emotional exhaustion's significant total effects on turnover intentions to include both direct and indirect (through commitment) relationships. The estimated paths in Model 1 support this assumption. The direct relationship between emotional exhaustion and turnover intentions was significant as was the indirect association via organizational commitment (Sobel = 2.84,  $p < 0.01$ ). Moreover, emotional exhaustion was associated with organizational commitment (mediator) and organizational commitment had a significant relationship with turnover intentions. Overall, these results are consistent with Hypothesis 4.

Although not explicitly hypothesized, we also found evidence to suggest three-path mediation chains. Both the joint significance test and product-of-coefficient test (Taylor et al., 2008) revealed significant three-path linkages for two (of the four) mediation chains. Specifically, the chain of relations for (a) distributive justice → emotional exhaustion → organizational commitment → turnover intentions, and (b) interpersonal justice → emotional exhaustion → organizational commitment → turnover intentions were both significant, supporting our general contention of an integrative model linking justice perceptions and withdrawal outcomes.

### Alternative Model Analyses

We examined additional structural models to complete the picture for the anticipated relationships and disconfirm alternative models (Mathieu and Taylor, 2006). Models 3

and 4 were identical to Model 2, except that we constrained certain paths to zero (to further investigate the mediating role of emotional exhaustion). For Model 3, the direct paths from the four justice types to emotional exhaustion were constrained to be zero. If, contrary to our expectations, individuals' justice perceptions have no predictive utility for emotional exhaustion, then Model 3 should exhibit a superior fit to the data. In Model 4, the direct paths from emotional exhaustion to commitment and from emotional exhaustion to turnover intentions were constrained to be zero (the paths constrained in Model 3 were freely estimated). Prior research (Lee and Ashforth, 1996) has shown emotional exhaustion to strongly correlate with organizational commitment and turnover intentions. Thus, we expected Model 4 to exhibit a poor fit to the data. Indeed, Models 3 and 4 were significantly worse fitting models, as compared to Model 2 ( $\Delta\chi^2_{(4)} = 67.2$ ,  $p < 0.01$ , and  $\Delta\chi^2_{(2)} = 80.3$ ,  $p < 0.01$ , respectively). This pattern of results provides strong evidence that emotional exhaustion is an intervening variable that ties individuals' justice perceptions to withdrawal outcomes.

Finally, we also estimated a revised model (i.e. Model 5), which only included significant paths (Mathieu and Taylor, 2006). The goodness of fit indices and the direction and magnitude of the parameter estimates closely mirrored the estimates shown in Figure 1 (the hypothesized model), with one exception. In Model 5, the linkage between informational justice and exhaustion, which we previously reported as significant and in the opposite direction to what we had predicted, was no longer significantly different from zero. Taken together with the negative, bivariate correlation between informational justice and emotional exhaustion ( $r = -0.28$ ,  $p < 0.01$ ), one could argue that the positive relationship previously observed was an empirical anomaly, possibly resulting from intercorrelations between the four justice types (cf. Colquitt et al., 2001). Thus, for exploratory purposes, the informational justice–emotional exhaustion linkage was omitted and the model re-estimated. As depicted in Figure 2, parameter estimates were largely unaffected by the omitted path.<sup>[5]</sup> It is important to note, however, that we must consider Model 5 exploratory because it (1) includes the unexpected, direct path from distributive justice to organizational commitment, and (2) rejects the proposed paths from procedural and informational justice to emotional exhaustion. Hence, as Mathieu and Taylor (2006) recommend, we note that this model should be validated with an independent sample.

### Common-Method Variance Analyses

Because all data were collected via self-report measures, it is possible that common-method variance may have inflated the previously described relationships. Thus, we followed procedures outlined by Williams et al. (1989) to empirically examine the extent to which common-method variance impacted the study's focal constructs. Results of these analyses showed that adding a method factor to the baseline measurement model improved model fit,  $\Delta\chi^2_{(31)} = 371.02$ ,  $p < 0.01$ . Calculating the incremental explained variance in the model by squaring the standardized factor loadings indicated that the common-method factor increased the explained variance by an average of 18 per cent per item. This finding compares favourably to Williams et al. (1989), who reported that



