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# High Performance HR Practices, Work Stress and Quit Intentions in the Public Health Sector: Does Person-Organization Fit Matter?

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# High Performance HR Practices, Work Stress and Quit Intentions in the Public Health Sector: Does Person-Organization Fit Matter?

# Abstract

Drawing on the attraction-selection-attrition (ASA) framework, this paper examines a mechanism, namely person-organization (P-O) fit, through which high performance HR practices (HPHRP) affect two negative employee outcomes: work-related stress and quit intentions. Using a sample of Egyptian public health sector workers, a mediation model is tested empirically using structural equation modelling. The study results show that HPHRP positively affected P-O fit, which in turn had significant negative associations with work stress and quit intentions. P-O fit also explained a high proportion of mediation in the relationship between HPHRP and both outcomes.

# Introduction

High performance HR practices (HPHRP) are generally viewed as a set of interrelated human resource practices designed to enhance the quality and performance of employees in organizations (Messersmith et al., 2011). Much research has examined the relationship between HPHRP and different employee outcomes (Boselie, 2010; Gould-Williams and Mohamed, 2010; Boon et al. 2011; Kehoe and Wright, 2013). However, the mechanisms through which this relationship takes place have received far less attention (Alfes et al., 2013; Boon and Kalshoven, 2014). In other words, researchers are still unclear as to *how* HPHRP relate to employee outcomes (Boon and Kalshoven, 2014). The current study seeks to provide an answer to this question by examining the mediating effect of person-organization (P-O) fit, i.e. the degree of congruence between employee and organizational values and goals, on the relationship between HPHRP and two negative employee outcomes: work-related stress and

quit intentions. By so doing, this study responds to recent calls for research on the role of P-O fit on the relationship between HPHRP and employee outcomes (Paauwe et al., 2013). Using the attraction–selection–attrition (ASA) framework, this study proposes that HPHRP will lead to higher levels of fit between employees and their organizations which will, in turn, lead to reduced levels of work stress and quit intentions.

The choice of the outcome variables in this study was motivated by three considerations. First, previous research has shown that job stress and quit intentions are significantly related to both HPHRP and P-O fit (e.g. Cable and DeRue, 2002; Stavroula et al., 2003; Gould-Williams and Mohamed, 2010). Second, these outcomes are critical for organizations nowadays and have been shown to have significant implications for both employees and organizational performance (Eatough et al., 2011; Khatri et al., 2001; Kim, 2005). Finally, testing the effects of HPHRP on job stress, a well-being variable, and quit intentions, which is the strongest indicator of turnover behaviour, will help evaluate whether HPHRP, which are aimed at providing organizations with a competitive advantage, do so at the expense of employees by resulting in negative consequences for workers (Jensen et al., 2011).

In this study, the focus is on employee perceptions of HPHRP rather than managers ratings of such practices. Employee perceptions are important because HPHRP are not essentially perceived as intended due to differences in interpretation and preferences (Nishii and Wright, 2008). Furthermore, employees' perceptions of HPHRP are likely to be more predictive of employee outcomes than are the ratings provided by managers (Kehoe and Wright (2013). Therefore, it is recommended that empirical studies on the relationship between HPHRP and employee outcomes be conducted using employee responses (Boon and Kalshoven, 2014; Kehoe and Wright, 2013).

This study contributes to the substantial body of P-O fit literature. Findings of previous studies suggest that P-O fit is positively related to the same employee outcomes as outlined in the HPHRP literature (e.g. Narayanan and Sekar, 2009; Iplik et al., 2011). However, less is known about *how* P-O fit can be established and maintained (Boon et al. 2011; Bright, 2008). Boon et al. (2011) advocate that HPHRP will increase congruence between workers and their organizations because, as a 'system' of practices, they communicate organizational values and goals to workers (Boon et al., 2011). Therefore, this study investigates the influence and importance of HPHRP on the degree of P-O fit.

