PERCEPTIONS OF HIGH-INVOLVEMENT WORK PRACTICES, PERSON-ORGANIZATION FIT, AND BURNOUT: A TIME-LAGGED STUDY OF HEALTH CARE EMPLOYEES

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Previous research demonstrates that high-involvement work practices (HIWPs) may be associated with burnout (emotional exhaustion and depersonalization); however, to date, the process through which HIWPs influence burnout is not clear. This article examined the impact of HIWPs on long-term burnout (emotional exhaustion and depersonalization) by considering the mediating role of person-organization fit (P-O fit) in this relationship. The study used a time-lagged design and was conducted in a Canadian general hospital among health care personnel. Findings from structural equation modeling (N = 185) revealed that perceived HIWPs were positively associated with P-O fit. There was no direct effect of HIWPs on burnout; rather, P-O fit fully mediated the relationship between employee perceptions of HIWPs and burnout. This study fills a void in the HR and burnout literature by demonstrating the role that P-O fit has in explaining how HIWPs alleviate emotional exhaustion and depersonalization. © 2016 Wiley Periodicals, Inc.

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Due to the plethora of challenges facing health care employees brought about by cost cutting, downsizing, and the introduction of new public management techniques, employee well-being is increasingly attracting the attention of academics and practitioners alike (Townsend & Wilkinson, 2010). One critical well-being outcome particularly likely to result from these challenges is burnout. Burnout describes a state of mental weariness (Schaufeli & Bakker, 2004) and is portrayed as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Leiter, 1997). Although the operationalization of the burnout construct has been debated, most authors advocate a two-dimensional concept that includes the emotional exhaustion and depersonalization components (e.g., Büssing & Glaser, 2000). It is argued that the specificity of the burnout syndrome lies in the combination of (1) general reactions linked to stress, captured by the

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emotional exhaustion dimension; and (2) specific attitudinal manifestations that signal a crisis in the individual-work relationship captured by the depersonalization dimension (Maslach, Schaufeli, & Leiter, 2001). As a result of the stressful working environment caused by high patient-to-staff ratios and long working hours, which are exacerbated by shift-work schedules and high workload, burnout is a very prevalent and well-known phenomenon in the context of health care (Felton, 1998). The prevalence of burnout among health care staff represents a major challenge given that burnout directly affects the quality of patient care delivered (Poghosyan, Clarke, Finlayson, & Aiken, 2010). As a result, working in health care organizations necessitates that personnel are capable of dealing with these special features and demands of the working environment (Vandenberghe, 1999). Indeed, one possible contributor to the emergence of burnout in individuals is a mismatch between the person and the working environment (Maslach & Leiter, 1997; Maslach et al., 2001).

By bridging the HRM and P-O fit literature, we advance a model linking HRM and well-being that demonstrates that the impact of HIWPs on employee burnout operates through HR processes that match employees to their working environments.

One proposed solution to problems surrounding the well-being and performance of health care employees lies in the role that HR systems can play in aligning persons with these particular work environments (Townsend & Wilkinson, 2010). Previous research has investigated and found support for the proposition that high-involvement work practices (HIWPs) positively affect organizational performance. This has been found to be the case both in the private sector (e.g., Vandenberg, Richardson, & Eastman, 1999) and the health care sector (Harris, Cortvriend, & Hyde, 2007). Indeed, researchers have found that HIWPs have a prominent role in reducing medication errors (Preuss, 2003), mortality rates (West et al., 2002), and improving patient satisfaction (Avgar, Givan, & Liu, 2011). HIWPs have also been linked to better well-being outcomes in both the private and public sector. For example, previous research demonstrates that HIWPs increase commitment (Paré & Tremblay, 2007) and job satisfaction (Butts, Vandenberg, Dejoy, Schaffer, & Wilson, 2009). Although studies that investigate the relationship between HIWPs and negative health outcomes are less common (Van de Voorde, Paauwe, & van Veldhoven, 2012),

HIWPs have been found to play an important role in the reduction of stress (e.g., Butts et al., 2009) and burnout (e.g., Castanheira & Chambel, 2010). However, most studies examining the relationship between HIWPs and health outcomes such as burnout use a cross-sectional research design. It is therefore unclear as to whether HIWPs can ameliorate burnout over time (Van de Voorde et al., 2012).

The present study investigates the role of P-O fit in the relationship between HIWPs and long-term burnout among health care professionals. This investigation represents an important contribution in two ways. First, methodologically, the usage of a time lagged research design enables burnout to be assessed following perceptions of HIWPs, thereby measuring the constructs in the hypothesized causal order (Wright & Haggerty, 2005). Second, by bridging the human resource management (HRM) and person-organization fit (P-O) fit literature, we advance a model linking HRM and well-being that demonstrates that the impact of HIWPs on employee burnout operates through HR processes that match employees to their working environments. Thus, beyond testing the direct relationship between HIWPs and burnout, this study goes a step further by attempting to understand the underlying mechanisms through which HIWPs influence burnout. To date, most research on HR practices in relation to P-O fit has focused on the role of the selection process (Ehrhart & Ziegert, 2005; Judge & Cable, 1997), and surprisingly little is known about what role other HR practices may play in establishing and maintaining P-O fit (Autry & Wheeler, 2005; Kristof-Brown, Zimmerman, & Johnson, 2005). However, recent studies do suggest that HRM practices can have a profound impact on employee outcomes by matching people with the organizations and jobs they work in (Boon, Den Hartog, Boselie, & Paauwe, 2011). By investigating the mediating role of P-O fit in the HIWPs-burnout relationship, we respond to calls from researchers to explore the potential role of a broader range of HR practices beyond that of selection in enhancing and maintaining P-O fit (e.g., Boon et al., 2011; Ehrhart & Ziegert, 2005). More important, by bringing HR, P-O fit, and burnout theory together in the same model, this study contributes to understanding the "black box" problem between HIWPs and well-being outcomes (Castanheira & Chambel, 2010; Peccei, Van de Voorde, & van Veldhoven, 2013). The next section discusses the link between HIWPs and well-being before elaborating on the relationships in the proposed model. Then the study will discuss the proposed methodology