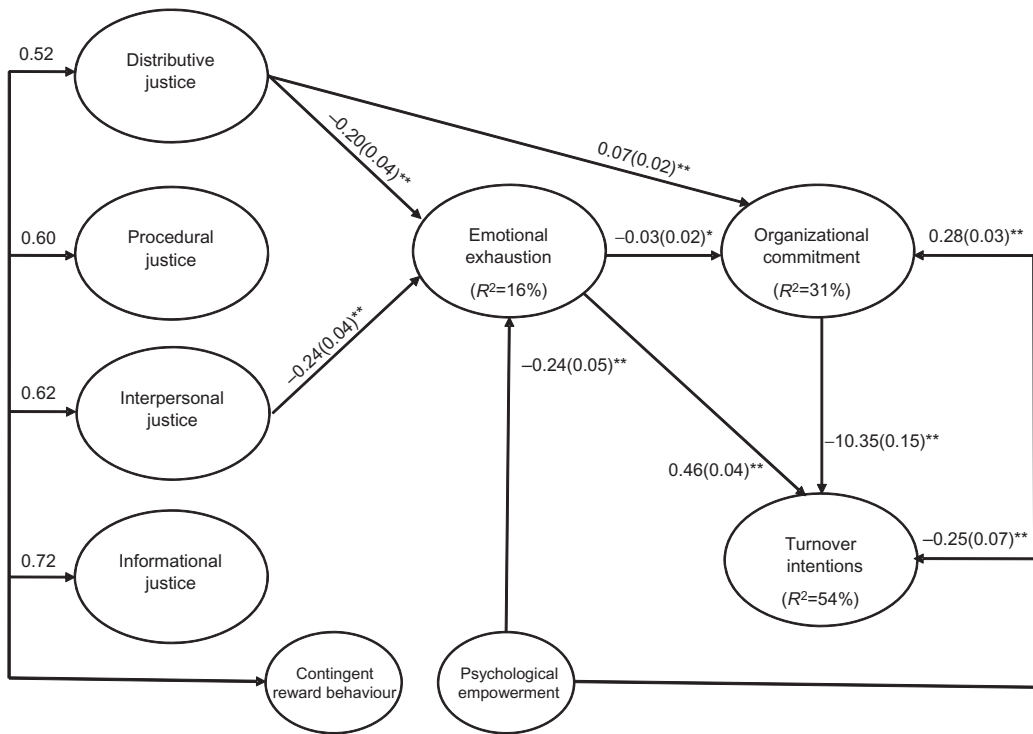


Figure 2. Exploratory model results of intervening relationships

*Notes:* Unstandardized regression weights are reported. Standard errors are provided in parentheses. Consistent with Spreitzer (1995), psychological empowerment was operationalized as a second-order construct. This model is exploratory (cf. Mathieu and Taylor, 2006). Conclusions based on the results of this model are tentative and need to be re-evaluated with an independent sample.

\* $p < 0.05$ . \*\* $p < 0.01$ .

approximately 25 per cent of the variance in all of the studies they examined was due to common-method variance.

## DISCUSSION

This study aimed to advance organizational justice research by testing an integrative model that highlights emotional exhaustion's role as a mediator in the relationship between four forms of organizational justice and individuals' withdrawal reactions. Overall, the results provided partial support for the proposed conceptual scheme. As we anticipated, the relationships from distributive and interpersonal justice to individuals' withdrawal were indirect. Emotional exhaustion, however, only partially mediated the linkage between distributive justice and organizational commitment and appeared to fully mediate the relationship between distributive justice and turnover intentions. Further, emotional exhaustion fully mediated the relationships between interpersonal justice and both organizational commitment and turnover intentions. Contrary to our predictions, however, empirical evidence did not support the suggested role of emotional

exhaustion as a mediator between procedural and informational justice and individuals' withdrawal. We also demonstrated that organizational commitment partially mediated the emotional exhaustion–turnover intentions linkage. Beyond constructively replicating previous research (e.g. Cropanzano et al., 2003), this latter result contributes to greater clarity about the unfolding process through which individuals' justice perceptions and their associated emotional exhaustion may influence turnover intentions.