This study extends previous research on the link between HPHRP and employee outcomes by examining this relationship in the Egyptian public health sector. In recent years, researchers have shown an increased interest in examining the relationship between HPHRP and different employee outcomes. However, most of this research has been conducted in large profitoriented multinational organizations and less is known about this relationship in public sector organizations (Boselie, 2010; Messersmith et al., 2011). Moreover, most of the studies linking HPHRP with employee outcomes have been conducted in the United States (e.g. Kehoe and Wright, 2010), Europe (e.g. Boselie, 2010; Messersmith et al., 2011) and Asia (e.g. Gould-Williams and Mohamed, 2010), and less is known about the nature of this relationship in Middle Eastern countries. Therefore, the findings of this study will contribute to the development of HRM theory by increasing the scope of empirical research used to test theory (Whetten, 1989).

This paper is structured as follows. First, the relationship between HPHRP and P-O fit is discussed so as to provide a description of the process through which HPHRP affect employee outcomes. The review then highlights how P-O fit mediates the relationship between HPHRP and both job stress and quit intentions. Following a description of the research methodology,

the study's hypotheses are tested using structural equation modelling (SEM). The final section presents the study's findings and discusses their implications for both theory and practice.

# **Relationship between HPHRP and P-O Fit**

Kristof (1996) defines P-O fit as the compatibility between employees and organizations that happens when at least one entity offers what the other needs, or when they share similar characteristics, or both. According to Muchinsky and Monahan (1987), there are two major types of P-O fit: complementary and supplementary. *Complementary fit*, is achieved when an employee's characteristics fill a gap in the organization or vice versa. *Supplementary fit*, on the other hand, is achieved when an employee's characteristics are similar to those of the organization and its employees (Kristof, 1996). This study considers the extent of congruence between organizational and employee values and goals in achieving desirable employee outcomes. Accordingly, the definition of 'fit' here is more akin to 'supplementary fit'.

Schneider's (1987) ASA framework helps explain how HPHRP might affect fit between employees and their organizations. The main idea of this framework is that individuals are attracted to different types of organizations based on their pre-entry beliefs of the organization's core values and goals. Then, organizations choose, through formal and informal selection procedures, individuals who fit their values and goals. As time passes, some employees may decide to leave because their values and goals may change and no longer fit the organization.

P-O fit is 'dynamic and flexible' because individuals adapt to organizations and organizations also change over time (Furnham, 2001, 9). For instance, the implementation of new public management (NPM) was associated with a change in the public sector organizational culture, which had to be accompanied by a similar change in the perceptions and willingness of employees to adapt to this culture. This implies that new policies will only be successful if

employees feel comfortable with the new organizational culture and identify with the values and goals of the broader organization (Vigoda-Gadot and Meiri, 2008). Thus, while hiring practices are important for assessing an individual's capacity to fit with the organization, other HPHRP are also important for matching employees with their organizations. Practices such as training and development, job security and promotion communicate organizational values, goals and expectations to employees, which in turn should increase employee perceptions of P-O fit (Boon et al., 2011). Two recent studies considered the relationship between HPHRP and P-O fit, and both reported that employee perceptions of HPHRP were positively related to congruence between employees and organizations (Boon et al., 2011; Takeuchi and Takeuchi, 2013). Accordingly, the following hypothesis is proposed:

Hypothesis 1: HPHRP will be positively related to P-O fit.

# The Mediating Role of P-O Fit on the Relationship between HPHRP and Employee Outcomes

Based on the ASA framework, this study suggests that the effects of HPHRP on employee outcomes can occur through P-O fit. According to Boon et al. (2011), the main aims of HPHRP are to fulfil the needs of employees and match their values and goals with those of their employing organizations. If a good fit is achieved, then employees will respond by displaying positive attitudes and behaviours, and experiencing high levels of well-being. Thus, it is predicted that the relationship between HPHRP and employee outcomes will be mediated by P-O fit. In fact, Boon et al. (2011) found that P-O fit mediated the relationship between HPHRP and organizational citizenship behaviours and organizational commitment in the Netherlands. Takeuchi and Takeuchi (2013) also found that P-O fit mediated the relationship between HPHRP and organizational commitment in Japan. The focus in this study, as mentioned above, will be on two negative employee outcomes: job stress and quit intentions.

