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**Mohammad, Tamara, Darwish, Tamer K ORCID logoORCID:
<https://orcid.org/0000-0003-1815-9338>, Singh, Satwinder and
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Human Resource Management and Organisational Performance: The Mediating Role of Social Exchange

Abstract

This study seeks to explore the impact of specific set of HRM practice on organizational performance in a Middle Eastern emerging market. It aims to examine the mediating role of social exchange within the healthcare sector in Jordan, which is presently reeling under pressure from refugee crisis from Syria and neighbouring countries. Both, HR and hospital managers were targeted in all private and public hospitals through two separate questionnaires. We find, as predicted, that recruitment, training, and internal promoting from-within have a positive and significant effect on performance. However, contrary to expectation, we found performance appraisal and rewards and benefits not linked with performance. Notably, whilst researchers argue that a better theoretical understanding of the mechanisms describing the relationship between HRM and performance should be developed, the results indicate that social exchange can play an essential role in explaining the HRM-performance indirect relationship—a result that partly unlocks the elements of so-called ‘black box’ in HR research. The theoretical and applied implications of these findings are explored.

Keyword: HR practices, organisational performance, social exchange, Middle East, healthcare.

1. Introduction

Human Resource Management (HRM) views employees as an active resource that needs to be effectively managed. This includes providing them with sufficient training and development opportunities, as well as incentives, in order to ensure their continued progression and utility within the company (Brewster, 2007). The concept of HRM emerged on this premise as the effective use of the human resource ensures greater organisational success (Zhu, Warner & Rowley, 2007).

The importance of HRM must be acknowledged in terms of how it can develop a superior workforce within an organisation. Effective HRM strategies ensure that an organisation maintains its competitive edge within its industry as their performance is enhanced (Richard & Johnson, 2001). Notably, it is held that HRM could be viewed as a process of social construction; employee relations are structured using social action (Boselie and Keegan, 2006). This would imply that the social role of HRM is vital in ensuring that relationships between employee and employer are strong.

This is a study of the effect of particular set of HRM practice on organizational performance in a Middle Eastern emerging market. It aims to explore the mediating role of social exchange in the relationship between HRM and performance within the healthcare sector in Jordan. Although existing literature has explored the influence of different sets of HR practices on organizational performance, but the focus was on a limited range of HR practices, and mostly conducted on the developed nations (Guest, 2011; Singh *et al*, 2012). However, this work employed a reasonably wider set of HR practices, within a key segment in an emerging Middle Eastern market. It is held that, within emerging markets, organisations may depend on HR practices that are somewhat different from conceptualizations of HRM faced in mature markets (Webster and Wood, 2005). Therefore, the utilisation of “modern” forms of HRM could have little or no impact on performance, given particular societal and economic realities (see HaakSaheem *et al.*, 2017; Wood *et al.*, 2019; Darwish *et al.* 2019; Singh *et al.* 2020).

This study has three core objectives; firstly, it seeks to examine the *direct* impact of HR practices on organizational performance within the healthcare sector in Jordan. Secondly, it seeks to explore the *indirect* impact of HR practice on performance by mediating the relationship with social exchange, and potentially offers some theoretical explanations to the HRM-performance relationship. Thirdly, the article also seeks to highlight both, HRM and performance issues within the healthcare sector in Jordan in light of the recent refugees crisis in the country which have significantly impacted on the sector; presently, Jordan has the second largest percentage of refugees in comparison to its population-89 refugees out of every 1,000 residents (UNHCR, 2018); 84% of these live outside of the designated refugee camps with 16% staying inside these camps (MOPIC, 2015). Clearly, a major impact of refugee crisis has been on the employment and health sector of Jordan. Unemployment in 2016 stood at 15.8% of labour force and health sector is coping with maintaining the demand put on it by the increased population owing to refugee influx. Health burdens imposed by refugees has raised the demand for services occupancy rates in hospitals, particularly in the North province - touching 100%, in addition to raising the workload by 9-15% at public health centres.

This study is structured as follows. Firstly, key aspects of the current HR literature linking HR practices with organisational performance are highlighted. We then explain our methods, and then, our findings. Finally, we discuss our conclusions, and come up with the implications for theory and practice.

Literature and Hypotheses Development

HRM and Organizational Performance

It is held that certain HRM practices are expected to serve as a main source of enhanced performance and competitive advantage (see Pfeffer, 1998; Singh et al. 2019). This view has led to explore into the effect of HR practices on the overall firms'

performance. Nevertheless, in practice, there is considerable debate as to what specific set of practices are likely to boost organisational performance, and how organisational performance of firms may best be captured (Guest, 2011; Singh et al, 2012; Darwish, Singh, and Wood, 2016).

It is possible to view the HRM-performance linkage models that are being developed as complementary to one another. These models are designed in order to analyze how HRM affects organisational performance, and each model is useful in expanding the constructs, including the assessment of new variables, or considering new relationships (Darwish et al. 2013). Whilst researchers can see a positive influence, they are not able to outline why this occurs, which has resulted in this area of research being referred to as a "black box" (e.g., Gerhart, 2005). It is thought that there will be a number of intermediary steps through this causational process and these too must be carefully outlined in how they affect the end variables (Becker & Gerhart, 1996).

Research has indicated that there are large differences in how individual studies analyzing the HRM-performance relationship have approached the "black box" scenario (Boselie et al., 2005). The most popular perspective is the contingent framework. The latter postulates that contingent factors such as business strategies are involved in the way that HRM influences performance (Schuler & Jackson, 1987).

Another theoretical perspective is the resource-based view, which indicates that human and social capital is the tools through which HRM influences performance (Barney, 1991). AMO is also another perspective, which proposes that HRM strategies affect employees Ability, Motivation and Opportunity (AMO) to improve themselves and therefore the firm (Appelbaum et al. 2000).

