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The Role of Strategic HR Practices in Organisational Effectiveness: An Empirical Investigation in the Country of Jordan

Tamer K Darwish, Satwinder Singh, and A. Fattaah Mohamed

Abstract

This study responds to the call of researchers, and is conducted in a non-Western context in the country of Jordan. The study contributes to our understanding of HR practices' impact on organisational effectiveness. The empirical analysis is based on theoretical prepositions that motivated employees through good HR practices stay longer and contribute positively to the overall financial performance of organisations. Rigorous statistical testing of the data on the population of financial firms shows that careful recruitment and selection, training, and internal career opportunities have a positive impact on reducing employee turnover. Training, in particular, is found to have a strong positive impact on financial performance measured by ROA and ROE. Furthermore, the findings provide strong support for the direct approach in SHRM-performance research that a group of best HR practices will continuously and directly generate superior performance. Despite such compelling arguments, however, we did not find evidence to support the notion that a bundle of HR practices impact better on financial performance than individual HR practices. It is possible that the optimal configuration may not only be contingent on national context, but due to the sector and the specific characteristics of the firm.

Keywords: HR practices; organisational effectiveness; SHRM-performance link; factor analysis; hierarchical regression.

1. Introduction

The field of strategic HRM (SHRM) has attracted a great deal of attention during the past decade owing to its potential impact on the functioning of the organisations. This attention reflects the growing importance of human capital in terms of gaining competitive advantage and thus enhancing organisational performance (OP). There is now an evolving belief that, if organisations wish to survive and compete in the present-day knowledge-based global economy, they have to acquire and develop world-class human resource competencies and the practices necessary for managing such (Pfeffer, 1994, 1998; Schuler and Jackson, 1999; Khandekar and Sharma, 2005; Moideenkutty, Al-Lamki and Rama Murthy, 2011). This belief has subsequently led to research

surrounding the link between SHRM and OP. A number of researchers who have conducted studies on this research stream have confirmed the positive impact of SHRM on OP (see, for example, Huselid, 1995; MacDuffie, 1995; Delery and Doty, 1996; Wright and Boswell, 2002; Moideenkutty *et al*., 2011; Razouk, 2011). However, there is also a group of researchers who have argued that the results of the SHRM-OP link are not encouraging, and that they are, in fact, ambiguous (Paauwe and Boselie, 2005; Guest, 1997; Paauwe, 2009). It is also being increasingly argued that additional studies in different contexts are required in order to obtain a broader view on the SHRM-OP link (see, for example, Gerhart, 2005; Guest, 2011; Ericksen and Dyer, 2005; Wright *et al*., 2005; Chand and Katou, 2007). Thus far, most studies in this arena have been carried out in the Western context. Accordingly, the present study aims to fill this apparent gap by conducting an in-depth analysis of HR practices in Jordan. The study assumes added importance in that it is conducted in the context of an all-important financial sector, and further accounts for the population of firms in this sector.

2. Theoretical Background and Hypotheses

This section first highlights the controversies surrounding the core issues concerning HR practices in the SHRM-OP link, as well as the measurement of OP itself. We then review the literature related to empirical work conducted in this research stream. Discussion here is divided under two sub-headings: Direct Relationship between SHRM and Performance, and Indirect Relationship between SHRM and Performance. It is considered that this scheme should help us to define the conceptual issues in a clearer manner and, in the process, highlighting the difficulties in the topic under investigation, thus leading to the derivation of testable hypotheses in a clearer manner.

2.1 The HR practices in the SHRM-OP link

The majority of the empirical work that has been conducted in the SHRM-Performance link has given attention to sixteen best practices, later consolidated into seven proposed by Pfeffer (1994, 1998). It is argued that the greater use of these practices (training and skill development, promotion from within, participation and employment, information-sharing, and others) would lead to increased productivity and profitability, and thereby assist organisations in achieving competitive advantage. Although this has been a popular classification, researchers have nevertheless also used different measures to

conduct SHRM-performance link studies, and there remains, as yet, no general consensus as to which combination of HR practices would enhance organisational performance (Wright and Gardner, 2003; Beltran-Martin *et al*., 2008; Paauwe, 2009; Guest, 1997, 2011; Singh *et al*., 2012). Even if researchers adopted the same practices, the underlying meaning of such may ultimately be different[1].

