

HPWS: A Bundling or a Systems Approach? Evidence from the Greek Healthcare Sector

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Abstract

This paper examines the mediating effects of social exchange on the relationship between High Performance Work Systems (HPWS) and employees' work related well-being, measured by their job satisfaction and affective commitment. In addition, this article investigates whether the social exchange relationship can lead to lower burnout and consequently to lower employees' intention of leaving their jobs. Partial Least Squares (PLS) Structural Equation Modeling (SEM) was used on a sample of 296 clinicians (doctors and nurses) across seven Greek regional hospitals. Results demonstrate first a strong effect of HPWS on social exchange, job satisfaction, and affective commitment. In addition, satisfied employees are highly likely to experience lower feelings of burnout, while the latter relationship decreases their intentions of leaving their hospital. Second, social exchange positively mediates the relationship between HPWS, job satisfaction, affective commitment, and burnout. Last but not least, of the three bundles comprising the HPWS, opportunity to participate had no effect on the overall HPWS construct. Finally, implications are drawn for the management of employees in the healthcare sector.

Keywords: High Performance Work Systems; HPWS; Healthcare; Greece; AMO

1. Introduction

During the past 20 years, there has been a vast amount of research linking High Performance Work Systems (HPWS) with increased productivity, and organizational performance (e.g., Huselid, 1995; Messersmith and Guthrie, 2010). To date, there has been an impressive body of empirical studies linking HPWS with various firm-level performance outcomes (e.g., Combs et al., 2006), such as increased productivity, and reduced turnover (e.g., Arthur, 1992; Huselid, 1995) in the US manufacturing sector, while other empirical studies have demonstrated similar results focusing on different industries and regions (e.g., Messersmith & Guthrie, 2010). Specifically, for the healthcare sector, there is mounting evidence relating aspects of HPWS and improved patient outcomes in numerous healthcare studies (e.g., Bartram et al., 2012; Harley et al., 2007; Young et al., 2010; Fan et al., 2014; Ang et al., 2013; Zhang et al., 2013).

Based on the preceding discussion, and taking into consideration the calls for more employee-centered research in examining the HR practices and underlying work processes (van de Voorde and Beijer, 2015, p. 62), in this study we shift our focus to the Greek healthcare context. Specifically, based on the social exchange theory, and using a sample of 296 clinicians (doctors and nurses) across seven Greek regional hospitals, we examine whether the social exchange nature of the employer and employee relationship can mediate employees' work related well-being, measured by their job satisfaction and affective commitment. In addition, we also investigate whether the social exchange relationship can lead to lower employees' burnout resulting consequently in employees' lower intention of leaving their hospital.

Moreover, taking a look at the HRM literature, the vast majority of researchers calculated HPWS as a unitary index by following a subscale aggregation approach (e.g. Zacharatos et al., 2005), which represents the overall HRM system. However, Jiang et al. (2012) challenged this approach based on the argument that different types of HR practices influence important outcomes through different paths, and proposed the HPWS categorization into several subdimensions. As a result, and drawing on the (AMO) framework (Appelbaum et al., 2000), an additional goal of this study is to decompose HPWS into three bundles of practices, namely abilities, motivation, and opportunities. Thus, although this study focuses on the overall contribution of HPWS as a system, the method of analysis followed in this study provides us with the opportunity to examine – additionally – the heterogeneous effects of bundles of HRM practices on the proposed relationships.

2. Theory and Conceptual Framework

2.1. High Performance Work Systems (HPWS)

The basic concept behind these systems is that organizational performance does not stem from the HR practices themselves but rather from the contribution that these HR practices make regarding employees' attitudes and behaviors, which in turn serve as mediators in the HPWS—organizational performance relationship (Takeuchi et al., 2007, p. 1069). However, a significant limitation concerns the fact there are considerably fewer studies that examine the positive effects of HPWS specifically on employees' job attitudes and outcomes (e.g., Appelbaum et al., 2000).

Thus, many researchers call for more employee-centered research, in order to restore the effects of HRM on employee outcomes to a central position of HPWS studies, and to focus on the processes that help to explain how HPWS influences healthrelated outcomes (Van De Voorde and Beijer, 2015, p. 62).

Overall, and taking into consideration the previous studies' arguments suggesting that the relationships between HPWS and employee well-being are neither direct nor unconditional, and can be moderated and/or mediated by other variables (Zhang et al., 2013, p. 3199), in this study we introduce and explore the social exchange perception as mediator between HPWS and employee outcomes in the Greek healthcare context, since exchange plays a central role in employment relationships (Shore et al., 2006, p. 837).