It is held that the various studies conducting research in this field are not comparable, due to them using differing HR practices, policies and systems (Boselie et al., 2005; Wright et al., 2005; Lepak, Chung & Harden, 2006; Darwish et al. 2016). A HRM

checklist would be beneficial, and attempts have been made to create this, however, the authors of the relevant studies have all sought to use differing HRM contexts or concepts, which thereby means thus far there is no mutually agreed upon HRM checklist. Three of the HRM-outcomes are usually used as mediating variables. These are: employee skills (competence and cooperation), employee behaviour (retention), and employee attitudes (satisfaction level, motivational factors and commitment) (Paauwe, 2004; Lepak et al., 2006). Causation in relation to HRM outcomes as mediating variables has been incredibly mixed, therefore making conclusions difficult to draw (Wright et al., 2005).

HR Practices

Recruitment and selection: for over 60 years, researchers have been examining the efficiency of various standards used in the recruitment and selection processes (Sinha & Thaly, 2013). This has been done through assessment of the rates of turnover, workplace survival and work performance together with other aspects related to the organization such as referrals by current staff, internal job postings and rehiring in former staff (Zottoli & Wanous, 2001). The resource-based theory suggests that employees play a very substantial role in the operations of an organization and therefore workers should be given special attention as the organization strives to attain a competitive advantage in the market (see Youndt et al., 1996).

Hospitals can be able to create an effective healthcare culture through utilization of appropriate recruitment and selection policies. The ability of a given hospital to hire the most qualified personnel will have an effect of the attitudes of employees, interaction between the clients and the workers, and the relationships between the staff members themselves. Problems relating to employee retention are likely to arise in the long run if there is a negative relationship between culture and employees. A hospital can boost its performance by retaining the employees who match with its culture (see Fried and Gates, 2008). An organization may face high turnover if it fails to follow the appropriate procedures in recruiting its staff because there are very high chances that the individuals being employed lack the most desirable skills for the job. It therefore can be concluded that the recruitment and selection processes have a direct impact on organisational performance.

Training: training initiatives have become very important due to inadequate healthcare labour. Good training minimizes employee turnover and has a positive impact on the level of service quality in hospitals. Singh and Negi, (2013) noted that adequate training sessions are offered each year through

the healthcare system. The trainings can be mandatory (such as those for confidentiality, compliance, medical skill enhancement, etc.) or optional (such as those for progressing with health education, managerial growth, teamwork, problem handling, etc.). It is not an easy task to conduct multiple trainings in a year, and there are however best practices, though limited, that ensure any provided training program achieves its objectives without overstretching the healthcare system resources. Training programs, for instance, should contain techniques that work for numerous learning styles: visual, verbal, practical, etc. Hospitals mainly focus their training on technical skills; it has however become essential for the inclusion of some aspects of soft skill training such as customer service and communication skills. Lastly, hospitals should evaluate the effectiveness of their training on a regular basis through surveys and examine of the new skills as programs that do not enhance skill sets wastes the hospital's finances and the workers' time (Lansley, 2012).

Rewards and benefits: many studies have highlighted the importance of HRM on improving the quality of service in hospitals (Agarwal, Garg, and Pareek, 2011) and realized that motivation to perform and bonus systems based on individual competencies reinforces performance in hospitals evident from comparisons between hospitals with good performance and those with poor performance (Edgar and Geare, 2005). For instance, in Turkish hospitals, lack of good incentives and poor working conditions for employees is an indicator of poor performance (Yavas, Karatepe and Babakus, 2014). Thus, good compensations and incentives may enhance the overall performance within institutions (Darwish et al. 2016).

Performance appraisal: the method which the company decides to adopt for employee performance reviews should also be used as a way of encouraging the employees to work extra hard. For the case of a hospital, official documentation has to be prepared when performing a performance appraisal and a performance appraisal form has to be filled in the process (Sinha and Thaly, 2013). Through a performance appraisal, workers in the organization will be able to determine the elements in their performance that will

guarantee an award (Nelson & Quick, 2008). Rewarding of employees after better performances will guarantee improvements in their performances and this can be affected using the performance appraisals (Stephan & Dorfman, 1989). If

accomplishment of the pre-set targets is the main basis of the performance appraisals, then a good relationship will exist between the personnel planning and the employees. Awards for the employees are determined based on some formal assessment. The daily practices of medical personnel can be greatly influenced by the feedback from patients (for more details, see Hearnshaw et al. 1996). The

main reason why hospitals use performance appraisals is to make the activities done within the health sector more efficient.

Internal career opportunities: healthcare organizations must possess the capacity to groom employees and managers to fill vacancies created by all these events (Wilkes and Bartley, 2007). A career development program provides hospitals with a sustainable solution for shutting the experience and supply gap as they get ready for the future. It then devises a strategic plan to satisfy future requirements of the organization, a task it performs through retaining vital workers and developing the employees professionally to ready the current workforce for future changes. Healthcare organizations are under constant pressure to discover new ways of filling critical jobs and at the same time figure out ways of retaining productive workers. The odds, however, are stacked up against them; more job vacancies are expected but fewer workers available to fill them.

Based on the discussion and reasoning outlined above, we propose the following hypothesis, which encompasses all the HR practices discussed above:

H1: A positive relationship between HR practices (recruitment and selection, training, rewards and benefits, performance appraisals, and internal career opportunity) and perceived organizational performance will be observed within the health care sector.

Social Exchange as a Mediating Variable

In this work, we deal with social exchange as a mediator rather than moderator, to understand whether the effect of the mediator is stronger than the direct effect of the independent variable. On one hand, moderator is a variable that influences the direction or strength of the link between an independent and dependent variable. Particularly in a correlational evaluation framework, a moderator is a variable that influences the zeroorder relationship between two other variables. However, a basic moderator impact could be characterised as an interface between a main independent variable and an element that indicates the proper conditions for its function (Baron and Kenny, 1986). On the other hand, mediation can be more straightforward in its specifying convention. A mediator mediates the association between

the independent and dependent variables – describing the purpose for such a connection to endure; thus, a mediator variable conveys an influence. In the mediation, an independent variable leads to some alteration

to the mediator variable, which then cause a change in the outcome variable. Nevertheless, practically, the relations between the independent variable, mediator, and outcome variable are not examined for causality, only a correlational relation (Baron and Kenny, 1986; Fairchild and MacKinnon, 2009; Pearl, 2012).