# Job Stress

Stress is generally viewed as a condition that occurs when an individual realizes that the requirements of a situation are more demanding than he or she can handle (Mansoor et al. 2011). Stress within the workplace is referred to as job stress, work stress or occupational stress (Kalia, 2002). Job stress can be defined as the response employees may experience when faced with work demands and pressures that do not match their knowledge and abilities (Ukandu and Ukpere, 2012). Findings of several studies suggest that job stress has negative effects on employee physical and psychological health, as well as organizational efficiency and effectiveness (Mansoor et al., 2011; Stavroula et al., 2003). Previous research has also shown that public sector employees are not immune to stress. Workers in the medical profession (the survey respondents of this study) have also been found to be more vulnerable than many other professions because of the higher levels of emotional exhaustion experienced (Kahn, 1993).

Little attention has been paid to the link between HPHRP and work outcomes that undermine employee health and well-being such as stress at work (Jensen et al., 2011). Baptiste (2008) found that HPHRP had a significant positive effect on the well-being of employees in the UK. Gould-Williams and Mohamed (2010) also found that HPHRP negatively affected job stress of local government employees in the UK and Malaysia. However, the underlying mechanisms of this relationships remain unclear. This study proposes that level of compatibility between employees and their organizations helps indirectly explain the relationship between HPHRP and job stress.

It is argued that job stress usually results from a lack of congruence between employee and organizational characteristics (Edwards and Cooper, 1990). In other words, job stress usually increases when the characteristics of the organization differ from those of the employee. This difference creates a lack of fit, which in turn results in negative psychological effects (Edwards

and Cooper, 1990). High levels of P-O fit indicate that there is congruence between employee and organizational characteristics (Kristof-Brown et al., 2005). This congruence makes it easier for workers to communicate with others within the organization and receive their support, which in turn is likely to lead to reduced levels of job stress (Edwards and Cooper, 1990). Accordingly, and based on the findings of previous research on the relationship between P-O fit and job stress (e.g. Iplik et al., 2011; Park et al., 2011), the following hypothesis is proposed:

Hypothesis 2: P-O fit will mediate the relationship between HPHRP and work stress.

# Intention to Quit

Intention to quit refers to the extent to which an employee plans not to continue membership with his employer (Price, 2001). According to Lambert and Hogan (2009), intention to quit is more important from the employer's viewpoint than actual turnover behaviour. If employers can properly understand the precursors of turnover intentions, they can possibly introduce changes to reduce these intentions. However, once employees have quit, the employer can do nothing but assume the expense of hiring and training other employees (Lambert and Hogan, 2009). Intention to quit is also easier to measure and predict than actual turnover (Firth et al., 2004), and represents a better indicator of management practice (Khatri et al., 2001). Furthermore, even though meta-analyses indicate a modest association between quit intentions and turnover behaviour in the private sector, recent research suggests that the relationship between both is stronger in the public sector (Cho and Lewis, 2012). This may give 'some confidence' for using intention to quit as a proxy for actual turnover (Cho and Lewis, 2012, 14).

There is evidence supporting the assumption that HPHRP are negatively related to quit intentions (Gould-Williams and Mohamed, 2010; García-Chas et al., 2013). However, researchers argue that the processes through which this relationship takes place remain

uncertain (Kehoe and Wright, 2013). It could be argued that HPHRP are more likely to influence quit intentions indirectly through P-O fit.

According to Saks and Ashforth (1997), when employees have high perceptions of P-O fit, they are more likely to define themselves "in terms of their organization". Thus, the values of their organization and their working colleagues will reflect their identities. This will strengthen the bonds between employees and both their organization and co-workers, which will in turn make it less likely that they want to quit (Jackson et al., 1991). These views are also consistent with the ASA framework and the findings of recent empirical research (e.g. Narayanan and Sekar, 2009; Liu et al., 2010). On this basis, the following hypothesis is proposed:

Hypothesis 3: P-O fit will mediate the relationship between HPHRP and intention to quit.

# **Research Context: The Egyptian Public Health Sector**

The Egyptian healthcare system is highly complex and pluralistic, with many public and private providers. Although most of the Egyptian healthcare industry is dominated by the public sector (about 60% of the hospitals in Egypt are owned by the government), the private health industry is also rapidly growing. The health system in Egypt has a strong infrastructure of physicians, hospitals and clinics, medical devices and pharmaceuticals (Salah, 2007).