2.2. Job satisfaction

Job satisfaction lies at the heart of the HPWS approach. Indeed, it has been argued that discretionary effort is one of the keys to understanding the links between HR practices and organizational performance (CIPD/EEF, 2003, p. 15), which depends on improvements in job satisfaction, organizational commitment, and motivation. This argument is aligned with the AMO framework (Appelbaum et al., 2000), which supports the fact that HPWS will create highly-skilled, engaged and empowered workers who feel valued and enjoy higher job satisfaction. Overall, there is mounting evidence across the HRM literature supporting the positive relationship between HPWS and employee attitudes and behavior, such as job satisfaction, across different industries (e.g., Garcia-Chas et al., 2014) including the healthcare sector (e.g., Chuang et al., 2011; Harley et al., 2007; Young et al., 2010). Hence, and taking these arguments into consideration we formulate the following hypothesis.

Hypothesis 1: Employees' perceptions of the existence of HPWS in the Greek healthcare context will be positively associated with their job satisfaction.

2.3. Affective commitment

In this study we examine the affective commitment component of organizational commitment since employees' work experiences have been identified as the most influential antecedents of affective commitment by satisfying their needs (Meyer and Allen, 1991, p. 70). Indeed, HPWS engages employees through involvement in participative decision-making and extensive training, thus influencing, their affective commitment (Pfeffer, 1998), a finding also supported by the Ang et al. (2013) study. Moreover, career planning and advancement provide growth opportunities for employees and represent the organization's care for and long-term commitment to their future (Gong et al., 2010, p. 126). Overall, affective commitment motivates employees to exert considerable efforts on behalf of the organization, to align with the organization's goals and finally to express a strong desire to maintain membership in the organization (Gong et al., 2010, p. 126). Hence, and taking these arguments into consideration, we formulate the following hypothesis.

Hypothesis 2: Employees' perceptions of the existence of HPWS in the Greek healthcare context will be positively associated with their affective commitment.

2.4. The Social exchange theory

According to the social exchange theory (Blau, 1964), employers and employees develop an exchange relationship. In general, one contributes to the interest of the other and expects a return at a future time, while it is believed that those receiving a service will develop a sense of obligation to reciprocate. Overall, if an organization provides substantial inducements to employees, then they will possibly feel the need to reciprocate with positive job attitudes and behaviors towards that employer (Zhang et al., 2013, pp. 3199-3200).

Moreover, it has been argued that employees form perceptions about their organization's intentions from its HR policies and practices, which serve as the mechanism that employees use to define the psychological meaning of their work situation (Wei et al., 2010, p. 1635). Indeed, HPWS convey messages from the organization to its employees that they are highly valued for their skills and knowledge by the organization, while the latter is willing to commit itself to employees' welfare. As a consequence, employees develop positive work-related attitudes by (and towards) their organizational environments (Wei et al., 2010, pp. 1635-1636). Hence, and based on this analysis, there is an incentive for the employees to remain with the organization and perform at a high level (Takeuchi et al., 2007, p. 1071). Thus, we propose the following hypothesis:

Hypothesis 3: HPWS will be positively and directly related to social exchange.

Nonetheless, the argument that HPWS impact employees' attitudes and behaviors through the social exchange mechanism has not been empirically examined, although some studies have used the social exchange theory as their theoretical framework (e.g., Gong et al., 2010; Wei et al., 2010). Specifically, for the healthcare sector, Fan et al. (2014, p. 944) suggested that based on the social exchange theory employees may interpret HPWS as a sign that they are valued and respected by the organization. Thus, showing loyalty to the organization is one way for employees to reciprocate the positive treatment they receive from the organization (Bartram et al., 2012, p. 1575). Thus, we formulate the following hypotheses.

Hypothesis 4: The social exchange perception will mediate the relationship between HPWS and employees' job satisfaction in the Greek healthcare context.

Hypothesis 5: The social exchange perception will mediate the relationship between HPWS and employees' affective commitment in the Greek healthcare context.

2.5. Burnout—Emotional exhaustion and disengagement from work

Burnout is a psychological syndrome that involves losing concern for the people with whom one is working and is commonly associated with workers in ‘caring’ professions (Maslach, 1982). Although burnout has been linked to several negative organizational outcomes, there has been little research exploring how to reduce burnout through appropriate HRM strategies (Fan et al., 2014; Zhang et al., 2013). To our knowledge, only a few studies focused on the relationship between HPWS and burnout in the healthcare sector, suggesting that HPWS has the potential to decrease burnout (Bartram et al., 2012; Fan et al., 2014) since it leads to mutually beneficial outcomes for both employers and employees (Harley et al., 2007). The main conclusion of these studies is that HPWS could decrease employees’ feelings of burnout through greater engagement (e.g., Ang et al., 2013) and / or lower emotional exhaustion (Zhang et al., 2013), which comprise the two main dimensions of burnout.