The amount of information and support exchanged between two parties dictate social exchange relationships (Wayne, Shore and Liden, 1997). Contemporary conceptual view in social exchange theory emphasizes social exchange relationships. High quality relations are categorised by exchanging mutual interests and sharing benefits (Evans and Davis 2005). Workers have several exchange partners with whom they can make unique social exchange relations, from the direct manager, colleagues, suppliers and consumers. These links are intervening variables in the social exchange process (Cropanzano and Mitchell 2005).

The mechanisms between HRM and organizational performance have no immediately apparent characteristics as the only factors for consideration are hidden from immediate observation; social exchange theory, however, attempt to offer insight into the mechanisms. Recently, scholars have expounded on the theory of social exchange as well as the involved norm of exchange, to establish propositions about the relationships among HR practices and employee behaviours. Employees, through their behaviour and performance reciprocate the HRM practices they obtain from the organization (Whitener 2001; Purcell and Hutchinson 2007). In addition, Whitener (2001) opined that employees perceive HRM practices as a ‘personalized’ dedication to them, practices which they then exchange back to the organization through positive behaviour and attitude. This may also include non-compulsory behaviour, employee commitment and intention to stay.

The social exchange model provides important perspectives in the investigation of staff attitudes and behaviours as well as their impact on organization performance. Social exchange model places focus on the motivational bits of the relationship between staff and the employer, giving out insights pertaining to the effects of compatibility between anticipated incentives and contributions offered, in an exchange involving the employee and the employer (Tsui *et al.*, 1997). It is particularly noted that social exchange theorists such as Gouldner (1960) carried out studies on the exchanges taking place

between staff and their employers referencing views of reciprocity at a personal level of analysis. The idea of an advancing routine of interchange that makes employees feel compelled to react justifiably to actions from others is what makes up the essence of social exchange model. Workers aim to have a balance in their exchange relationships with organisations, by having their behaviour equal to the degree of employer dedication to them (Wayne *et al.*, 1997).

It is held that the social exchange model proposes that employee attitudes and behaviours usually mediate the HRM-performance relationship (Wright *et al.*, 2005; Clinton and Guest, 2007). As an intermediary, therefore, worker behaviours are influenced by the experience of human resource regulations and practices, and the resulting constructive change in behaviours leads to the enhancement of both individual and organizational performance. Hence:

H2: Social Exchange mediates the relationship between HR practices and perceived organizational performance within the health care sector.

Methodology

Context, Sample and Data Collection

Jordan is a small country of 9.5 million residents nestled between the West Bank on the left and Syria on the north, and Saudi Arabia on the right. Country has a history of refugees settling in Jordan dating back to 1948-49 when following war between Arabs and Israelis 400,000 Palestinians came to be settled in West Bank, the then part of Jordan. Around this time, additional half a million refugees also sought refuge predominantly on the east side of the Jordan River. As mentioned earlier, turbulent times that began in the 1940's have never left Jordan the trickling of refugees that became a torrent in the recent Syrian conflict with an influx of 1.2 million refugees which is having its mark on all walks of social and economic life of Jordan.

The targeted population of this study is all hospitals operating in Jordan. Due to the relatively small number of hospitals operating in the country (just below 150), we targeted the entire population. The unit of analysis is the organisation (hospitals) and the targeted respondents are the HR managers (given

their knowledge and experience in designing and implementing HR policies and practices in hospitals), and hospitals' managers (due to their knowledge in relation to the hospitals' overall performance). The reason behind using a separate questionnaire to assess organisational performance with a different group of respondents is to avoid potential Common Method Variance (CMV). For consistency, we have only included those hospitals where we could obtain replies from the two different respondents. Hence, out of the 150 existing hospitals, 85 completed questionnaires were useable for analysis. The questionnaires have been distributed in person amongst HR and hospital managers, which greatly helped in reaching a relatively high response rate.

Methods

A number of methods were adopted to examine the stated hypotheses. We first used factor analysis in order to test the correlation among the factors and group them together. We then assessed validity by evaluating the loadings of all factors, average variance extracted (AVE), and the reliability values for all measures. In addition, we also tested discriminant validity as detailed below. The descriptive analysis of measurement scales is also presented (Table 2) which includes the standard deviation, mean, correlations. For modelling the data, sequential regression analysis, and regression process was then performed.

Measures of HR practices

HR practices used in this study were all measured based on existing literature by using 5-point Likert scale (see, Huselid, 1995; Becker and Huselid, 1998; Ngo, et al. 1998; Pfeffer, 1998; Appelbaum et al., 2000; Siengthai and Bechter, 2001; Paul and Anantharaman, 2003; Minbaeva, 2005; Gould-Williams, 2007; Zhang et al. 2008; Jiang et al., 2012; Kehoe and Wright, 2013). Please (see Table 1) which lists all measuring items of HR practices.

Mediating Variable

Social exchange: This variable was measured by asking HR managers to make assessments reflected in the dimensions of trust, investment, duration, and financial/socioemotional. The views of

respondents were tested using a five-point Likert-type scales ("1 = strongly disagree" to "5 = strongly agree"). The social exchange scale is based the work of Shore et al. (2006) as shown in Table 1.

Outcome Variables

Perceived organisational performance: organisational performance scale consists of five items, which are (holding market share, growth in sales, profitability (after tax), staff productivity, and quality of medical products and services). A five-point scale is used to measure organisational performance, from "1 = Lowest performing" to "5 = Highest performing". Hospital managers were asked to rate the performance indicators of their hospitals in comparison to their rivals in a separate questionnaire, which only contains the performance measurement items, to avoid potential CMV effects. The scale used in this work was akin to that developed by Delaney and Huselid (1996), Yang and Lin (2009) and Singh, Darwish and Potocnik (2016) for measuring organizational performance.