In the late 1990s, Egypt implemented the Health Sector Reform Program (HSRP) which mainly aimed at improving service quality and controlling service cost (Gaumer and Rafeh, 2005). The program empowered public hospitals to manage their facilities in a decentralized way. Nowadays, public hospitals have a direct relationship with patients (i.e. customers) and the government only intervenes if the patient does not have the ability to pay for the service. Because of the limited resources provided by the government to the public health providers, public hospitals are required to become self-funding entities. Therefore, they are empowered to create resources by adopting 'the ability to pay principle', while a specific proportion of free beds is set aside for those who cannot afford to pay. However, because of this, citizens are not satisfied with public health services in Egypt as they are unclear as to whether public hospitals are state-owned units that provide free health service for the poor or they are private profit seeking organizations (Hassan and Sarker, 2012).

The most powerful professional groups in the Egyptian health sector are physicians, nurses and pharmacists. Egyptian physicians are known for being highly qualified and regarded throughout the Middle East and Africa for their knowledge and skills. As regards to nurses, even though they are considered the 'backbone' of the healthcare system in any country, Egypt suffers from a severe shortage of nurses, especially qualified nurses (Ma et al., 2012, p. 127). The physician to nurse ratio in Egypt is estimated to be 1.7 physicians to 1 nurse, while the average ratio in other countries in the world is 1 physician to 2.98 nurses (Ma et al., 2012). Pharmacists are also important to the Egyptian health care sector. In Egypt, the roles of pharmacists vary from preparing and supplying medicines to sharing pharmaceutical expertise with physicians, nurses and patients. The density of pharmacists in Egypt is above the Middle East and North African average (USAID, 2011).

Historically, the training and development of public sector workers in Egypt, including health sector workers, was inadequate, their salaries were low and they were not graded for their performance. However, Egyptian governments have been recently working on improving the working conditions of employees in this sector. Furthermore, over the last decade, organizations, managers and employees in Egypt have been exposed to more international influences. It is believed that such influences have impacted work-related values as well as the HRM practices employed by public organizations (Leat and El-Kot, 2007). This study assesses

the relationship between HPHRP, P-O fit and two negative employee outcomes in the public health sector, namely work-related stress and quit intentions.

# Method

# Sample and Procedures

The study sample included Egyptian public hospitals physicians (consultant, specialist and intern physicians), nurses and pharmacists. A convenience sample was adopted because of the challenges of collecting primary data in Egypt where respondents tend to be uncooperative (Hatem, 1994). However, because of this approach, the study results will be less representative than those obtained from a random sample.

A pen and paper questionnaire survey was used. The English questionnaire was back-translated into Arabic and pretested by three health professionals. Using personal contacts, participants were contacted directly to participate in the study rather than through their organizations. They were also promised complete anonymity. These steps were taken so as to reduce the risk of social desirability response bias on the part of participants (Miao et al., 2013). The questionnaire was distributed to 500 professionals on a face-to-face basis during working hours and 340 questionnaires were returned, giving a response rate of 68 percent. Of the respondents, 38.2 percent were male and 61.8 percent were female. Most of the respondents (66 percent) were between 20 and 30 in age, 26 percent were between 31 and 40 in age, and the rest were above 40. Regarding educational background, 24 percent had masters and 61 percent had a bachelor's degree. Most of the respondents (50 percent) had served in their institutions for less than 5 years, 33 percent had served for between 5 and 10 years, and the remainder had been serving in their institutions for more than 10 years.

# Measures

Responses to all questionnaire items were on a seven-point Likert scale in which 1 = "Strongly disagree" and 7 = "Strongly agree".