and data analytic techniques before clarifying the key theoretical contributions and practical implications.

High-Involvement Work Practices and Well-Being

The terms *high-performance work systems, high-commitment HR practices,* and *high-involvement work practices* have been used interchangeably. While each of these terms has significant merit, Boxall and Macky (2009) highlight the high-involvement stream of literature as particularly important in the current context of workplace change and consider it the most useful for constructing theoretical models of high-performance work systems. In their view, HR systems should link to a broader organizational logic and be relevant to the organizational context. In health care, HIWPs may be viewed as part of a hospital's logic to promote humanistic values such as autonomy and control over work (e.g., Rondeau & Wagar, 2006). HIWPs may also be viewed as a key factor for improving patient care and are purported to complement other management innovations in health care such as the patient-centered care model (PCC) that emphasize clients' needs and preferences in the quest to improve the quality of patient care (Avgar et al., 2011). Therefore, following both theoretical reasoning and the particular application of HIWPs in the health care context, we focus on the high-involvement stream.

Vandenberg et al. (1999) developed a research framework based on Lawler's (1986) PIRK model and specifically proposed that HIWPs encompass four dimensions, that is, workplace power (P), information (I), rewards (R), and knowledge (K). The focus of these practices is on empowering workers to make better decisions, enhancing the information and knowledge that they need to do so, and rewarding them for so doing (e.g., Boxall & Macky, 2009). Empowerment, information sharing, rewards, and development practices are the core practices for high involvement and have been included in most research on HIWPs (Guerrero & Barraud-Didier, 2004). Therefore, similar to previous research in the health care context (e.g., Tremblay, Cloutier, Simard, Chênevert, & Vandenberghe, 2010), these practices were adopted in the present study. Previous research demonstrates that HIWPs have a stronger effect when combined rather than when used in isolation (e.g., Guerrero & Barraud-Didier, 2004). As HIWPs are a collective set of mutually reinforcing practices that have synergistic effects (Vandenberg et al., 1999), employees must perceive high levels on all four attributes of the PIRK model for maximum benefit (Riordan, Vandenberg, & Richardson, 2005).

Consistent with the "mutual gains" perspective, many authors argue that properly designed HR systems are beneficial for both the organization and its employees' well-being (e.g., Appelbaum, Bailey, Berg, & Kalleberg, 2000). However, the critical management-by-stress perspective argues that while high-involvement management may increase performance, it might also intensify employees' job demands and have a negative impact on their well-being (Wood, Van Veldhoven, Croon, & de Menezes, 2012). There is considerable debate in the literature regarding which perspective holds true. A recent meta-analytic review suggests that a "mutual gains perspective" is found for positive well-being outcomes while a conflicting outcomes perspective is found when focusing on negative well-being outcomes, albeit few studies have addressed such negative outcomes (Van de Voorde et al., 2012). While this particular debate is beyond the scope of the present study, we do contribute to the debate regarding the influence of HIWPs on employees' health-related well-being, that is, burnout. In accordance with recent theorizing and empirical evidence linking HIWPs to lower burnout (e.g., Castanheira & Chambel, 2010), we adopt an optimistic perspective regarding the influence of HIWPs on well-being. Indeed, consistent with the job demands–resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), recent research in health care shows that HIWPs improve employee well-being outcomes as they act as a positive resource, instrumental in alleviating their job demands (e.g., Bartram, Casimir, Djurkovic, Leggat & Stanton, 2012). However, Vanhala and Tuomi (2006) found that the direct relationship between HR practices and burnout is rather weak partly due to the existence of a "black box" between them. They suggested that researchers should focus their attention on clarifying the nature of this "black box" by focusing on the salience of the work environment. We suggest one possible model whereby P-O fit mediates this HIWPs-burnout relationship. The following sections explicate the key theoretical arguments for the HIWPs → P-O fit → burnout link as depicted in Figure 1.