Control Variable

There are a number of control variables often employed when investigating the relationship between HR practices and organizational performance. Two of the most important control variables are the size and the age of the firm (see, for example, Arthur, 1994; Huselid, 1995). Hospital age and size were both considered as control variables in this work due to their potential impacts on the HRM-performance relationship. Hospital age was measured by the number of years the hospital has been in operation; hospital size, on the other hand, is measured by the number of employees in each hospital (see Darwish et al. 2016).

Reliability and Validity

Reliability, convergent and discriminant validity of the research measures

Factor loadings, AVE, and reliability of the measures have been used to assess convergent validity (Hair et al., 2010). As recorded in Table 1, reliability coefficients range from .70 to .94, thus indicating that the reliability results have shown that all of the scales conform to the reliability criterion. Table 1 also records the standardised loadings for the measuring items; the results

indicate that all the values of the factor loading lie above the threshold value of 0.5 except few cases which were dropped to further enhance the measures conceptualisation. What is of interest is the significance of the results showing that all factor loadings of each variable indicator range from .60 to .91. The latter demonstrates a strong linkage between measures and their factors. Moreover, AVE values were in a range of .50 to .76. This demonstrates sufficient coverage of the research measures. Considered overall, these results indicate that convergent validity is established for the research measures.

In addition, discriminant validity was tested following the method proposed by Fornell and Larcker (1981). The results indicated that the squared roots of the AVE values are greater than any given correlation value of the HR practices, which is beneath the diagonal line as shown in Table 2. This is indicative of a level of acceptability of discriminant validity.

Table 1: Convergent validity

| Constructs | Items | Factor Loading | Cronbach Alpha | AVE |
|----------------------------------|--|----------------|----------------|-----|
| Recruitment and selection | | | .91 | .72 |
| | Hospital prefers promotion from within when filling vacant position | .894 | | |
| | Recruitment and selection process fit the candidates with the jobs | .881 | | |
| | Hiring people with creative thinking skills | .844 | | |
| | Hiring employee with specialised skills | .797 | | |
| Training | | | .70 | .53 |
| | Hospital provides continuous training for updating employee skills and knowledge | .777 | | |
| | Our hospital provide equal opportunities to all employees | .777 | | |
| | New employees familiarise with organisational norms and values (orientation) | .689 | | |
| | All training programmes are of high quality | .652 | | |
| Performance appraisals | | | .71 | .65 |
| | Employee evaluation criteria are clear | .887 | | |
| | Performance appraisal can impact the employee's commitment towards work positively | .848 | | |
| | Feedback is provided on a regular basis by the management | .792 | | |
| | Employees are satisfied with performance appraisal result | .696 | | |
| | Performance appraisal is result oriented | .328 | | |

| | | | | |
|--------------------------------------|--|------|-----|-----|
| Compensation and benefits | | | .79 | .65 |
| | Good job performance is noticed and rewarded | .913 | | |
| | Top management prefers participation in decision making with all levels of jobs | .903 | | |
| | Job performance is an important factor in determining the incentives and compensation of employees | .823 | | |
| | Compensation system is rewarded by innovative idea | .749 | | |
| | Hospital relates to compensation system with the level of knowledge and skill acquired by employees' knowledge and skill | .607 | | |
| Internal career opportunities | | | .94 | .76 |
| | Qualified employees in the job have the opportunity to be promoted to positions of greater pay and/or responsibility within the hospital | .911 | | |
| | Employees who desire promotion in this hospital have more than one potential position they could be promoted too | .909 | | |
| | Strong support for training in our area of work | .908 | | |
| | Our hospital provides support to keep up-to-date with developments in our field | .894 | | |
| | Employees have good opportunities of being promoted within this hospital | .885 | | |
| | The promotion process used by our hospital is fair for all employees | .835 | | |
| Social exchange | | | .72 | .64 |
| | Employees try to look out for the best interest of the hospital because they can rely on our hospital to take care of them | .882 | | |
| | Employees' relationship with our hospital is based on mutual trust | .878 | | |
| | There is a lot of give and take in the employee's relationship with the hospital | .831 | | |
| | Employees worry that all efforts on behalf of the hospital will never be rewarded | .698 | | |
| | Our hospital has made a significant investment in its employees | .689 | | |
| Organisational performance | | | .75 | .50 |
| | Quality of medical product and services | .818 | | |
| | Profitability (after tax) | .764 | | |
| | Holding market share | .672 | | |
| | Growth in sales | .650 | | |

| | | | | |
|--|--------------------|------|--|--|
| | Staff productivity | .620 | | |
|--|--------------------|------|--|--|

Note: All deleted items (not reported in this table) had factor loadings below .50, which is considered the minimum significance level in comparison with our sample size (Hair et al., 2010).

Table 2: Correlation matrix of variables

| Constructs | Mean | SD | Recruitment and Selection | Training | Performance Appraisal | Compensation and benefits | Internal career opportunity | Social exchange | OP | Log Firm Size | Log Firm age |
|-----------------------------|-------|-------|---------------------------|------------|-----------------------|---------------------------|-----------------------------|-----------------|-------|---------------|--------------|
| Recruitment and Selection | 3.60 | .801 | .84 | | | | | | | | |
| Training | 3.74 | .847 | .389** | .72 | | | | | | | |
| Performance Appraisal | 3.51 | 1.03 | -.015 | .053 | .80 | | | | | | |
| Compensation and Benefits | 3.70 | .726 | .269* | .454** | .149 | .80 | | | | | |
| Internal Career Opportunity | 2.68 | 1.01 | .282** | .374** | .141 | .127 | .87 | | | | |
| Social Exchange | 3.77 | .836 | .390** | .473** | .121 | .282** | .435** | 1 | | | |
| Organisational Performance | 2.86 | .963 | .440** | .517** | .086 | .273* | .609** | .557** | 1 | | |
| Log Firm Size | 2.965 | .856 | -.030 | .105 | -.136 | -.013 | .019 | .056 | .027 | 1 | |
| Log Firm Age | 2.916 | 1.014 | .114 | .096 | .258* | .270* | .030 | .042 | -.022 | -.179 | 1 |