**HPHRP**. Strategic HRM scholars claim that HPHRP should be examined as systems or bundles rather than in isolation (Liao et al., 2009). According to Kehoe and Wright (2013), coherent systems of HPHRP that reinforce each other are more likely to support sustainable performance outcomes than individual practices. For instance, organizational investments in employee training and development could only be effective when employees are given opportunities to utilize their newly acquired skills via, amongst other things, autonomous work design. This is supported by Sun et al. (2007) who argue that it is the system of HPHRP that provides the organization with a strategic asset and therefore, the effects of HPHRP should be considered from a systems rather than an individual perspective. Accordingly, in the current study, the systems approach was adopted in the analysis.

Five practices were used in the present study to assess employee perceptions of HPHRP. These practices are among the most widely used in the studies examining the link between HPHRP and employee outcomes (e.g. Boselie, 2010; Gould-Williams and Mohamed, 2010). In particular, the practices included here are training and development, job security, promotion, work autonomy and communication.

Twenty items taken from previous studies (Morgeson and Humphrey, 2006; Boon et al. 2011; Boselie, 2010; Gould-Williams and Gatenby, 2010; Kehoe and Wright, 2013) were used to measure HPHRP. Sample items include: 'When my job involves new tasks, I am properly trained' (training); 'I am certain of keeping my job' (job security); 'I have good opportunities of being promoted within this institution' (promotion); 'Management keeps me well informed of how well the institution is doing' (communication); 'My institution gives me considerable opportunity for independence and freedom in how I do the work' (work autonomy). Cronbach's alpha for the measures of the five HPHRP ranged between 0.73 and 0.89.

**P-O fit.** Direct or indirect measures could be used to assess P-O fit (Kristof 1996). Direct measures involve asking respondents for their perceptions of fit with their organization. They are usually beneficial for the assessment of *perceived* fit. Indirect measures, on the other hand, involve a comparison between assessments of fit by both the employee and the employer. They are usually used to assess *actual* fit. According to Bright (2007), direct measures of fit are better and stronger predictors of fit than indirect measures. Accordingly, 4 items representing direct measures of fit were used in the current study to assess the level of congruence between employees and their organizations. These items were developed by Cable and Judge (1996) and Bright (2007). A sample item is: 'My values match the values of my institution'. Cronbach's alpha for this measure was 0.84.

**Job stress**. Job stress was measured using the 4 items developed by Motowidlo et al. (1986). An item from this scale is: 'My job is extremely stressful'. Cronbach's alpha for this four item scale was 0.88.

**Intention to quit**. Four items developed by O'Reilly et al. (1991) were used to evaluate intention to quit. A sample item is: 'I have seriously thought about leaving this institution'.-The Cronbach's alpha for the intention to quit measure was 0.86.

**Controls.** It is argued that P-O fit will be higher for older, highly educated employees who are more tenured with the organization (Vigoda and Cohen, 2002; Vigoda-Gadot and Meiri, 2008). Moreover, previous research has shown that employees' age, gender, education, job and tenure are related to both job stress and quit intentions (e.g. Kahn, 1993; Samad, 2006; Balakrishnamurthy and Shankar 2009; Kabungaidze et al., 2013). Accordingly, these variables

were controlled for so as to rule out potential alternative explanations for the findings (Dulac et al. 2008).

# Analysis and Results

Gerhart (2013) recommended using structural equation modelling (SEM) when testing mediators of the relationship between HPHRP and outcomes. Accordingly, the study data were analysed using SEM with AMOS 21. The analysis followed Anderson and Gerbing's (1988) two-step approach wherein the estimation of the measurement model precedes the estimation of the proposed structural model.

The data were examined to ensure that the assumptions of normality were maintained. All the skewness and kurtosis values were less than 2, suggesting that there was no serious violation of the normality assumption (Curran et al., 1996). However, to minimize the chance of committing Type-1 errors, the SEM models were estimated with bootstrapped standard errors based on 1000 re-samplings. Here the re-sampled coefficient estimates serve as a proxy for the sampling distribution of the population parameters (Im and Workman, 2004).

#### Measurement validation

The measurement relationships were analysed and the reliability and validity of all the study constructs were evaluated using confirmatory factor analysis (CFA). The evaluation of the measurement model was conducted in two stages. First, CFA was conducted for a second-order measurement model of HPHRP, wherein the five HR practices were treated as first-order factors and the items of the practices were the observed indicators. Then, CFA was conducted for the overall measurement model in which all the major latent constructs, including the second-order HPHRP construct, were correlated with each other. The indices recommended by Williams et al. (2009) were used to assess model fit. These are the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square

residual (SRMR). A good fit is achieved when the CFI exceeds 0.90, the RMSEA is below 0.08 and the SRMR is below 0.10.