HIWPs and P-O Fit

Kristof (1996, p. 4) defines P-O fit as "the compatibility between people and organizations that occurs when: (a) at least one entity provides what the other needs or (b) they share similar fundamental characteristics or (c) both." This definition recognizes two different conceptualizations: supplementary fit and complementary fit
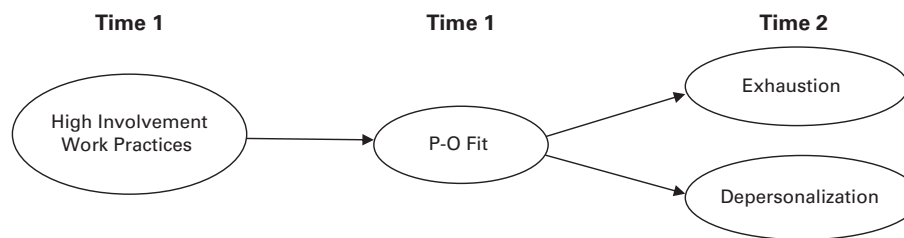
FIGURE 1. Hypothesized Relationships between HIWPs, P-O Fit, and Burnout

(Kristof, 1996). *Supplementary fit* is achieved when individuals possess characteristics that are similar to other individuals in an organization (Muchinsky & Monahan, 1987); for example, when both the individual and the organization are similar (Kristof-Brown et al., 2005). *Complementary fit,* however, is achieved when an individual's characteristics add something that is missing to the organization (Muchinsky & Monahan, 1987). Similarities may exist in terms of values, attitudes, personality, traits, or goals (Kristof-Brown et al., 2005). However, value congruence, which represents the similarity between individual values and those of the organization and its members (Kristoff-Brown, 1996), has been found to be the most consistent and effective predictor of employee outcomes (Verquer, Beehr, & Wagner, 2003).

Boon et al. (2011) argued that HRM practices have a profound impact on P-O fit by stimulating the internalization of organizational values and norms, a learning process often referred to as *socialization.* Organizational socialization represents an ongoing process of information acquisition "by which an individual comes to appreciate the values, abilities, expected behaviors, and social knowledge essential for assuming an organizational role and for participating as an organizational member" (Louis, 1980, pp. 229–230). In this respect, longitudinal studies have consistently shown that P-O fit indeed increases as a consequence of organizational socialization efforts (e.g., Cable & Parsons, 2001). HIWPs have an important role to play in supporting this socialization process by signaling what is expected, supported, and rewarded by the organization. In this respect, there are two ways in which HIWPs may increase P-O fit. First, HIWPs allow for the effective transmission of values. Indeed, HIWPs have a critical signaling function (Rousseau, 1995), whereby they communicate key organizational values and behaviors to employees (Bowen & Ostroff, 2004). For example,

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communication that occurs via information sharing ensures that employees actually know what the values of the organization are. Also, greater participation in the development of organizational goals (evidenced, for example, by empowerment and information sharing) may result in an increased sense of ownership and therefore more buy-in to organizational values (Siegall & McDonald, 2004).

Second, the system of HIWPs ensures that values communicated to employees are more coherent and consistent and, thus, have a reinforcing role. Indeed, through their signaling function, HIWPs reinforce key strategic goals and values in terms of what is expected from employees at work (Bowen & Ostroff, 2004). For example, information sharing informs employees about the specific contributions that may be expected of them at work. Furthermore, development and reward practices have a prominent role in stimulating desired employee behavior, which should be aligned with the values of the organization (Boon, Boselie, Paauwe, & Den Hartog, 2007). Overall, socialization processes in organizations, consisting of empowerment, reward, information sharing, and training, have a critical role in molding personal values to align with organizational values (e.g., Edwards, 2008). Consistent with the above explanation, we propose the following hypothesis:

Hypothesis 1: Positive perceptions of HIWPs will be positively associated with P-O fit.

P-O Fit and Burnout

While the attitudinal and behavioral outcomes of P-O fit have been previously investigated (see Kristoff-Brown et al., 2005, for a review), much less research has focused on its relationship with indicators of well-being, such as burnout. However, theoretical and empirical progress has been made in this area. One line of inquiry to explain how P-O fit relates to burnout is found in the ideas of Maslach and Leiter (1997), who explicitly stated that burnout might occur as a consequence of a chronic mismatch between people and their work

situation in terms of values. Indeed, a lack of value congruence signifies a depletion of important resources in employees' environments. This may result in additional job stressors in terms of role conflict and role ambiguity. The resulting imbalance between job demands and job resources has been proven to be one of the leading causes of the emotional exhaustion component of burnout (e.g., Demerouti et al., 2001). Relatedly, a lack of value congruence has also been found to lower the level of identification with the organization (Edwards & Cable, 2009), which likely results in depersonalization expressed as a cynical attitude or withdrawal behavior such as disengagement toward patients (Schaufeli & Enzmann, 1998). Consistent with this model of burnout, Siegall and McDonald (2004) found that P-O fit was strongly and negatively associated with burnout.

Social identity theory has particular relevance to our understanding of the P-O fit–burnout relationship. Central to social identity theory is the premise that individuals seek to fulfill an inherent need for belonging and communion by joining and retaining membership in groups that align with their self-concepts (Tajfel & Turner, 1985). Research has shown that achieving P-O fit represents an important way by which individuals succeed in satisfying this need for belongingness (Greguras & Diefendorff, 2009). P-O misfit thus involves an experience of cognitive dissonance as employees are forced to negotiate between their personal identity, which differentiates the individual from others within a social context, and their aspired social identities, which categorize the self into "more inclusive social unites that depersonalize the self-concept" (Brewer, 1991, p. 476). Given the salience of humans' need for affiliation and belonging, individuals low on P-O fit likely face an ongoing internal tension to adjust their self-concepts to the depersonalizing demands of their work environment, a process that over time may ultimately lead to a decline in self-definition and hence burnout (Tong, Wang, & Peng, 2015). The cognitive dissonance experienced is believed to evoke role conflict, and the associated anxiety and uncertainty is particularly prominent in explaining exhaustion as employees feel a lack of resources to help them cope in their environment (Tong et al., 2015). Moreover, lack of P-O fit often results in less effort from employees and they feel disengaged (Siegall & McDonald, 2004). This is because they find themselves making a trade-off between what they have to do and what they want to do (Maslach & Leiter, 2008). Over time, this ensures that they feel alienated and experience a lack of engagement, which is expressed by a cynical attitude or withdrawal behavior, that is,