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

Diagonal elements are square roots of average variance extracted

Analysis and Results

Hypotheses Testing

Table 2 presents descriptive statistics and the results of correlation matrix of variables under consideration. Hierarchical multiple regression analysis, also known as sequential regression, was then conducted for testing the proposed hypotheses. The latter is useful technique particularly when having control variables like the case of this work. As noted in Table 3, the values of R^2 and ΔR^2 indicate how good our model fits to the data. The value of R^2 for HR practices ($R^2 = .52$, $p < .001$) is of great significance as it means that HR practices account for 52% of the variation found in OP. What of great significance for this model is the F -ratio, which stands at 16.481. Further, the adjusted R^2 is .474, which indicates to what extent this model is generalizable and ideal reflection of the same, or near to the R^2 value. Notably, the difference between R^2 and that of the adjusted ΔR^2 is not significant (.517 - .474 = 0.043); the shrinkage is reflective of the notion that if the derivation of the model is from the entire population, it would be accountable for about 4% less variance in OP.

Next, when firm age and firm size controlled, changes of significance in R^2 in addition to what is explained by the controls ($R^2 = .001$, $F(2, 82) = .043$, $p > .05$) provide primary support for the first hypothesis in relation to the HR practices. This means that some of the predictors/HR practices presented in the second step have significant relationships with the outcome variable ($\Delta R^2 = .52$, F for $\Delta R^2 = 16.481$, $p < .001$). This includes recruitment and selection ($\beta = .211$; $t = 2.391$, $p < 0.05$), training ($\beta = .243$; $t = 2.457$, $p < 0.05$), and internal career opportunities ($\beta = .449$; $t = 5.114$, $p < .001$). With regard to the remainder of the practices of HR (performance appraisal, $\beta = .029$; $t = .343$, $p > 0.05$, compensation and benefits, $\beta = .075$; $t = .807$, $p > 0.05$), the results are not indicative of any distinctive contributions in terms of their relationship with OP as shown in Table 3.

Table 3: Hierarchical regression analysis for OP with HR practices

| Variables | Step One | Step Two |
|-----------|----------|----------|
|-----------|----------|----------|

| | Organizational Performance | | Organizational Performance | |
|-----------------------------|----------------------------|------|----------------------------|---------|
| <u>Control Variables</u> | <i>B</i> | Sig. | <i>t</i> | Sig. |
| Log Firm Size | .024 | .829 | -.195 | .846 |
| Log Firm Age | -.018 | .875 | -1.328 | .188 |
| <u>HR Practices</u> | | | | |
| Recruitment and Selection | | | 2.391 | .019* |
| Training | | | 2.457 | .016* |
| Performance Appraisal | | | .343 | .732 |
| Compensation and Benefits | | | .807 | .422 |
| Internal Career Opportunity | | | 5.114 | .000*** |
| R ² | .001(-.23) | | .517(.474) | |
| ΔR ² | .001 | | .516 | |
| F for ΔR ² | .43 | | 16.481*** | |
| Durbin-Watson | 2. 218 | | | |

* $p < .05$, ** $p < .01$, *** $p < .001$.

Testing for mediation effects

The next hypothesis tests the mediating effects of social exchange when exploring the link between HRM and performance. In the first step, it was found, as shown earlier, that three of the HR practices have direct effect on OP (training, internal career opportunity and recruitment and selection - see table 3).

To test the mediation effects, we ran a bootstrapping-based mediation test using the PROCESS macro in SPSS (Hayes, 2013). This technique is an extension of Sobel test (Sobel, 1982) and is suggested over alternative techniques (e.g., Baron & Kenny, 1986) as it does not undertake a normal sampling distribution of indirect effects; it was also proven to be more effective and statistically powerful than other techniques (MacKinnon, Lockwood, & Williams, 2004). For this task, five thousand replicates of the data set were chosen to estimate the coefficients and confidence intervals corrected to 95%. Results exposed that the relationship between recruitment and selection and OP became non-significant anymore after the inclusion of social exchange as a mediator (indirect effect = .213, SE = .083, LLCI: .086, ULCI: .407) which means that social exchange fully mediates the relationship between recruitment and selection and OP. PROCESS macro was executed again to test the impact of training and internal career opportunity on OP,

mediated by social exchange. The results remained significant (indirect effect = .190, SE = .060, LLCI: .086, ULCI: .279; indirect effect = .149, SE = .053, LLCI: .047, ULCI: .255) respectively, which means that social exchange has partial effect on OP (see Table 4).

Table 4: Bootstrapped indirect effects of HR practices on OP

| Paths & effects | Indirect effects | SE | LLCI | ULCI |
|--|-------------------------|-----------|-------------|-------------|
| Recruitment & Selection → Social Exchange → OP | .213 | .083 | .086 | .407 |
| Training → Social Exchange → OP | .190 | .055 | .060 | .279 |
| Internal Career Opportunity → Social Exchange → OP | .149 | .053 | .047 | .255 |

Sobel test

The Sobel test was then implemented to further examine the mediation influences and to assess the indirect paths significance from the independent variable to the dependent. It is recognized that Sobel test will provide empirical sustenance for the presence level of partial mediation. The social exchange mediator's test statistic for training, internal career opportunity and recruitment and selection equals (2.213, 2.161, and 2.086) respectively; they are showing statistical significance of (0.026, 0.030 and 0.036) for the same predictors. In terms of standard error, they are (0.056, 0.044 and 0.051). These results indicate that social exchange was statistically significant at $p < 0.05$. As a result, Sobel test further confirms the mediation results presented earlier.