Thus, taking into consideration that satisfied employees are less likely to experience feelings of burnout, and based on the social exchange relationship along with the positive job attitudes and behaviors it generates, we formulate the following hypotheses.

Hypothesis 6: Satisfied employees will experience diminished feelings of burnout in the Greek healthcare context.

Hypothesis 7: Employees’ social exchange perception will mediate the relationship between HPWS and employees’ burnout in the Greek healthcare context.

2.6. Intention to leave

There is an extensive body of literature suggesting a negative association between HPWS and intention to leave or turnover intentions. The logic behind this argument is that HPWS practices, such as improving employee participation and extensive training, are often associated with humanizing work. Hence, when employees perceive that these practices are implemented, they are less likely to seek alternate employment (Ang et al., 2013, p. 3109). In line with this argument and, as we have analyzed in the previous section, one significant contribution of HPWS is the positive direct effect on employees’ job satisfaction. As can be assumed, satisfied employees are less likely to leave their jobs. Indeed, job satisfaction has been regarded as an important antecedent in reducing employees’ intention to leave (e.g., Chen et al., 2011). In addition, it has been reported that job satisfaction mediates the relationship between HPWS and intention to leave (Garcia – Chas et al., 2014), while empirical findings indicate that job satisfaction can be a significant predictor of nursing absenteeism, turnover and intentions to quit (Lu et al., 2005). Specifically, for the healthcare sector, low job satisfaction is regarded as a major cause of turnover among health care providers (e.g., Ang et al., 2013). Hence, we propose the following hypothesis.

Hypothesis 8: Job satisfaction will mediate the relationship between HPWS and employees’ intention of leaving their hospital in the Greek healthcare context.

In addition, researchers have suggested a negative association between employees' burnout and intention to leave, especially in the healthcare context (e.g., Bartram et al., 2012; Ang et al., 2013). Overall, and as has been argued by Schaufeli and Bakker (2004), engaged employees are less likely to leave their jobs. Hence, we expect that HRM practices focused on enhancing employees' engagement, such as HPWS, will reduce burnout and ultimately employees' intention of leaving their hospital.

Hypothesis 9: Employees' feelings of burnout will be negatively related to their intentions of leaving their hospital in the Greek healthcare context.

3. Method

3.1. Sample and procedure

For the purposes of our research, we developed both a handwritten and an on-line questionnaire. We surveyed clinicians' (doctors, and nurses) responses in seven (five private and two public) regional hospitals, located in Athens and Thessaloniki, Greece. Overall, the survey was sent to 741 employees in the seven hospitals, in spring 2014. We received 296 usable responses, a response rate of 40%. Our sample is comprised of 177 doctors and 119 nurses. About 71% of the doctors were male while 83% of the nurses were female. The average age of respondents was 44. In addition, 55% of employees held a bachelor's degree, while 41% held postgraduate qualifications. Finally, 71% of the respondents were working full-time, 18% parttime, and an additional 11% were working under a short-term employment contract.

4. Measures

All survey items, were measured using a five point Likert-type scale ranging from 1 = strongly disagree, to 5 = strongly agree.

4.1. High-performance work systems (HPWS)

For this study, the HRM practices constituting the HPWS construct were classified into three bundles (see Appelbaum et al., 2000) that include Abilities (Recruitment and selection; Training and development; $\alpha = 0.815$), Motivation (Employment security; Performance management; $\alpha = 0.856$), and Opportunities (Participation in decision making; Job clarity; Employee autonomy; $\alpha = 0.848$). With regard to the items that were used to measure the relevant HR practices that formed the three bundles, all were adapted from established scales or existing measures of HR systems (Ang et al., 2013; Delery and Doty, 1996; Zacharatos et al., 2005). Overall, 31 items were used, encompassing seven sub-scales / HR practices. The Cronbach's alpha for the singleindex HPWS measure was 0.915.

4.2. Job satisfaction

Job satisfaction was measured by using three items developed by Seashore et al. (1983). The Cronbach's alpha for the single index measure was 0.643.

4.3. Affective commitment

Affective commitment was measured with a seven-item scale developed by Allen and Meyer (1990), in combination with Ang et al. (2013) additional item on 'I would recommend this health service to my family'. The Cronbach's alpha for the single index measure was 0.865.

4.4. Social exchange

The perceived nature of social exchange between employers and employees was measured with a six-item scale developed by Shore et al. (2006), loaded into a single factor. The Cronbach's alpha for the single index measure was 0.838.

4.5. Burnout

Burnout was measured by using the Oldenburg Burnout Inventory (OLBI) comprised of *emotional exhaustion* and *disengagement from work* (Demerouti et al., 2010, pp. 210-211). A separate component analysis with a cutoff value of 0.50 was used to indicate satisfactory loading. *Emotional exhaustion* was measured by using four items, loaded into a single factor. The Cronbach's alpha for the single-index measure was 0.755. Similarly, *disengagement from work* was measured by using four items, loaded into a single factor. The Cronbach's alpha for the single-index measure was 0.676.