depersonalization (Schaufeli & Enzmann, 1998). Indeed, as P-O fit enhances one's self-definition by virtue of belonging, it may act as an important resource for employees to ameliorate their defensive coping, eventually resulting in less emotional exhaustion and depersonalization over time (Tong et al., 2015). In accordance with the theoretical perspectives and empirical evidence outlined above, we hypothesize that:

Hypothesis 2: Positive perceptions of P-O fit will be negatively related to (a) emotional exhaustion and (b) depersonalization.

The Mediating Role of P-O Fit in the Relationship between HIWPs and Burnout

Although some propositions have been put forward to explain how HIWPs influence employee well-being outcomes, this link remains undertheorized (e.g., Peccei et al., 2013; Wood et al., 2012). One perspective that should be given greater attention concerns the extent to which employees' values fit with those of the organization for which they work (Boon et al., 2011). HIWPs have a significant role in matching employees with their organization, and this occurs via a social learning process (Davis & Luthans, 1980) or "socialization" (Cable & Parsons, 2001). Indeed, HIWPs have a prominent role in communicating the values and characteristics of the organization to employees, as well as signaling what is expected, supported, and rewarded (Boon et al., 2011). Matching employees' values with those of the organization, that is, ensuring P-O fit, is critical given that one serious consequence of a mismatch in values is elevated burnout (Tong et al., 2015).

On the basis of the important role that HIWPs can play in enhancing and maintaining P-O fit, coupled with the fact that P-O misfit causes a surge in burnout, we propose a model whereby P-O fit mediates the HIWPs-burnout relationship. Premised on a social learning approach to organizational behavior (Davis & Luthans, 1980), we recognize that to truly capture employees' experiences and behavior in the work context, it is necessary to consider the organization members, their behavior, and their environment. In this regard, Tremblay and colleagues (2010) found that the impact of HIWPs on behavioral outcomes among health care professionals is largely indirect. Kristof-Brown et al. (2005) have commented that P-O fit has largely been studied independently and suggested a need to study it within the context of other meaningful predictors and work outcomes. Following this line of argument and in an attempt to further uncover the underlying

mechanisms between HIWPs and well-being, we identify HIWPs as a relevant and important antecedent of P-O fit and long-term burnout as a critical and costly outcome of poor P-O fit. Based on these theoretical perspectives and empirical evidence, we hypothesize that:

Hypothesis 3: P-O fit will mediate the relationship between perceptions of HIWPs and (a) emotional exhaustion and (b) depersonalization.

Method

We used a time-lagged design to investigate the effects of perceived HIWPs on burnout via P-O fit. The study was conducted in a Canadian general hospital. With the agreement of the HR director, employees were invited to participate in a survey about work attitudes. Two questionnaires were sent to employees' private addresses. The first questionnaire was sent in January 2008, and the second was sent in January 2011. The survey package included a letter cosigned by the HR director and the researchers explaining the purpose of the study and ensuring that participation was voluntary and data would be kept confidential. Of the 1,802 employees who were contacted for participation in 2008, 530 filled out the first survey questionnaire and returned it to the researchers' office. In 2011, from an overall population of 1,843 employees, 507 filled out the second survey questionnaire and returned it to the researchers. A total of 185 respondents completed surveys at both Time 1 and Time 2. Analyses were conducted on this final sample of employees, representing 10 percent of the overall population of employees. In this sample, 91 percent were women, average age was 49 years, and average tenure was 15 years. Seventy-one percent of respondents were members of the nursing or paramedical staff, and 73% were employed full-time. In terms of education, 87 percent of respondents held a postsecondary degree: 28 percent college, 13 percent certificate, 38 percent bachelor's, and 8 percent master's.

No difference in terms of demographics (age, gender, and tenure) was found between the final sample of respondents ($N = 185$) and the hospital's general population of employees ($N = 1,843$). To further examine whether subject attrition from Time 1 to Time 2 led to nonrandom sampling, we tested whether the probability of remaining in the final sample ($N = 185$) among Time 1 respondents ($N = 530$) could be predicted by demographics and substantive variables measured at Time 1 (Goodman & Blum, 1996). The logistic regression predicting the probability of remaining in the final sample using age, job status, education, organizational tenure, and HIWPs and P-O fit as predictors was nonsignificant, although gender has a very small difference in proportion: 87.2 percent at Time 1 to 92 percent at Time 2. Overall, the results indicate that respondent attrition was mainly random.

Measures

The predictor variables in the present study are HIWPs and P-O fit, while burnout (emotional exhaustion and depersonalization) is the outcome variable. All items for the measures are depicted in the appendix. Employees were asked to express their level of agreement with each statement on a Likert scale ranging from 1 = strongly disagree to 7 = strongly agree.