Discussion and Conclusions

This study seeks to explore the mediating role of social exchange in the HRM-OP relationship, within the healthcare sector in Jordan. The results show that recruitment, training, and promoting from-within had a positive and significant relationship with organisational-level performance. Although hardly surprising, such findings provide added emphasis to the debate that the effect of HRM practices are not only to be found in Western countries, or organisations in the private sector; but rather, they are in

evidence across various labour markets and cultures (Gould-Williams and Mohamed 2010; Darwish et al. 2016). However, the result show that rewards and benefits were not significantly linked with organisational performance (also see similar results in the Middle Eastern context in the work of (Budwar & Mellahi, 2006; Al-Husan et al., 2009; Darwish et al., 2013; Aladwan et al., 2014). Although the government in Jordan determines the minimum wage for all employment sectors (Al-Husan & James, 2003), but reward systems are usually utilised as an incentive for staff who are competent in their jobs to remain working for the company, or to entice more skilled individuals during recruitment (Budwar & Mellahi, 2006, 2016; Al-Husan & James, 2003).

Likewise, the results show that performance appraisal was not linked with organisational performance (also see Abu-Doleh and Weir 2007; Aladwan et al., 2014; Darwish et al., 2016). Jordan has the same culture, language, religion and social values as many other Arab countries, and these factors all directly contribute to the way in which management operates within an organization. The culture in these countries is a product of religion, politics and history (Altarawneh, 2009). Many employees in Jordan do not view performance appraisals in a positive manner. As argued by Darwish et al. (2016), such findings could reveal institutional or cultural barriers to general acceptance of performance appraisal in the Middle East context

We next tested the indirect relationship between HRM and OP. In other words, how social exchange mediates the HR-performance link within the health care sector. The results showed these people management practices have an indirect positive impact on OP through social exchange. The latter, to some extent, has mediated the relation between HR practices and performance as proposed in our last hypothesis.

Our findings contribute to the exiting HR literature and have important implications for both, theory and practice. A significant theoretical aspect that has led the field of HR in the last era concerns the particular theoretical mechanism connecting HRM and organisational performance outcomes. This matter is called the 'black box' (see, for example, Bowen and Ostroff, 2004; Boselie et al., 2005). The current findings indicate that social exchange has potentially and partially unlocked the so-called 'black box' and offer insightful theoretical explanations to the HRM-performance nexus. In other words, this means that HR practices would most logically have an impact on social exchange aspects such as investment in the employees, the perception of the employees on getting benefit from their

performance at long-run, employees' relationship with their hospital, and the trust between employees and their hospital.

At a practical level, our findings help HR managers to understand the role of social exchange and draw more attention to the communication between employees and organisation by investing in employees as a planned way for developing OP within the Jordanian health sector. Specifically, it was found that investing in employees has positive impact on OP at the long run. Moreover, the current results showed that managers believe that ensuring clear communication and expectations between employees and the hospital would influence the hospital's performance positively. For instance, if both workers and the hospital know and expect their roles, this would increase the satisfaction level and lead to a more effective performance. In addition, employees' relationship with the hospital should be built based on trust between each other's. Notably, HR managers could attempt to clarify for employees the logic behind the rewarded and unrewarded work. In addition, current findings offer several critical inferences with probable impacts within healthcare set-ups, particularly on the hospital administrators. Correspondingly, it is imperative to establish an alignment between employees and organisational value in order to improve the workers' experience at work. Further, managers should make certain that optimal on-going training opportunities are made available to the employees with the aim to strengthen the employee's continued connect and association with the organisational culture. The framework of these training programmes as such should be underpinned by the missions and objectives of the organisation. Also, the training should be structured to impact on improvement and augmentation of the job-related skills with a concurrent career development. For instance, the current study shows that training can best be reflected by the orientation for the new workforces to familiarise them with hospital values and norms, training for updating employee competencies and knowledge and the training programmes should be in a high quality. Moreover, although performance appraisal was not related to OP, perhaps due to institutional or cultural barriers as mentioned earlier; however, hospitals could have clear employee evaluation criteria, establishing result oriented performance appraisal, and understanding the importance of performance appraisal on employees' commitment towards their work. Hence, it is recommended that the method of performance appraisal must be managed correctly to enhance the effectiveness of OP.

Despite the contributions of this work, we acknowledge a number of limitations; the cross-sectional study design impedes drawing any conclusions with respect to causality. Although it could be argued, based on present findings, that some of the HR practices should lead to enhanced OP, the cross-

sectional approach does not allow us to rule out the opportunity of reverse causation (Darwish et al. 2016). Hence, a longitudinal approach could be employed to enhance the reverse causation possibility and solve time-lag effects in relation to the HRM-OP link (Andersen et al., 2007). In addition, although the whole population of the health sector was targeted, this study is applied on one sector only; hence, the size of sample could be larger and more diverse. Further, although we have targeted two completely different group of respondents to avoid potential CMV when measuring organisational performance, it could be more effective if future work could gather objective performance data to reflect a more reliable measure of this particular variable. In our case, such data was hard to obtain and they are unavailable in numerous cases.

References

- Abu-Doleh, J., & Weir, D. (2007). Dimensions of performance appraisal systems in Jordanian private and public organizations. *The International Journal of Human Resource Management*, 18, 75-84.
- Agarwal, A., Garg, S., & Pareek, U. (2011). Strengthening Human Resource Practices in Healthcare in India: The Road Ahead. *Journal Indian Academy of Clinical Medicine*, 12, 39.
- Al-Husan, F. B., & James, P. (2003). Cultural control and multinationals: The case of privatized Jordanian companies. *International Journal of Human Resource Management*, 14, 1284-1295.
- Al-Husan, B.F., Brennan, R. and James, P. (2009), Transferring western HRM practices to developing countries: the case of a privatized utility in Jordan, *Personnel Review*, Vol. 38 No. 2, pp. 104-123.
- Aladwan, K., Bhanugopan, R. and Fish, A. (2014). Managing human resources in Jordanian organisations: challenges and prospects. *I J Islam Mid East Fin and Mgt*, 7,126-138.
- Altarawneh, I. (2009). Training and Development Evaluation in Jordanian Banking Organisations. *Research & Practice in Human Resource Management*, 17, 44-63.
- Appelbaum, E., Bailey, T., Berg, P. B., Kalleberg, A. L., & Bailey, T. A. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Cornell University Press.
- Arthur, J.B. (1994). Effects of human resource systems on manufacturing performance and turnover. *Academy of Management Journal*, 37, 670-687.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of management*, 17, 99-120.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51, 1173-1182.