2.2 Organisational Performance

As is the case with the SHRM-OP link, as yet, there is no consensus amongst researchers on the measurement of OP; thus, it remains an imprecise and loosely defined construct—not only in the field of HR but in other fields as well (Rogers and Wright, 1998). For instance, Scott (1977, p. 63), in his review of the measures of organisational effectiveness, concludes that, 'after reviewing a good deal of the literature on organisational effectiveness and its determinants, I have reached the conclusion that this topic is one about which we know less and less'. Organisational performance can be defined in terms of HR-related outcomes (turnover, job satisfaction, commitment, and others) or organisational outcomes (productivity, quality, service, efficiencies, and others) (Dyer and Reeves, 1995). Moreover, it can also be defined in terms of financial indicators—Return on Assets (ROA) or Return on Equity (ROE) or capital market outcomes: market share, stock price, and growth. Notably, the term 'performance' is more specific than 'effectiveness', thus researchers usually refer to the term 'effectiveness' when they consider multiple outcomes of performance in their studies. Dyer and Reeves (1995) propose that HR strategies would most likely directly affect the HR-related outcomes, followed by organisational, financial and market outcomes. The logic behind this is that HR practices have their most direct impact on employee behaviours and attitudes which, for example, will subsequently result in a low turnover and high satisfaction, which in turn, has the capacity to generate high organisational and financial outcomes. Some authors (see, for example, Paauwe and Boselie, 2005; Paauwe, 2009) emphasise the use of the multi-dimensional concept of organisational performance which can more reflect the effectiveness of the companies.

[1] This has led to a plea by some authors for a specific theory on HRM in the first place (Paauwe and Boselie, 2005; Paauwe, 2009; Guest, 1997, 2011).

However, in the final analysis, it seems there is no firm agreement amongst researchers on this issue[2].

2.3 Empirical work on SHRM-Performance link

Since the emergence of the SHRM-Performance debate, two broad research streams have emerged to examine the relationship between strategic HRM and performance. The first one follows a direct approach between individual HR practices and/or a bundle of HR practices and performance (Chand and Katou, 2007). The second research stream has focused on the indirect relationship between individuals' HR practices and/or a bundle of HR practices and that of organisational performance (Wright and Gardner, 2003).

2.4 Direct relationship between SHRM and Performance

Studies on the direct SHRM-Performance link suggest that specific HR practices can ultimately enhance organisational performance (Pfeffer, 1994; MacDuffie, 1995; Huselid, 1995; Delaney and Huselid, 1996; Guest, 1997; Guest *et al*., 2003). These specific HR practices helping organisations to achieve better results have been termed as 'best practices' (Pfeffer, 1994), 'high-performance work system (HPWS)' (Way, 2002; Beltran-Martin, 2008; Guthrie *et al*., 2009), 'high-involvement practices' (Wood and Menezes, 2008) or 'high commitment practices' (Wood, 1996).

Researchers have also examined the impact of a bundle or system of HR practices on performance on the presumption that they are of the appropriate level of analysis to examine the impact of organisation-level performances (Delaney and Huselid, 1996). It is stated that a bundle (the internal or horizontal fit) of practices should generate greater effects owing to the whole being greater than the sum of its parts. For instance, in order to recruit and select good employees without having to train them, or to otherwise train and develop them without giving them the authority to make decisions, will produce few effects; implementing the three practices together, on the other hand, would produce greater effects (Wall and Wood, 2005). This is in contrast to individual HR practices which, in isolation, can produce only a limited amount of competitive advantage (Barney, 1995). In totality, however, there is again no agreement amongst

[2] In fact there is a call here as well for a better theory on performance itself from some scholars (Paauwe and Boselie, 2005; Guest, 2011).

researchers on what these practices should be, or even on the number of practices that can enhance organisational performance (Dyer and Revees, 1995; Wright and Gardner, 2003; Guest, 2011). The only agreement seems to be that such practices can lead to better performance for all types of organisations.