4.6. Intention to leave

Intention to leave was measured with a three-item measure used by Ang et al. (2013). The Cronbach's alpha for the single index measure was 0.887.

4.7. Common Method Bias To minimize the presence of Common Method Variance (CMV) we used Harman's singlefactor test. Since this single factor did not explain the majority of the variance in the variables, common method bias is not likely to be an issue in our analysis.

4.8. Statistical Model

SPSS v. 22 was used to conduct descriptive statistical analysis and exploratory factor analysis. We tested our hypotheses by means of Partial Least Squares (PLS) Structural Equation Modeling (SEM) using the SmartPLS 3.1 software (Ringle et al., 2014). In our structural model, HPWS and Burnout were estimated in two stages Hierarchical Component Measurement (HCM) models, Following Hair et al. (2014, p. 229) guidelines. Figure 1 depicts the first stage of the proposed model, whereas the final model (two-step approach) is depicted on Figure 2.

Figure 1: The proposed model

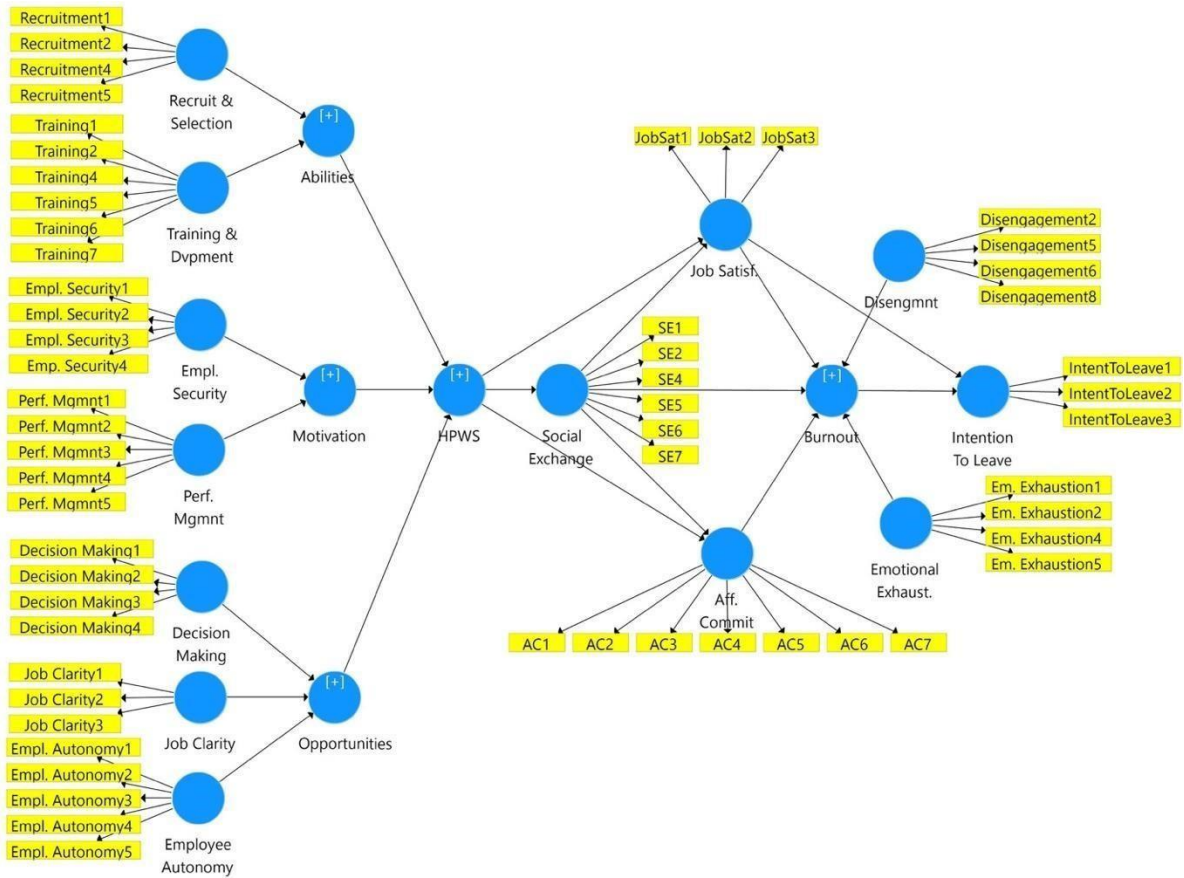
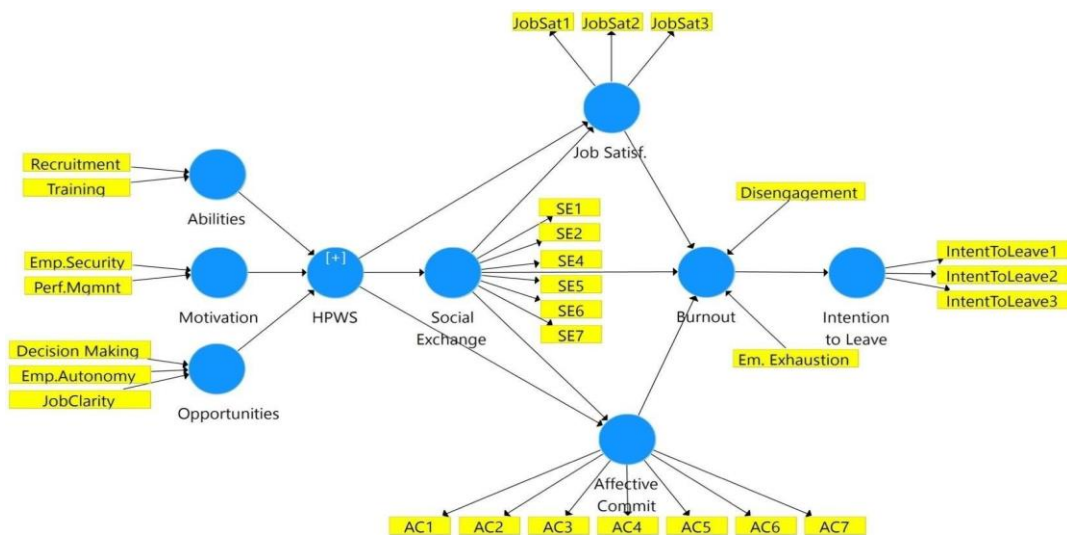