The fit of the second-order measurement model of HPHRP was good ( $\chi^2$  (df = 165) = 469.584, p < .001; CFI = 0.905, RMSEA = 0.074, and SRMR = 0.064). The standardized second-order factor loadings ranged between 0.58 and 0.82, and were all significant at the p < .001 level. The overall measurement model fit was also good ( $\chi^2$  (df = 453) = 966.821, p < 0.001; CFI = 0.907, RMSEA = 0.058, and SRMR= 0.064). Both the composite reliability and average variance extracted were also calculated and the results showed that the constructs had high internal consistency where all the composite reliability scores were above 0.80 and the average variance extracted scores were above 0.50. Discriminant validity was also assessed by comparing the square root of the average variance extracted of each construct with the correlation estimates between constructs (Fornell and Larcker, 1981). The square root of the variance extracted estimate for each construct was greater than the corresponding interconstruct correlation estimates, suggesting that discriminant validity was satisfied (see Table 1). Furthermore, the correlation coefficients among the constructs did not exceed 0.75, indicating that multicollinearity does not appear to be a problem (Kline, 2005).

# -Insert Table 1 here-

Since all the variables of the study were measured using the same source, the effects of common method bias were examined (Podsakoff et al., 2003). To test for method bias, the unmeasured latent method factor technique was used. This approach involves estimating a latent variable model in which items are allowed to load on their theoretical constructs and a latent common methods factor (Dulac et al., 2008). The results showed that the model with the common method factor had a good fit to the data ( $\chi^2$  (df = 421) = 767.195, p < 0.001; CFI = 0.938,

RMSEA = 0.049, and SRMR = 0.058). Yet, the variance extracted by the common method factor was only 0.22, falling below the 0.50 threshold that has been suggested as indicating the presence of common method bias (Dulac et al. 2008). This provides evidence against common method bias in the current study.

# Structural model and tests of hypotheses

The structural model was tested with and without the control variables and the results were highly consistent. In the interest of parsimony, the results are reported without control variables. To account for the associations between job stress and intention to quit, the residual errors of the two variables were correlated (Im and Workman 2004). The proposed structural model provided a good fit to the data ( $\chi^2$  (df = 453) = 966.821, *p* < 0.001; CFI = 0.907, RMSEA = 0.058, and SRMR= 0.0641). In this model, HPHRP accounted for 47.3 percent of the variance ( $R^2$ ) in P-O fit. Moreover, HPHRP and P-O fit together explained only 3 percent of the variance in work-related stress and 12 percent of the variance in quit intentions.

Turning to the individual paths (see Figure 1), HPHRP had a positive and significant association with P-O fit ( $\beta = 0.688$ , p < 0.001), suggesting that the fit of employees with their organisations is strengthened through HPHRP. Therefore, hypothesis 1 is supported. P-O fit in turn had a significant negative association with quit intentions ( $\beta = -0.229$ , p < 0.05) and job stress ( $\beta = -0.231$ , p < 0.05). Together, this indicates that P-O fit acts as a mediator between HPHRP and employee outcomes, providing support for hypotheses 2 and 3. The direct path from HPHRP to both quit intentions and job stress was not significant, which suggests that P-O fit fully mediated the relationship between HPHRP and both outcomes.

-Insert Figure 1 here-

# **Proportion of Mediation**

According to Iacobucci et al. (2007), the proportion of mediation could be determined by comparing the magnitude of the indirect to total (direct plus indirect) path coefficients  $[(a \times b) / (a \times b) + c']$ . The coefficient associated with any indirect path is usually labelled  $a \times b$ , where a in the case of current study is the standardized path coefficient from HPHRP to P-O fit and b is the standardized path coefficient from P-O fit to employee outcomes. The standardized path coefficient from HPHRP to employee outcomes is referred to as c'. If both a and b are significant, then there is mediation.