High-Involvement Work Practices

High-involvement work practices were assessed using the core practices for high involvement, namely, empowerment, information sharing, rewards, and development practices (Guerrero & Barraud-Didier, 2004). The measure for empowerment was adopted from the psychological empowerment scale by Spreitzer (1995). Specifically, three items were used from the autonomy subscale. A sample item is "I can decide on my own how I go about doing my work." Cronbach's alpha was .90. To measure top-down and bottom-up information sharing, three items of each type were adopted from Lawler, Mohrman, and Ledford (1995). A sample item for information sharing is "Employees are regularly informed about major projects in our organization (e.g., structural changes, major investments, new technologies)." Cronbach's alpha was .92. To measure nonmonetary recognition, three items were adopted from Tremblay, Guay, Simard, and Chênevert (2000). A sample item is "Exceptional contributions of employees are formally recognized by the organization (e.g., during ceremonies or meetings, through the organization's newsletter, by congratulatory letters, with gifts)." Cronbach's alpha was .90. The measure for development practices was adopted from Tremblay et al. (2000). Specifically, three items assessed the level of training and development that employees were exposed to. A sample item is "In our organization, we have access to the resources needed to improve our skills." Cronbach's alpha was .80. All Cronbach's alphas pertaining to

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measuring HIWPs were deemed highly reliable. Guerrero and Barraud-Didier (2004) demonstrated that HIWPs have a stronger effect on performance when combined on a latent factor rather than when used in isolation. Following this approach, we treated HIWPs as a second-order latent factor.

P-O Fit

P-O fit can be assessed by using either direct or indirect measures (Kristof-Brown, 1996). Direct measures of fit involve asking respondents explicitly for their perceptions of fit in their organization. Such measures are beneficial if the objective is to assess *perceived* fit. Indirect measures of fit, however, involve an explicit comparison between separate assessments of respondent and organizational characteristics. These measures are used to assess *actual* fit (Kristof-Brown, 1996). Direct measures of fit have been found to be stronger than indirect measures. They have also been found to be better predictors of employee outcomes (e.g., Bright, 2007). Accordingly, direct measures were used in the current study to assess the value fit between employees and their organization. We used three high-loading items from Cable and Judge's (1996) measure of P-O fit. A typical item is "My personal values 'match' or fit exactly the values that my organization considers important." This scale had a Cronbach's alpha of .82.

Burnout

Items linked to the two dimensions of burnout are taken from the Maslach Burnout Inventory-Human Services Survey (MBI-HSS) (Maslach, Jackson, & Leiter, 1996). Five items each were used to assess emotional exhaustion and depersonalization. A sample item for emotional exhaustion is "I feel burned out from my work." Internal consistency reliability was .91. A sample item for depersonalization is "I feel little enthusiasm for the work that I do." Cronbach's alpha was .87.

Analysis

To test our hypotheses we conducted structural equation modeling (SEM) in Mplus version 6.0 (Muthen & Muthen, 1998–2010) with maximum likelihood estimation. Mplus produces measures of overall model fit, generates estimates of the hypothesized relationships (unstandardized and standardized coefficients, standard errors, and *t*-tests), calculates total effects, and provides measures of the proportions of variance explained. The goodness of fit of the SEM models was evaluated based on a range of fit indices including the chi-square (χ^2) value, the root mean square error of approximation (RMSEA), the standardized root mean square residual (SRMR), the comparative

fit index (CFI), and the Tucker-Lewis index (TLI). Levels of .90 or higher for TLI and CFI and levels of .06 or lower for RMSEA, combined with levels of .08 or lower for SRMR, indicate that models fit the data reasonably well (Arbuckle, 2003). Furthermore, Akaike information criterion (AIC; Akaike, 1974) was used to evaluate the alternative models, with the smaller value indicating the best-fitting model.

To confirm the four-factor structure (HIWPs, P-O fit, emotional exhaustion, and depersonalization) for the measurement model, a confirmatory factor analysis using latent variables was carried out in the first step. The theoretical model with structural paths was tested in the second step. The latent exogenous variable of P-O fit and endogenous variable of burnout were operationalized by one and two variables, respectively. HIWPs were treated as a second-order latent factor. To test the mediating role of P-O fit in the HIWPs-burnout relationship, the following conditions must be satisfied according to MacKinnon, Fairchild, and Fritz (2007): (1) the independent variable (HIWPs) has a significant effect on the mediating variable (P-O fit); and (2) the mediating variable (P-O fit) has a significant effect on the dependent variable in a regression of the independent and mediating variable on the dependent variable. Full mediation occurs if there is no effect of the independent variable on the dependent variable (in addition to the mediating variable). Partial mediation occurs if the independent variable does have a significant effect on the dependent variable in addition to the mediating variables. Although the often cited mediation rules of Baron and Kenny (1986) argue that for a mediating effect to exist, the independent and the dependent variable should correlate, recent research argues that this condition is not necessary as suppressor effects may occur (MacKinnon et al., 2007). To test the mediation hypothesis, we compared the fit of a fully mediated model and a partially mediated model, which included direct and indirect paths. In addition, the increasingly popular and robust method of bootstrapping was used to test the significance of the indirect effect (Shrout & Bolger, 2002).