Figure 2: The two-step approach model



4.9. Validity and Reliability Before running the PLS analysis, we had to configure the model's reliability and validity. Since all first-order constructs used in the model were reflective, we evaluated *individual indicator reliability*, the *composite reliability* to evaluate internal consistency, the *convergent validity* of the measures associated with each construct and their *discriminant validity* (Hair et al., 2014, p. 95). The validity and reliability of the formative scales (HPWS and Burnout) was checked by following the procedures described in Petter et al. (2007). Overall, the results indicate sufficient construct validity for our formative indicators.

Finally, to determine the *discriminant validity* of our indicators, we used three established techniques. First, we checked for cross-loadings. Secondly, we used the Fornell-Lacker criterion. Finally, we used the Heterotrait-Monotrait ratio (HTMT was below 0.85) and the $HTMT_{inference}$ criterion (upper confidence intervals were below the 1 value), as suggested by Henseler et al. (2015). Therefore, we conclude that discriminant validity has been established for our model.

5. Results

To analyze the hypotheses in the structural model, we ran the full model (figure 2) with a bootstrapping procedure that used 500 randomly drawn samples with replacement. The algorithm converged in 10 iterations, while the model was controlled for age, and gender. Since there were no significant effects for these control variables, we excluded them from the analysis. A summary of the path coefficients and their significance levels are summarized in table 1.

Table 1: Summary of Path Coefficients and Significance levels

Hypotheses and corresponding paths	Path Coefficient	T-Statistics	Hypotheses Support
□HPWS → Job Satisfaction	0.281	3.874***	H1 supported
HPWS → Affective Commitment	0.371	6.807***	H2 supported
□HPWS → Social Exchange	0.540	12.346***	H3 supported
Job Satisfaction → Burnout	-0.440	7.485***	H6 supported
Burnout → Intention to leave	0.243	4.137***	H9 supported

*indicates significant paths: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, ns = not significant

The results (table 1) support hypotheses 1, 2, 3, 6, and 9. Thus, employees' perceived HPWS is directly and positively related to employees' job satisfaction (H1), affective commitment (H2), social exchange (H3), while satisfied employees are highly likely to experience lower feelings of burnout (H6). Finally, employees' feelings of burnout seem to increase their intentions of leaving their hospital (H9).

Next, we checked the mediating role of 'social exchange' on the relationship between HPWS and employees' job satisfaction, affective commitment, and burnout as well as the

mediating role of ‘job satisfaction’ on the relationship between HPWS and intention to leave. For this analysis, we followed Baron and Kenny’s (1986) three-step approach. The following table (table 2) presents the Path Coefficients and Significance levels for the mediation hypotheses.