Prior to determining the proportion of mediation, the statistical significance of the indirect pathway  $(a \times b)$  was estimated using bootstrapping based on 1000 resampling. This nonparametric approach has performed well in comparison to other mediation testing methods (MacKinnon et al., 2004). Results of this test are presented in Table 2.

### -Insert Table 2 here-

The coefficient associated with the indirect path of HPHRP via P-O fit to quit intentions equalled 0.158 (0.688  $\times$  0.229) and was significantly different from zero (p < .05). The ratio of the indirect to total effect equalled 0.524 [0.158 / (0.158 + 0.143)]. This indicates that 52.4% of the intention to quit variance explained by both HPHRP and P-O fit was accounted for by the indirect path via P-O fit. This suggests that the contribution of future mediators to explaining the HPHRP-intention to quit variance is likely to be modest. The same applies to work stress, the indirect path via P-O fit accounted for the majority of the variance explained (ratio of indirect to total effect was substantially greater than 0.5).

# Discussion

There have been recent calls for research on the mechanisms through which HPHRP relate to employee outcomes. This study sought to answer these calls by testing one such mechanism, namely P-O fit. Since the study is based on a sample of public health sector employees in Egypt, it contributes to the HRM literature by extending the empirical evidence of the effects of HPHRP to a new context. This research presents several noteworthy findings. Consistent with the rationale of the ASA framework and evidence from previous research (Boon et al., 2011; Takeuchi and Takeuchi, 2013), the findings of the current study revealed that employee perceptions of HPHRP had a significant positive relationship with P-O fit. This confirms that HPHRP communicate organizational values, goals and expectations to employees which, in turn, facilitates greater congruence between employees and organizations (Boon et al., 2011). HPHRP accounted for a large proportion (47.3%) of the variance in P-O fit. Boon et al. (2011) reported that high performance HR practices explained 29% of variance in P-O fit in the Netherlands, whereas Takeuchi and Takeuchi (2013) reported that HPHRP explained 28% of variance in P-O fi in Japan. Thus, the results presented in the current study suggest that high performance HR practices are especially critical in shaping the values and goals of workers in the Egyptian context, as they explained a bigger proportion of variance in P-O fit in comparison to employees in both the Netherlands and Japan. This could be attributed to two reasons. The first relates to the nature of the hiring process in Egyptian organizations, where managers give preference for applicants who possess the required job skills rather than those who fit with the characteristics of the organization (Leat and El-Kot, 2007). However, as indicated by Lauver and Kristof-Brown (2001), possessing the necessary skills for performing a job does not essentially mean fitting with the organization. The second reason relates to the age of the employees in this study's sample, where most of the respondents (66%) were young employees between 20 and 30 in age. Older employees are more likely have higher levels of P-O fit than

younger employees, since they know more about the organization and accept it as an important part of their life (Vigoda and Cohen, 2002). Therefore, HPHRP are likely to have a bigger influence in bringing young workers values into congruence with those of the organization.

Furthermore, findings revealed that the positive effects of HPHRP on employee outcomes occur through the degree of congruence between employees' values and goals, and those of the organization (Boon et al. 2011; Takeuchi and Takeuchi 2013). P-O fit fully mediated the relationship between HPHRP and both job stress and quit intentions. Moreover, the effect of P-O fit was also consistent across the two outcome variables. The total variance explained by HPHRP and P-O fit on job stress was 3%, and 12% for quit intentions. Of these values, the indirect effect of HPHRP via P-O fit accounted for more than half of the variance explained, suggesting that P-O fit is an important mediator in these relationships.

The findings also show that both HPHRP and congruence with the organization are very weak predictors of work-related stress and quit intentions in the Egyptian context, as they only explained 3 percent and 12 percent of the variance in both variables respectively. This study focused on P-O fit which is viewed as the most popular and most important type of fit (Kristof-Brown et al., 2005). P-O fit has been shown to have a stronger relationship with employee outcomes than other types of fit (Kristof-Brown and Jansen, 2007). However, in this context, other types of fit such as P-J fit may have a stronger link with work-related stress and quit intentions, as it has been found that a misfit between an employee's abilities and the demands of his job leads to work-related stress and quit intentions (Edwards and Cooper, 1990; Scroggins, 2007). Other factors such as fairness and social support have also been suggested as potential predictors of stress and quit intentions (Leiter and Maslach, 2004). According to Leiter and Maslach (2004), employees 'will feel alienated' if they experience a lack of equity

and support from their supervisors and co-workers which, in turn, may lead to negative outcomes. Future public sector research may wish to consider these relationships.