Results

Descriptive Statistics

Table I presents the means, standard deviations, correlations, and internal consistencies of the scales. Demographic variables (e.g., position, tenure) were not statistically related to the dependent variables within the model (i.e., exhaustion and depersonalization) and were therefore omitted from further analysis to avoid misinterpretation of the results (Spector & Brannick, 2011).

T A B L E I	Means, Standard Deviations, Reliability Coefficients, and Correlations						
	Mean	SD	1	2	3	4
1. HIWPs	4.23	1.03	(.91)			
2. PO-fit	4.56	1.21	.636***	(.82)		
3. Exhaustion	3.36	1.49	−.241**	−.302***	(.91)	
4. Depersonalization	2.83	1.31	−.248**	−.322***	.778***	(.87)

Note: **$p < .01$; ***$p < .001$.

T A B L E I I	Confirmatory Factor Analysis of Measurement Models: Fit Indices							
Model	χ^2	df	Δ χ2	CFI	TLI	RMSEA	SRMR	AIC
1. Hypothesized four-factor model	616.294	340	–	.925	.916	.066	.058	15745.870
2. Three-factor model: Burnout								
Combining emotional exhaustion and depersonalization	667.042	343	50.748***	.912	.903	.071	.059	15790.618
3. Two-factor model								
Combining HIWPs and P-O fit	765.513	346	149.219***	.886	.875	.081	.105	15883.090
4. One-factor model	9629.896	464	9629.896***	.195	.140	.327	.191	19451.997

Notes: $N = 185$; χ^2 = chi-square discrepancy; df = degrees of freedom; Δ χ^2 = difference in chi-square; CFI = comparative fit index; TLI = Tucker Lewis Index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; AIC = Akaike information criterion. ***$p < .001$.

Measurement Models

According to Anderson and Gerbing's (1988) recommendations, it is necessary to assess the appropriate factor structure of the measures used in the current study prior to testing the structural model. We used the aforementioned fit indices in examining the distinctiveness of our study variables. Our overall hypothesized Confirmatory Factor Analysis (CFA) model including four factors yielded a good fit to the data (χ^2 (342) = 616.885, p < .001, CFI = .925, TLI = .917, RMSEA = .066, SRMR = .058, AIC = 15745.870). That model yielded a better fit to the data than any more parsimonious model, including a three-factor model that combined burnout as well as a one-factor model (see Table II). Models were compared using the chi-square difference test (Bentler & Bonnett, 1980).

As the data were collected using self-reported measures, findings could be affected by common method bias. To test for this issue we computed a confirmatory factor analysis for the four latent variables with and without a same-source first-order factor added test. This unmeasured latent method factor was set to have indicators of all self-report items, therefore controlling for the portion of variance attributable to obtaining all measures from a single source (see Podsakoff, Mackenzie, & Podsakoff, 2012). As all factor loadings and intercorrelations were almost identical in both models,

common method variance was not believed to be a source of bias in this study's data.

Structural Model and Hypothesis Testing

Figure 2 depicts the relationships between the focal variables. Hypothesis 1 proposed that positive perceptions of HIWPs would be positively related to P-O fit. There was a significant positive relationship (β = .768, p < .001), thus supporting Hypothesis 1. Hypothesis 2 proposed that P-O fit would be significantly negatively related to (a) emotional exhaustion and (b) depersonalization. These relationships were indeed significantly negatively related for emotional exhaustion (β = −.331, p < .001) and depersonalization (β = −.363, p < .001). Hypotheses 2a and 2b are thus supported. Hypotheses 3a and 3b stated that P-O fit would mediate the relationship between HIWPs and the two dimensions of burnout. This was tested by comparing a fully indirect and direct structural model. The SEM model, which specified full mediation of HIWPs on burnout through P-O fit, provided a good fit to the data, (χ^2 (342) = 616.885, p < .001, CFI = .925, TLI = .917, RMSEA = .066, SRMR = .058, AIC = 15742.461). In the second model, P-O fit was hypothesized to partially mediate the associations between HIWPs and burnout; that is, the model was specified to include direct associations between HIWPs and
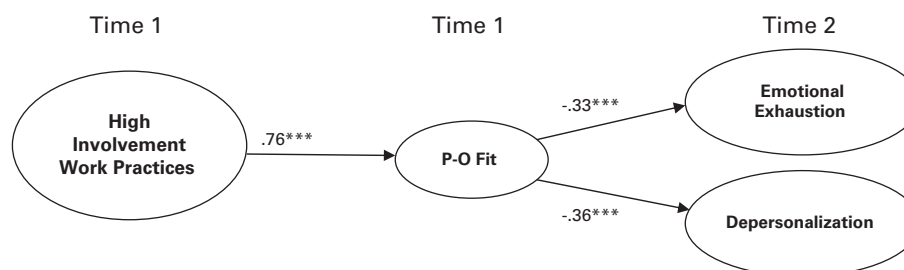
FIGURE 2. Relationships between HIWPs, P-O fit and Burnout