- Becker, B. and Gerhart, B. (1996). The impact of human resource management on organisational performance: Progress and prospects. *Academy of management Journal*, 39, 779-801.
- Becker, B. E., Huselid, M. A., Becker, B. E., & Huselid, M. A. (1998). High performance work systems and firm performance: A synthesis of research and managerial implications. In *Research in personnel and human resource management*.
- Boselie, P. and Keegan, A. (2006). The lack of impact of dissensus inspired analysis on developments in the field of human resource management. *Journal of Management Studies*, 43, 1491-1511.
- Boselie, P., Dietz, G. and Boon, C. (2005). Commonalities and contradictions in HRM and performance research. *Human Resource Management Journal*, 15, 67-94.
- Bowen, D.E. and Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the “strength” of the HRM system. *Academy of management review*, 29(2), pp.203-221.
- Brewster, C. (2007). Comparative HRM: European views and perspectives. *The International Journal of Human Resource Management*, 18, 769-787.
- Budhwar, P., & Mellahi, K. (Eds.). (2016). *Handbook of human resource management in the Middle East*. Cheltenham: Edward Elgar.
- Budhwar, P.S. and Mellahi, K. eds. (2006). *Managing human resources in the Middle-East*. Routledge.
- Yang, C. C., & Lin, C. Y. Y. (2009). Does intellectual capital mediate the relationship between HRM and organizational performance? Perspective of a healthcare industry in Taiwan. *The International Journal of Human Resource Management*, 20, 1965-1984.
- Clinton, M. and Guest, D. (2007). *Human resource management and university performance: final report*. Leadership Foundation for Higher Education.
- Cropanzano, R. and Mitchell, M.S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, 31, 874-900.
- Darwish, T., Singh, S. and Wood, G. (2016). The impact of human resource practices on actual and perceived organizational performance in a Middle-Eastern emerging market – *Human Resource Management*, 55, 261-281.
- Darwish, T., Singh, S. and Mohamed, A.F. (2013). The role of strategic HR practices in organisational effectiveness: an empirical investigation in the country of Jordan. *The International Journal of Human Resource Management*, 24, 3343-3362.
- Darwish, T. K., Wood, G., Singh, S., & Singh, R. (2019). Human Resource Management in India: Performance and Complementarity. *European Management Review*. <https://doi.org/10.1111/emre.12367>
- Delaney, J.T. and Huselid, M.A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39, 949-969.
- Edgar, F. and Geare, A. (2005). HRM practice and employee attitudes: different measures– different results. *Personnel review*, 34, 534-549.

- Evans, W.R. and Davis, W.D. (2005). High-performance work systems and organizational performance: The mediating role of internal social structure. *Journal of management*, 31, 758-775.
- Fairchild, A.J. and MacKinnon, D.P., (2009). A general model for testing mediation and moderation effects. *Prevention Science*, 10(2), pp.87-99.
- Field, A. (2009). *Discovering Statistics Using SPSS*, 3th ed., Sage, London.
- Fornell, C., and Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error, *Journal of Marketing Research*, 18, 39-50.
- Fried, B.J. and Gates, M. (2008). Recruitment, selection, and retention. *Human Resources in Healthcare: Managing for Success*, 197-235.
- Gerhart, B. (2005). Human resources and business performance: Findings, unanswered questions, and an alternative approach. *Management Review*, 174-185.
- Gould-Williams, J. and Mohamed, R.B., (2010). A comparative study of the effects of 'best practice' HRM on worker outcomes in Malaysia and England local government. *The International Journal of Human Resource Management*, 21, 653-675.
- Gould-Williams, J. (2007). HR practices, organizational climate and employee outcomes: evaluating social exchange relationships in local government. *The International Journal of Human Resource Management*, 18, 1627-1647.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 25, 161-178.
- Guest, D.E. (2011). Human resource management and performance: still searching for some answers. *Human Resource Management Journal*, 21, 3-13.
- Haak-Saheem, W., Festing, M., & Darwish, T. K. (2017). International human resource management in the Arab Gulf States—an institutional perspective. *The International Journal of Human Resource Management*, 28, 2684-2712.
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2010). Multivariate data analysis: A global perspective (7th ed.). *Upper Saddle River, NJ*.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression based approach*. New York: Guilford Press.
- Hearnshaw, H., Baker, R., Cooper, A., Eccles, M. and Soper, J. (1996). The costs and benefits of asking patients for their opinions about general practice. *Family Practice*, 13, 52-58.
- Huselid, M.A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of management journal*, 38, 635-672.
- 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*, 55, 1264-1294.

Kehoe, R.R. and Wright, P.M., (2013). The impact of high-performance human resource practices on employees' attitudes and behaviors. *Journal of management*, 39, 366-391.

Kenny, D. A., Kashy, D. A., & Bolger, N. (1998). Data analysis in social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., 233– 265). New York: Oxford University Press.

Lansley. A. (2012). The National Health Service and Public Health Service in England: Secretary of State's Annual Report 2011/2012, London: HM Government.

Lepak, D.P., Liao, H., Chung, Y. and Harden, E.E. (2006). A conceptual review of human resource management systems in strategic human resource management research. *Research in personnel and human resources management*, 25, 217-271.

MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate behavioral research*, 39(1), 99-128.

Minbaeva, D.B. (2005). HRM practices and MNC knowledge transfer. *Personnel review*, 34, 125-144.

MOPIC. (2015). *Jordan response plan for Syrian crisis 2016-2018*. Amman, Jordan: The Ministry of Planning and International Cooperation.