Table 2: Summary of Path Coefficients and Significance levels for the mediation hypotheses

Hypothesized relationships	IV to DV	IV to Med	Med to DV	IV to DV (with mediator)	Hypotheses Support
HPWS \square SE \square JS	0.389 ***	0.547 ***	0.330 ***	0.286 ***	H4 partially supported
HPWS \square SE \square AC	0.566 ***	0.547 ***	0.572 ***	0.358 ***	H5 partially supported
HPWS \square SE \square Burnout	-0.208 **	0.547 ***	-0.324 ***	ns	H7 fully supported
HPWS \square \square JS Intention to Leave	-0.402 ***	0.281 ***	-0.433 ***	-0.276 ***	H8 partially supported

*indicates significant paths: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, ns (not significant)

IV = Independent Variable, DV = Dependent Variable, Med = Mediator

SE = Social Exchange, JS = Job Satisfaction, AC = Affective Commitment

Table 2 supports hypotheses 4, 5, 7, and 8. Specifically, our findings support the argument that social exchange partially mediates employees’ job satisfaction (H4) and affective commitment (H5), and fully employees’ feelings of burnout (H7). Hence, social exchange seems to be a critical antecedent in reducing employees’ burnout, and explaining the relationship between HPWS and burnout. Last but not least, table 2 supports hypothesis 8 that job satisfaction mediates (partially) the relationship between HPWS and employees’ intention of leaving their hospital (H8).

Finally, as was stated in the introduction section of this paper, an additional goal of this study is to examine HPWS as separate bundles of practices by following the Abilities – Motivation - Opportunities framework (AMO; Appelbaum et al., 2000). The method of analysis (PLS-SEM) followed in the present research provides the opportunity to examine the outer weights of each bundle of HR practices (formative indicators) on the more general construct (HPWS). Based on this latter analysis, it was found that the ‘Opportunities to contribute’ bundle was not loaded significantly on the HPWS system. Indeed, as can be evident by Table 3, the ‘Abilities’ and ‘Motivation’ bundles show a strong effect on both employee attitudes (job satisfaction and affective commitment) and social exchange. In contrast, however, the ‘Opportunity’ bundle had no effect both employee outcomes and social exchange. These findings are discussed next in more detail.

Table 3: Results of the hypothesized mediation model (AMO framework)

	Job Satisfaction	Affective Commitment	Social Exchange
Abilities	0.215***	0.356***	0.543***
Motivation	0.249***	0.289***	0.498***
Opportunities	0.053ns	0.111ns	0.098ns

Note: Standardized coefficients are reported (beta estimates)

*indicates significant paths: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, ns = not significant

6. Conclusion

In this article, by following the social exchange as our theoretical framework, we examined the potential HPWS effects on employees' attitudes, behaviors, and their subjective wellbeing. The results provide some useful insights.

First of all, the findings of this article indicated that effective HPWS operating at the level of the work group have a strong direct effect on health-care professionals' job satisfaction (e.g., Ang et al., 2013; Chuang et al., 2011; Fan et al., 2014; Young et al., 2010; Zhang et al., 2013), and affective commitment (e.g., Ang et al., 2013; Young et al., 2010), supporting previous studies findings in the healthcare context. In addition, this article contributes to the broader HRM literature, since the empirical examination of the HPWS impact on employees' attitudes and behaviors through the social exchange mechanism is lacking (Gong et al., 2010; Takeuchi et al., 2007; Wei et al., 2010). Indeed, the findings showed that HPWS was not only positively related to social exchange, but the latter mediated employees' job satisfaction (partially), affective commitment (partially), as well as their feelings of burnout (fully). Hence, this study provides support for the argument that HPWS reinforces the tone of social exchange relationship (Gong et al., 2010, p. 125). Overall, this study validates the argument that the social exchange relationship influences (negatively) employees' feelings of job burnout (Zhang et al., 2013, pp. 3199-2300), while it can act as an important antecedent in explaining the relationship between HPWS and employees' lower feelings of burnout.

Secondly, employees' job satisfaction was negatively associated with burnout, while the former mediated (partially) the relationship between HPWS and employees' intention to leave their hospital. In addition, a negative relationship emerged in our model between employees' feelings of burnout and intentions of leaving their hospital. These findings provide support to previous studies' conclusions that HPWS has the potential to decrease burnout (Bartram et al., 2012; Fan et al., 2014) by leading to beneficial outcomes for employees (Harley et al., 2007), and consequently to diminishing their intention to leave (Garcia – Chas et al., 2014). Hence, we could argue that by following a HPWS approach, employees are less likely to seek alternate employment (Ang et al., 2013, p. 3109).