burnout as well as indirect associations via P-O fit. The fit statistics for the partially mediated model were as follows; (χ^2 (340) = 616.294, $p < .001$, CFI = .925, TLI = .916, RMSEA = .066, SRMR = .058, AIC = 15745.870). Overall, there was no significant direct effect of HIWPs on burnout in the partially mediated model, and the bootstrapping results confirmed that there was no mediation effect for exhaustion (95% CI −.669 − −.247) and depersonalization (95% CI −.828 − −.249). On this basis and because the fully mediated model was the most parsimonious model and yielded the lower AIC, the hypotheses were analyzed using this model. Overall, HIWPs affected emotional exhaustion via P-O fit ($\beta = −.254$, $p < .001$) and depersonalization via P-O fit ($\beta = −.279$, $p < .001$). In other words, P-O fit fully mediated the relationship between HIWPs and burnout. Bootstrapping analysis with 1,000 bootstrap samples further confirmed the significance of the indirect effect of P-O fit between HIWPs and emotional exhaustion with an estimated indirect effect $\alpha\beta$ of P-O fit on change in exhaustion of −.254. The significance of the indirect effect of P-O fit between HIWPs and depersonalization was also confirmed with an estimated indirect effect $\alpha\beta$ of P-O fit on change in depersonalization of −.279. As the 95% bias-corrected confidence interval did not contain zero for emotional exhaustion (95% CI −.426 − −.83) and depersonalization (95% CI −.463 − −.95), full mediation was supported.

Discussion

To better understand the factors influencing health care professionals' well-being, this study explored a mediation model whereby HIWPs impacts on burnout via P-O fit. The findings demonstrate that perceived HIWPs are associated with higher levels of P-O fit. P-O fit is negatively associated with long-term burnout. Finally, the relationship between perceived HIWPs and burnout is fully mediated through P-O fit. These findings have important implications for both theory and practice. Below, we discuss these implications along with suggestions for new directions in research.

Theoretical Implications

Confirming the recent findings of Boon et al. (2011), the results from the present study suggest that perceptions of HIWPs have an important role in enhancing the P-O fit of health care employees. On the basis of the attraction, selection, and attrition (ASA) model (Schneider, 1987), Boon and colleagues (2011) argued that HR practices are likely to increase employees' P-O fit by attracting, selecting, and retaining employees with values similar to the organization's. However, the authors have called for future research to examine the role of other HR practices that go beyond selection and their potential role in increasing P-O fit (Boon et al., 2011). We adopted a set of HIWPs associated with the PIRK model developed by Lawler (1986) and showed how they increased P-O fit among health care employees. From a learning and "socialization" perspective, HIWPs are instrumental to enhancing P-O fit to the extent that they allow for the effective transmission of values (Bowen & Ostroff, 2004), which foster behaviors among employees reflecting aligned values with those of the organization (Boon et al., 2007). The ability of HIWPs to foster higher levels of P-O fit among health care employees in the present study is particularly interesting given that different subcultures within hospitals often make it difficult to achieve value congruence (Vandenberghe, 1999).

The present study also examines the relationship between perceptions of HIWPs and long-term burnout in the health care context. In doing so, we respond to the call from Harley, Allen, and Sargent (2007) to elucidate whether HIWPs have a positive or negative influence on employees' well-being in the health care context. Our use of a time-lagged research design to explore the impact of HIWPs on burnout represents a particular strength of the present study, as measuring resources (HIWPs) and outcomes (burnout) at the same time can

From a learning and "socialization" perspective, HIWPs are instrumental to enhancing P-O fit to the extent that they allow for the effective transmission of values.

spuriously overinflate the correlations between variables (Sanchez & Viswesvaran, 1996). This common method bias issue is mitigated in this study. More important, we are able to infer the direction of causality as HIWPs precede burnout in time. There are no other studies that examine the impact of HIWPs on burnout using a time-lagged design. Thus, our study is apposite and makes a considerable contribution to the HRM literature, which is still unclear as to how long it takes for HIWPs to influence well-being outcomes (Peccei et al., 2013). The results from the present study suggest that HIWPs can ameliorate burnout even three years later. However, it should be noted that in the broader academic literature, little consensus exists about the ideal length of time lags (Zapf, Dormann, & Frese, 1996). Overall, the results lend support for the optimistic (Peccei, 2004) or mainstream (Harley et al., 2007), perspective of HRM. It is also significant that HIWPs did not affect long-term burnout directly in our study, as was found in previous studies that used a cross-sectional research design (e.g., Castanheira & Chambel, 2010; Sun & Pan, 2008).

The results from the present study suggest that HIWPs can ameliorate burnout even three years later.

In fact, the results reveal that P-O fit acted as the fundamental process underlying the HIWPs–well-being link as it fully mediated the HIWPs-burnout link. By investigating and finding support for the mediating role of P-O fit, this study contributes to our existing knowledge by bringing various aspects of P-O fit theory and HRM theory together in a single explanatory model (Boon et al., 2011). In doing so, we contribute to a better understanding of the mechanisms underlying the relationship between HIWPs and burnout, thus addressing the "black box" problem (Castanheira & Chambel, 2010). The finding that P-O fit fully mediates the HIWPs-burnout link demonstrates the importance of matching values in health care environments (Vandenberghe, 1999). However, P-O fit in this instance may also mask the concept of person-job fit, which has also been shown to be a key mediator in the link between HRM and employee outcomes. Moreover, different explanations for the HIWPs-burnout link might work through different HR practices that were not included in this study, and this requires further research.