Nelson, D. L., & Quick, J. C. (2008). *Understanding Organisational Behavior*. Thompson. 5th ed. South-Western College Pub.

Ngo, Hang-Yue, Daniel Turban, Chung-Ming Lau, and Siu-yun Lui. (1998). Human resource practices and firm performance of multinational corporations: Influences of country of origin. *Journal of International Human Resource Management*, 9, 632-652.

Paauwe, J., (2004). HRM and performance: *Achieving long-term viability*. Oxford University Press on Demand.

Paul, A.K. and Anantharaman, R.N. (2003). Impact of people management practices on organisational performance: analysis of a causal model. *International journal of human resource management*, 14, 1246-1266.

Pearl, J., (2012). The causal mediation formula—a guide to the assessment of pathways and mechanisms. *Prevention science*, 13(4), pp.426-436.

Pfeffer, J. (1998). Seven practices of successful organizations. Part 2: Invest in training, reduce status differences, don't keep secrets. *In Health Forum Journal*, 42, 55-57.

Purcell, J. and Hutchinson, S. (2007). Front-line managers as agents in the HRM-performance causal chain: theory, analysis and evidence. *Human Resource management journal*, 17, 3-20.

Richard, O.C. and Johnson, N.B. (2001). Strategic human resource management effectiveness and firm performance. *International Journal of Human Resource Management*, 12, 299-310.

Schuler, R. S., & Jackson, S. E. (1987). Organizational strategy and organizational level as determinants of human resource management practices. *Human Resource Planning*, 10, 125– 141.

Shore, L.M., Tetrick, L.E., Lynch, P. and Barksdale, K. (2006). Social and economic exchange:

Construct development and validation. *Journal of Applied Social Psychology*, 36, 837-867. Siengthai, S. and Bechter, C. (2001). Strategic human resource management and firm innovation. *Research and Practice in Human Resource Management*, 9, 35-57.

Singh, G. and Negi, K.S. (2013). Human Resource Management Practices in Large Hospitals of Dehradun, Uttarakhand. *Global Journal of Management and Business Studies*, 3, 555-560.

Singh, S., Darwish, T. K. and Potočník, K. (2016). Measuring Organizational Performance: A Case for Subjective Measures. *British Journal of Management*, 27, 214–224.

Singh, S., Darwish, T.K., Costa, A.C. and Anderson, N. (2012). Measuring HRM and organisational performance: ‘concepts, issues, and framework. *Management Decision*, 50, 651667.

Singh, S., Darwish, T. K., Wood, G., & Fattaah, P. M. A. (2020). *Institutions, Complementarity, Human Resource Management, and Performance*. In Darwish, T. K., & Fattaah, P. M. A. (Eds.). *Human Resource Management in an Emerging South Asian Economy: The Case of Brunei*. Routledge.

Singh, S., Wood, G., Darwish, T., Fleming, J. and Mohammed, A.F. (2019), Human resource management in multinational and domestic enterprises: A comparative institutional analysis in Southeast Asia, *Thunderbird International Business Review*, 61, 229-241.

Sinha, V. and Thaly, P. (2013). A review on changing trend of recruitment practice to enhance the quality of hiring in global organizations. *Management: Journal of Contemporary Management Issues*, 18, 141-156.

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13: 290–312.

Stephan, W.G. and Dorfman, P.W. (1989). Administrative and developmental functions in performance appraisals: Conflict or synergy?. *Basic and applied social psychology*, 10, 27-41.

Tsui, A. S., Pearce, J. L., Porter, L. W. and Tripoli, A. A. (1997). Alternative approaches to the employee-organization relationship: Does investment in employee payoff? *Academy of Management Journal*, 40, 1089-1121.

United Nations High Commissioner for Refugees. (2018). *Fact sheet about health access survey in Jordan*. Data available online <http://reporting.unhcr.org>. pdf, accessed 25 December 2018.

Wayne, S. J., Shore, L. M. and Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82-111.

Webster, E. and Wood, G., (2005). Human resource management practice and institutional constraints: The case of Mozambique. *Employee Relations*, 27, 369-385.

Whitener, E.M. (2001). Do “high commitment” human resource practices affect employee commitment? A cross-level analysis using hierarchical linear modeling. *Journal of management*, 27, 515-535.

Wilkes, R.C. and Bartley, S.J. (2007). A model for career planning in healthcare: Investing in a career development program will retain workers for growth. *Online Journal for Workforce Education and Development*, 2, 3.

Wood, G., Darwish, T. K., Alanezi, A. N., & Singh, S. (2019). Indigenization of staffing in

MNEs: The case of Saudi Arabia. *Asia Pacific Journal of Management*, <https://doi.org/10.1007/s10490-019-09661-5>.

Wright, P.M., Gardner, T.M., Moynihan, L.M. and Allen, M.R. (2005). The relationship between HR practices and firm performance: Examining causal order. *Personnel psychology*, 58, 409-446.

Yavas, U., Karatepe, O.M. and Babakus, E. (2014). Exploring the role of organizational and personal resources in explaining nurse performance in public hospitals in the Turkish Republic of Northern Cyprus. *Journal of Health Management*, 16, 1-12.

Youndt, M.A., Snell, S.A., Dean, J.W. and Lepak, D.P. (1996). Human resource management, manufacturing strategy, and firm performance. *Academy of management Journal*, 39, 836-866.

Zhang, Z., Wan, D. and Jia, M. (2008). Do high-performance human resource practices help corporate entrepreneurship? The mediating role of organizational citizenship behavior. *The Journal of High Technology Management Research*, 19, 128-138.

Zhu, Y., Warner, M. and Rowley, C. (2007). Human resource management with 'Asian' characteristics: a hybrid people-management system in East Asia. *The international journal of human resource management*, 18, 745-768.

Zottoli, M.A. and Wanous, J.P., (2001). Recruitment source research: Current status and future directions. *Human Resource Management Review*, 10, 353-38.