Our results are part of a growing body of evidence demonstrating the importance of adopting a four-dimensional conceptualization of organizational justice (e.g. Jones and Martens, 2009; Judge and Colquitt, 2004). A number of earlier studies (e.g. Cropanzano et al., 2002; Rupp and Cropanzano, 2002) have, for example, combined interpersonal and informational justice into an overall, interactional justice dimension. Our findings support the perspective that these are distinct facets of justice with distinct implications. We also note that there has been a preference in past research for contrasting two types of justice (e.g. procedural vs. interactional; Coyle-Shapiro et al., 2004). Given that the justice constructs are often correlated, this approach can lead to the conclusion that justice-to-outcome linkages exist when, in fact, these relationships may change as additional types of justice are considered (Cropanzano et al., 2002). For example, a number of studies focusing on specific types of justice have reported procedural justice and organizational commitment to be associated (Folger and Konovsky, 1989; Masterson et al., 2000); and meta-analytic results show organizational commitment to more strongly correlate with procedural than with distributive and interactional justice (interpersonal + informational justice; Cohen-Charash and Spector, 2001). In the present study, however, the procedural justice-organizational commitment relationship was not supported, and perhaps this finding is due to the more complete set of variables tested here (including all four justice types and study covariates). Thus, we contend there is much to gain by adopting the four-factor taxonomy of justice, given that specific justice perceptions appear to differentially affect individuals' withdrawal (cf. Colquitt et al., 2001).

Perhaps even more important is our investigation of possible mediating factors. Rather than focusing on direct linkages between individuals' perceived (in)justices and withdrawal, we aimed to explore a potential mechanism believed to underlie these relationships. Corroborating the predictions we derived from COR theory (Hobfoll, 1989) and the social exchange model of burnout (Schaufeli, 2006), our study indicated that perceptions of unfairness may take an emotional toll on individuals, thereby disrupting organizational attitudes and behavioural intentions. As a result, this study is one of the first to suggest that feeling emotionally exhausted at work explicates how and why (in)justice perceptions can have severe effects for both employees and organizations.

Whereas our study findings indicate that emotional exhaustion is a key generative mechanism linking individuals' distributive and interpersonal justice perceptions and withdrawal reactions, emotional exhaustion does not seem to offer a viable explanation for the potential effects of procedural and informational justice. A further unanticipated result was the positive relationship between informational justice and emotional exhaustion (obtained in the hypothesized structural model). As we previously noted, the most likely explanation for this finding is that it is simply an empirical anomaly and thus should be interpreted with caution. This explanation is consistent with the results obtained in

the exploratory structural model, wherein the informational justice–emotional exhaustion linkage was not statistically significant. Alternatively, a second explanation is that there may be other mediating mechanisms that explain the null findings. In this regard, the quality of the supervisor–subordinate relationship (e.g. extent of open communication and interpersonal respect) may explain the divergent set of findings surrounding distributive and interpersonal justice vs. procedural and informational justice (Karriker and Williams, 2009). Future research therefore should account for the possibility that other generative mechanisms exist; such a study would be interesting.

## **Practical Implications**

This research also has implications for management practice with respect to the costly problems of organizational (in)justice, occupational stress, and voluntary withdrawal. Simply put, managers who are perceived to make unfair decisions or act in a disrespectful manner can deplete subordinates' valued resources. Tepper (2001) has shown that victims of 'day-to-day' injustices are more likely to feel that they lack the resources needed to sustain hope and solve problems. Thus, to the extent that perceived injustices encourage victims to doubt their capacity to cope (due to a depletion of resources), such injustices may function as workplace stressors, triggering an unfavourable chain of events that includes stress reactions in the form of emotional exhaustion and subsequent organizational withdrawal.