Finally, this study examines the relationship between P-O fit and long-term burnout. The findings reveal that P-O fit is associated with lower levels of burnout over time. While burnout has traditionally been investigated from a job demands and resources perspective (Demerouti et al., 2001),

authors have recently highlighted the theoretical salience of value congruence and suggest it to be a priority for future empirical research (Tong et al., 2015). This study uses social identity theory to explain how P-O fit influences long-term burnout. From this perspective, a mismatch of values between individuals and the organization evokes cognitive dissonance and a threat to their self-concept, resulting in increased emotional exhaustion and alienation reflected by a cynical or detached attitude (i.e., depersonalization). The finding that P-O fit reduces burnout is also consistent with Maslach and Leiter's (1997) model, which suggests that mismatch of values between employees and the organization causes frustration and anxiety, ultimately leading to burnout. Therefore, our results corroborate the empirical study of Siegall and McDonald (2004), who found that P-O fit was strongly and negatively related to burnout among university professors. However, we can now see that P-O fit can affect burnout over time via a different social identity mechanism in the health care context.

Implications for Practitioners

This study has a number of practical implications for managers in health care organizations. The results demonstrate that positive perceptions of HIWPs are related to higher levels of P-O fit and lower levels of burnout. From a policy and practice perspective this is important, given that burnout is rife among health care professionals and negatively affects the quality of patient care delivered (Poghosyan et al., 2010). A perennial problem for HR managers is to establish evidence that can be used to make a case to increase investment in HR. Therefore, the HR function could use these findings to build a case for investing in HIWPs to overcome the persistent problem of burnout. The results from the present study also provide insight to practicing managers in terms of understanding what is required for the positive socialization effects of HIWPs to occur (i.e., enhancing P-O fit). Although different subcultures exist within hospitals, these results suggest that improving P-O fit by adopting HIWPs is a possible and worthwhile endeavor. Therefore, matching people with organizations should be a central concern for HR managers. As line managers are charged with the responsibility of implementing HRM, their support will likely enhance or hinder any positive perceptions of the HIWPs that employees may have (Hutchinson & Purcell, 2010). As a whole, it seems that HIWPs represent a positive resource for employees, which improves health-related outcomes. However, managers need to be aware that it may take some time for these practices to

take effect, as they are dependent on enhancing employees' P-O fit.

Limitations and Future Directions

This study has a number of limitations. First, the sample was composed of employees from a single organization (i.e., a Canadian hospital). While this type of design is often used to represent a rare or unique case (Yin, 1994), we do not believe that this hospital represents such a unique event, given that all hospitals, at least in Canada, are bound by the same institutional and contextual forces. Nevertheless, it would be advantageous for future research to use different samples of employees in different contexts and countries to see if the results hold. Second, although a major strength of this study is the utilization of a time-lagged research design, three waves of data collection would provide an even more robust design (Cole & Maxwell, 2003). Third, while our study finds a mediating effect of P-O fit in the relationship between HIWPs and burnout, it is possible that there are a number of contextual factors capable of enhancing or undermining this relationship. Therefore, we encourage researchers to investigate such individual, organizational, and institutional contextual factors in future research.

Conclusion

The present study, by investigating the mediating role of P-O fit in the relationship between HIWPs and burnout, provides unique theoretical insight into how HIWPs work in improving health care employees' well-being. P-O fit represents a fundamental underlying process, which explains how HIWPs ameliorate long-term burnout.

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APPENDIX   **Items to Measure Variables**

High Involvement Work Practices

Empowerment

I have significant autonomy in determining how I do my job.

I have considerable opportunity for independence and freedom in how I do my job.

I can decide on my own how to go about doing my work.

Information Sharing

The organization usually asks for employees' opinion when it considers adopting new rules, procedures, or methods related to the organization of work.

In general, the organization seeks the employees' collaboration to help it find solutions to problems that directly affect their work.

The organization strongly incites its employees to communicate new ideas for improving how things operate within the organization.

The organization provides its employees with timely feedback about the decisions that affect them or have an impact on the work they do.

Employees are regularly informed about major projects in our organization (e.g., structural changes, major investments, new technologies).

Employees usually receive feedback on their suggestions.

Development Practices

In our organization, various professional development activities are available to employees (e.g., coaching, training).

Training pursued by employees outside of the organization is valued (e.g., refresher courses, academic or professional diplomas).

In our organization, we have access to the resources needed to improve our skills (e.g., time, financial resources, flexibility of work schedule).

Rewards

The organization generally congratulates employees for a performance that goes beyond its expectations.

The organization usually recognizes the extra efforts that employees put into their work.

Exceptional contributions of employees are formally recognized by the organization (e.g., during ceremonies or meetings, through the organization's newsletter, by congratulatory letters, with gifts).

P-O Fit

My personal values "match" or fit exactly the values that my organization considers important.

General managers and myself grant importance to the same values.

My personal values coincide precisely with those of the employees that work for the hospital.

Emotional Exhaustion

I feel emotionally drained from my work.

I feel tired when I get up in the morning and have to face another day on the job.

I feel burned out from my work.

I feel used up at the end of the workday.

Working all day is really a strain for me.

Depersonalization

I have become less enthusiastic about my work.

I have become more cynical about whether my work contributes anything.

I have become less interested in my work since I started this job.

I just want to do my job and not be bothered.

I doubt the significance of my work.