# Conclusions

This study contributes to the literature in several ways. First, it responds to calls for more research on the mechanisms through which HPHRP relate to employee outcomes (Alfes et al., 2013; Boon and Kalshoven, 2014). This study adds to the literature as the results suggest that HPHRP lead to high levels of fit between employees and their organizations and, in turn, reduced levels of stress and quit intentions. Second, this study contributes to the P-O fit literature by examining the effects of HPHRP on employees fit with their organizations. The examination of this relationship addresses recent calls for additional empirical work on the factors that help facilitate greater fit (Boon et al. 2011; Bright, 2008). Third, the proposed relationships were tested in an understudied setting which is of growing interest in the literature, namely the Egyptian public sector. Thus, this paper contributes to establish the generalizability of concepts and measures developed in western countries to other regions of the world. This is important given that the study variables have considerable implications for employees all over the world (Eatough et al., 2011; Khatri et al., 2001; Kim, 2005).

The results of the current study have important implications for practice. Overall, if organizations are keen on improving employees' experience at work, then achieving congruence between employees' and organizational values and goals is important. The study findings showed that HPHRP such as on-going training opportunities, high levels of job security, promotion from within and work autonomy are effective in this regard. Managers, therefore, should use the organizational mission and objectives as a basis on which HPHRP are designed. This is more likely to increase the alignment of employee goals and those of the organization. Managers should also pay careful attention to the implementation and

communication of HPHRP so as to positively influence how employees view these practices. This will help reinforce employees' identification with the organization's culture and will strengthen their bonds with the organization, which will in turn make it less likely that they feel stressed and want to quit.

The findings of this study should be interpreted with consideration of a number of limitations. First, the current study used a cross-sectional design, and accordingly conclusions regarding causality cannot be made. Instead, the study results report levels of association only. For instance, it is plausible that the level of P-O fit influences employees' perceptions of HPHRP, where employees who achieve fit with their organizations may have a positive view of HR practices. It is also possible that employees who experience low levels of job stress perceive that their values are consistent with their organizations. Future research with longitudinal or experimental designs is required to address the issue of causality. Second, because of the use of single-source self-reported data, common method bias may have inflated the overall strength of correlations. However, the results of the unmeasured latent method factor technique provide evidence against common method bias in this study. Third, there is no agreement upon which set of practices should be used when testing the relationship between HPHRP and employee outcomes. Accordingly, the five practices used in the current study may not be representative of all HPHRP employed by organizations. However, the practices included in the current study are among the most widely used practices in the studies linking HPHRP and employee outcomes. Finally, the study data were collected from Egyptian public health sector professionals, and a convenience sample was used. Thus, the findings of the current study cannot be generalized to the Egyptian context as a whole and are limited to the studied sample. Future research may wish to assess whether the findings of the current study can be extrapolated across organizations and other geographical locations. In spite of these limitations, this study provides evidence of the importance of P-O fit in public organizations as the effects of HPHRP are contingent on the degree of compatibility between employees and public sector organizations.

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Construct	1	2	3	4
1. HPHRP	0.74, (0.86)			
2. P-O Fit	0.688	0.76, (0.84)		
3. Quit Intentions	- 0.301	- 0.328	0.78, (0.86)	
4. Job Stress	- 0.035	- 0.146	0.113	0.82, (0.89)

Table 1: Inter-correlations and reliability estimates

Sub-diagonal entries are the latent construct inter-correlations. The first entry on the diagonal is square root of the AVE, whilst the second entry in parenthesis is the composite reliability score.

Figure 1: Results of the Structural Model (standardized coefficients)



Note: \*\*\*p < 0.001, \*\*p < 0.05