These potential ramifications are so substantial for companies and their employees that managers must act to reduce instances of injustice and the associated, excessive job stress (DeFrank and Ivancevich, 1998). Recent evidence has, for example, highlighted the socially contagious nature of fairness perceptions (Harris et al., 2009; Hollensbe et al., 2008). Thus, organizations (and their agents) can minimize potential stressors by promoting positive social environments and establishing strong norms for fairness. Managers should make every attempt to ensure that outcomes are allocated appropriately and equitably reflect individuals' contributions. Also, managers should enact policies and procedures in a supportive and respectful manner. Research suggests that one way managers can incorporate such practices is through the use of socialization tactics that allow for the sharing of stories and experiences related to employee fairness (Hollensbe et al., 2008). Although these suggested practices may seem commonsensical, managers do not always follow justice guidelines (Brockner, 2006). Therefore, organizational training efforts may not only make managers more aware of the deleterious effects of injustice but may also encourage and enable managers to more carefully enact fair procedures, treatments, and outcomes. Indeed, Skarlicki and Latham (1997) have demonstrated that managers, leaders, and other agents of the organization can be trained to adopt organizational justice practices, thereby making them more effective. In turn, individuals will experience less emotional exhaustion and organizations may gain competitive advantage because individuals hold more favourable job attitudes and behavioural intentions. Further, the minimizing of perceived injustices should allow individuals to focus their coping resources on other, less avoidable stressors (e.g. task-specific).

### **Limitations and Directions for Future Research**

As in all studies, there are certain limitations that should be acknowledged. The data for this study are cross-sectional, so inferences of causality cannot be established. Consequently, alternative models (including reverse causality) may exist that are indistinguishable from our models in terms of goodness-of-fit (MacCallum et al., 1993). Nonetheless, given our ability to leverage strong theory, the combination of measurement quality with the use of SEM techniques, and our focused analyses demonstrating both confirming and disconfirming evidence, we have greater confidence in our position from which to draw mediational inferences (Cheung and Lau, 2008; Mathieu and Taylor, 2006; Mathieu et al., 2008). Yet, we do acknowledge the need for more evidence based on longitudinal or experimental research before the suggested pattern of causation is defensible.

A second potential limitation is that because all data were collected via self-report measures, common-method variance may have influenced our study results. We maintain that our CFA results (Williams et al., 1989), in which we demonstrated that common-method variance did not significantly affect our ability to test study hypotheses, lessens any concern relating to common-method bias. We also offer four additional reasons that should further reduce concerns about common-method bias. First, we used procedural design remedies (e.g. verbal and written assurances of anonymity; distinct questionnaire sections and instructions) that should have reduced the susceptibility of our data to common-method bias (Podsakoff et al., 2003). Second, self-perceptions of stressors, attitudes, and intentions are key variables in research on organizational justice and emotional exhaustion (e.g. Colquitt, 2001; Deery et al., 2002), and self-report measures are believed to yield accurate representations of individuals' cognitive states (Ganster, 2008). Third, discriminant validity analyses described as part of our measurement model analyses affirmed that the latent constructs were empirically distinct. The existence of common-method variance might have resulted in supporting fewer factors (Podsakoff et al., 2003). Finally, as discussed in Rupp and Spencer (2006), no mediator should appear when a study's relationships are based entirely on common-method bias. In other words, because the majority of the relationships between justice and withdrawal were reduced when controlling for emotional exhaustion, we can infer that common-method bias is not the only explanation for the relationships reported. Considering these arguments and prior research indicating that common-method bias 'may be more the exception than the rule in microresearch on organizations' (Crampton and Wagner, 1994, p. 72), it is unlikely that common-method variance fully accounts for the current results.

Another limitation relates to the context where we collected the data – a large organization within the US Air Force. The generalizability of our findings to more traditional samples with different educational and cultural backgrounds and greater age diversity can only be investigated through future research. Indeed, it would be interesting to determine if our model can be extrapolated to other organization types (e.g. less bureaucratic, flatter hierarchies, and weaker chains of command) and to other employee groups who, unlike military personnel and civil servants, are more mobile in terms of employment opportunities (e.g. temporary workers).

Beyond addressing these limitations, study results point to a number of directions for future research. For instance, we were able to replicate the four-dimensional factor structure of organizational justice proposed by Colquitt (2001) (see also Judge and Colquitt, 2004). This finding suggests that the four-dimensional structure is a viable conceptualization, and we echo Colquitt's appeal for research that considers all four justice types rather than focusing on global measures (or alternatively, two- or three-dimensional models). The fact that justice scholars have applied various models of justice perceptions, even in recent efforts, underscores the need for additional research to establish a robust representation of the justice construct (Karriker and Williams, 2009). By utilizing the four-dimensional conceptualization, we hold that it is possible to obtain a more detailed depiction of fairness sentiments, allowing one to uncover details that might otherwise remain hidden.