Furthermore, as an additional goal, this study examined HPWS as three separate bundles of practices, namely abilities, motivation, and opportunities (Appelbaum al., 2000). This analysis showed significant differences between HPWS as a system of practices and HPWS as bundles of practices. Indeed, of the three bundles, only ‘Abilities’ and ‘Motivation’ seem to be able to affect employee outcomes (job satisfaction and affective commitment) and social exchange. In contrast, the ‘Opportunities’ had no effect on the mediating variables. These findings are of significant importance, as they provide support to previous researchers’ arguments who suggested that different sets of HR practices may impact the same outcomes in a heterogeneous way (e.g., Jiang et al., 2012). Thus, in accordance with Oppenauer and van de Voorde’s (2016, p. 3) argument, examining the HPWS construct in different bundles can be extremely significant for gaining a better understanding of the linkages under study.

Last but not least, our research adds to the broader HRM literature, as it takes place in the first European Union country that has been severely affected by Europe’s financial crisis since 2008. Thus, and taking into consideration that the findings of the present study are consistent with most of the international literature examining the impact of HPWS on employee outcomes (e.g., Van de Voorde and Beijer, 2015), it seems reasonable to argue that HPWS can be a fruitful and effective approach even in turbulent times.

References

- [1]. Allen, N.J. and Meyer, J.P. (1990). “The measurement and antecedents of affective, continuance and normative commitment to the organization,” *Journal of Occupational Psychology*, vol. 63, pp. 1–18.
- [2]. Ang, S.A., Bartram, T., McNeil, N., Leggat, S.G. and Stanton, P. (2013). “The effects of High-Performance Work Systems on hospital employees’ work attitudes and intention to leave: A multi-level and occupational group analysis,” *The International Journal of Human Resource Management*, vol. 24, pp. 3086–3114.
- [3]. Appelbaum, E., Bailey, T., Berg, P. and Kalleberg, A. (2000). *Manufacturing Advantage: Why High Performance Work Systems Pay Off*, Ithaca, NY: Cornell University Press. [4]. Baron, R.B. and Kenny, D.A. (1986). “The moderator mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations,” *Journal of Personality and Social Psychology*, vol. 51, pp. 1173–1182.
- [5]. Bartram, T., Casimir, G., Djurkovic, N., Leggat, S. and Stanton, P. (2012). “Do perceived High Performance Work Systems influence the relationship between emotional labour, burnout, and intention to leave? A study of Australian nurses,” *Journal of Advanced Nursing*, vol. 68, pp. 1567–1578.
- [6]. Becker, J-M., Klein, K. and Wetzels, M. (2012). “Hierarchical Latent Variable Models in PLS-SEM: Guidelines for Using Reflective-Formative Type Models,” *Long Range Planning*, vol. 45, pp. 359–394.
- [7]. Blau, P.M. (1964). *Exchange and Power in Social Life*, New York: Wiley.

- [8]. Chen, G., Ployhart, R.E., Thomas, H.C., Anderson, N. and Bliese, P.D. (2011). "The power of momentum: A new model of dynamic relationships between job satisfaction change and turnover intentions," *Academy of Management Journal*, vol. 54, pp. 159–181.
- [9]. Chuang, E., Dill, J., Craft Morgan, J. and Konrad, R.T. (2011), A configurational approach to the relationship between High-Performance Work Practices and frontline health care worker outcomes. *Health Services Research*, vol. 47, pp. 1460–1481.
- [10]. CIPD/EEF (2003). *Maximizing Employee Potential and Business Performance: The Role of High Performance Working*, London: Chartered Institute of Personnel and Development.
- [11]. Combs, J., Liu, Y., Hall, A. and Ketchen, D. (2006). "How much do HighPerformance Work Practices Matter? A Meta-Analysis of their Effects on Organizational Performance," *Personnel Psychology*, vol. 59, pp. 501-528.
- [12]. Demerouti, E., Mostert, K. and Bakker, A.B. (2010). "Burnout and work engagement: A thorough investigation of the independency of both constructs," *Journal of Occupational Health Psychology*, vol. 15, pp. 209–222.
- [13]. Fan, D., Cui, L., Zhang, M.M., Zhu, C.J., Hartel, C.E.J. and Nyland, C. (2014). "Influence of High-Performance Work Systems on employee subjective well-being and job burnout: Empirical evidence from the Chinese healthcare sector," *The International Journal of Human Resource Management*, vol. 25, pp. 931–950.
- [14]. Garcia – Chas, R., Neira-Fontela, E. and Castro-Casal, C. (2014). "High-performance Work System and intention to leave: A mediation model," *The International Journal of Human Resource Management*, vol. 25, pp. 367-389.
- [15]. Gong, Y., Chang, S. and Cheung, S.Y. (2010). "High Performance Work System and collective OCB: A collective social exchange perspective," *Human Resource Management Journal*, vol. 20, pp. 119–137.
- [16]. Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, USA: SAGE.
- [17]. Harley, B., Allen, B.C. and Sargent, L.D. (2007). "High Performance Work Systems and employee experience of work in the service sector: The case of aged-care," *British Journal of Industrial Relations*, vol. 45, pp. 607–633.
- [18]. Henseler, J., Ringle, C.M. and Sarstedt, M. (2015). "A new criterion for assessing discriminant validity in variance-based Structural Equation Modeling," *Journal of the Academy of Marketing Science*, vol. 43, pp. 115–135.
- [19]. Huselid, M.A. (1995). "The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance," *Academy of Management Journal*, vol. 38, 635–872.
- [20]. Jiang, K., Lepak, D.P., Hu, J. and Baer, J. C. (2012). "How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms," *Academy of Management Journal*, vol. 55., pp. 1264–1294.