Given converging evidence for the relevance of affective factors in the experience of (in)justice (Barsky and Kaplan, 2007), we encourage future scholars to expand upon this line of inquiry. Our study focused on emotional exhaustion (i.e. the depletion of an individual's emotional energy and resources), and other justice researchers have examined the role of an individual's negative emotions (e.g. Barclay et al., 2005). It would be particularly interesting to consider other affectively relevant responses to perceived (in)justice. In this regard, emotion researchers have found positive feelings to reduce the detrimental implications of negative contexts (e.g. Fredrickson et al., 2003). Thus, it might be possible to counteract the unfavourable consequences associated with a lack of justice (e.g. as transmitted by emotional exhaustion) by emphasizing other workplace aspects that may contribute to individuals' positive emotionality (see, e.g. Janssen et al., 2009). Finally, having demonstrated the mediating role of emotional exhaustion in the linkage between organizational justice and withdrawal outcomes, we look forward to future research that extends our conceptual scheme to include moderating variables (i.e. moderated mediation). Individuals' work environments (e.g. organizational structure and climate) and personal factors (e.g. hardiness and optimism) might be interesting starting points in this regard.

## SUMMARY

This study contributes to the organizational justice literature by providing support for the proposition that exposure to perceived injustices is a stressful, emotionally depleting experience. In doing so, we have begun to learn about the underlying mechanisms that may help to understand why, in response to a lack of perceived justice, individuals mentally and behaviourally withdraw from their organizations. We hope our findings will stimulate further research on the implications, mechanisms, and boundary conditions of organizational justice, thereby promoting greater scholarly knowledge on these issues and enabling practitioners to deal with perceived (un)fairness in a manner that enhances the effectiveness of their organizations and the quality of employees' work life.

## NOTES

- [1] Rupp and Spencer (2006) noted that 'in the absence of injustice, fairness becomes a camouflaged phenomenon' in that fairness implies adherence to expected norms that tend to be taken for granted

(p. 972). Thus, justice research commonly uses 'injustice' as the dominant theme because it is more salient to those who experience or observe it (Rupp and Spencer, 2006). We use the terms justice and injustice interchangeably.

- [2] At the request of an anonymous reviewer, we explored the possibility that our sampling methodology (i.e. random sampling of respondents, e.g. military, civil service, and field grade officers, across the ten bases) represented a study confound. We applied a number of statistical approaches to empirically test whether the sampling (i.e. respondents' characteristics) led to a misinterpretation of the results. Across the ten bases, for example, there were no significant differences in the mean values of the study's focal variables. With regard to the respondent groups (i.e. military vs. civil and 'other' respondents vs. field grade officers), the subsamples were sufficiently large to use multigroup structural equation modelling. Accordingly, we developed a multigroup structural model (identical to Model 5) whereby the model's path parameters were simultaneously estimated for each group. This analysis was conducted on the military vs. civil servant subsamples, and then on the 'other' respondents vs. field grade officers.

If sampling represented a study confound, we should find one or more estimated paths that are statistically different across the respondent groups. Results showed that when the hypothesized path estimates were constrained to be equal across groups, model fit was not significantly worse: military vs. civil,  $\Delta\chi^2_{(6)} = 5.44$ ,  $p = \text{ns}$ ; and 'other' respondents vs. field grade officers,  $\Delta\chi^2_{(6)} = 2.56$ ,  $p = \text{ns}$ . We can therefore infer that the hypothesized path estimates are equivalent (alternatively known as 'invariant') across the subsamples of respondents and, by extension, the sampling methods employed did not contaminate the study results.

- [3] A meta-analysis by Tett and Meyer (1993), based on nearly 14,000 participants from 51 samples, reported the correlation between organizational commitment and turnover intentions to be  $-0.54$ . In addition, being strongly correlated does not necessarily mean that two variables are the same construct (cf. Mathieu and Farr, 1991).
- [4] Although not depicted in the figure, the justice dimensions were allowed to correlate with each other. Study controls were also allowed to covary.
- [5] Although not depicted in the figure, the justice dimensions were allowed to correlate with each other. Study controls were also allowed to covary.

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