- [21]. Kilroy, S., Flood, P.C., Bosak, J. and Chenevert, D. (2016). "Perceptions of highinvolvement work practices and burnout: the mediating role of job demands," *Human Resource Management Journal* (in press).
- [22]. Lu, H., While, A.E. and Barriball, K.L. (2005). "Job satisfaction among nurses: A literature review," *International Journal of Nursing Studies*, vol. 42, pp. 211–227.
- [23]. Maslach, C. (1982). *Burnout: The Cost of Caring*, Englewood Cliffs, NJ: Prentice Hall.
- [24]. Messersmith, J.G. and Guthrie, J.P. (2010). "High Performance Work Systems in Emergent Organizations: Implications for Firm Performance," *Human Resource Management*, vol. 49, pp. 241–264.
- [25]. Meyer, J.P. and Allen, J.N. (1991). "A three-component conceptualization of organizational commitment," *Human Resource Management Review*, vol. 1, pp. 61–89.
- [26]. Oppenauer, V. and Van de Voorde, K. (2016). "Exploring the relationships between high involvement work system practices, work demands and emotional exhaustion: a multi-level study," *The International Journal of Human Resource Management* (in press).
- [27]. Petter, S., Straub, D. and Rai, A. (2007). "Specifying formative constructs in information systems research," *MIS Quarterly*, vol. 31, pp. 623–656.
- [28]. Pfeffer, J. (1998). "Seven practices of successful organizations," *California Management Review*, vol. 40, pp. 96–124.
- [29]. Ringle, C.M., Wende, S. and Becker, J.M. (2014). *SmartPLS 3*, Hamburg: SmartPLS, <http://www.smartpls.com>
- [30]. Schaufeli, W.B. and Bakker, A.B. (2004). "Job demands, job resources and their relationship with burnout and engagement: A multi-sample study," *Journal of Organizational Behavior*, vol. 25, pp. 293–315.
- [31]. Seashore, S.E., Lawler, E.E., Mirvis, P. and Cammann, C. (1983), *Measuring Organisational Change*, New York: Wiley Interscience.
- [32]. Shore, L.M., Tetrick, L.E., Lynch, P. and Barksdale, K. (2006). "Social and economic exchanges: Construct development and validation," *Journal of Applied Social Psychology*, vol. 36, pp. 837–867.
- [33]. Sun, Li-Yun, Aryee, S. and Law, K.S. (2007). "High-Performance Human Resource Practices, citizenship behavior, and organizational performance: A relational perspective," *Academy of Management Journal*, vol. 50, pp. 558-577.
- [34]. Takeuchi, R., Lepak, D.P., Wang, H. and Takeuchi, K. (2007). "An empirical examination of the mechanisms mediating between High-Performance Work Systems and the performance of Japanese organizations," *Journal of Applied Psychology*, vol. 92, pp. 1069-1083.
- [35]. Van De Voorde, K. and Beijer, S. (2015). "The role of employee HR attributions in the relationship between High-performance Work Systems and employee outcomes," *Human Resource Management Journal*, vol. 25, pp. 62–78.
- [36]. Wei, Yui-Chen, Han, Tzu-Shian and Hsu, I-C. (2010). "High-Performance HR

Practices and OCB: A cross-level investigation of a causal path,” *The International Journal of Human Resource Management*, vol. 21, pp. 1631–1648.

- [37]. Young, S., Bartram, T. and Stanton, P. (2010). “High Performance Work Systems and employee well-being. A two stage study of a rural Australian hospital,” *Journal of Health Organization and Management*, vol. 24, pp. 182–199.
- [38]. Zacharatos, A., Barling, J. and Iverson, R.D. (2005). “High-Performance Work Systems and occupational safety,” *Journal of Applied psychology*, vol. 90, pp. 77–93.
- [39]. Zhang, M., Cherrie, J.Z., Dowling, P.J. and Bartram, T. (2013). “Exploring the effects of High-Performance Work Systems (HPWS) on the work-related well-being of Chinese hospital employees,” *The International Journal of Human Resource Management*, vol. 24, pp. 3196–3212.