2.5 Indirect relationship between SHRM and Performance

There are a group of scholars who have argued that, whether individual or in a bundle, HR practices do not directly affect organisational performance (Katou and Budhwar, 2006). HR practices, at best, only impact various mediator variables which, in turn, will impact organisational performance. It was held that HR practices would most likely directly affect the HR-related outcomes such as employee turnover, followed by organisational, financial and market outcomes (Dyer and Reeves, 1995). The logic behind such a proportion is that HR practices have their most direct impact on behavioural outcomes which, for example, will subsequently result in a low turnover, which in turn, has the capacity to generate high organisational and financial outcomes. This can be termed as the 'black box' issue in the context of SHRM-Performance research. As a result, some researchers have begun to consider and search inside the 'black box' in an attempt to understand which HR practices could mostly impact organisational performance (see, for example, Huselid, 1995; Huselid *et al*., 1997; Way, 2002; Ahmed & Schroeder, 2003; Katou & Budhwar, 2006; Beltran-Martin, 2008; Wood and Menezes, 2008). Different mediating variables have been used by researchers to find an effective mechanism in which HRM can best impact on organisational performance such as employee turnover, employee productivity, employee satisfaction, knowledge management, and organisational culture. This addresses the call of some researchers (Dyer and Reeves, 1995; Wright and Gardner, 2003; Guest, 1997, 2011) for the exploration of new theoretical frameworks with different mediating variables. However, owing to there being no established method available to researchers to follow in order to determine which HR practices could (indirectly) impact organisational performance, little attention has thus far been directed towards exploring this aspect of research further in this direction (Wright and Gardner, 2003).

2.6 Hypotheses

The literature, as described above, may seem inconclusive, but it does point to certain directions and research questions, which can then be translated into testable hypotheses. These hypotheses also echo the general theme that emerges from the (glossy) HR literature of organisations—most of which now claim to view their employees as assets to be optimally used and not as costs to be minimised. The drivers leading to this optimal use are HR practices, which markedly help motivate and retain employees within an organisation. This results in reduced employee turnover and enhanced financial performance. Importantly, such themes from the literature review and the corporate world can be translated into the following four testable hypotheses:

H1: HR practices, i.e. recruitment and selection, training, internal career opportunities, performance appraisal, extrinsic incentives and reward, and intrinsic incentives and rewards, will all reduce employee turnover.

H2: HR practices, as stated in H1, will positively relate to financial performance. The positive financial performance can be captured in increased Return on Assets (ROA) and Return on Equity (ROE).

H3: Employee turnover will mediate the relationship between HR practices and financial performance.

H4: There will be a positive relationship between a bundle of HR practices and that of financial performance.

3. Data, Variables and Methods

3.1 Data and Sample

The target population of this study is the financial sector of Jordan. Jordan, a country of six million inhabitants, occupies a strategic location within the Middle East. Although the country gained its independence from Great Britain in 1946, British heritage continues to appear in the Jordanian educational, economic and legal systems, and the English language is still used widely in the business and academic fields (Al-Shaikh, 2003). In recent years, Jordan has opened its markets to world trade and investment, and is fast becoming a credible player in global commerce. Jordan's stock exchange has

become one of the fastest growing open avenues for foreign investors. This growing international integration is exposing the country to both regional and international competition and risks (Al-Shammari and Hussein, 2008), which have subsequently coaxed companies into becoming increasingly competitive; however, given its limited natural resources, the onus is falling on the services sector, which contributes to over 75% to the country's national income (World Fact Book, 2009). Importantly, the financial sector is one of the largest and best-developed service sectors in the country, and is currently witnessing a great deal of deregulation, which is attracting private investment from within the country as well as overseas. This sector had been largely insulated from the recent financial crisis owing to it's as-yet limited exposure to overseas capital markets. This, however, is changing fast, which became evident during the course of the research for this paper, when the authors spoke to a large number of HR managers responsible for financial issues.

A count of all the firms operating in the financial sector revealed a population of 104 firms in banking, insurance, real estate, brokerage and other financial services. These firms are all listed on Amman Stock Exchange (ASE). Thus, it was decided that all the firms in the population would be approached for the purpose of data collection. Notably, we required two types of data for the study: the first set comprising primary data related to the HRM operations of these firms; the second set related to financial operations. A detailed questionnaire was drafted with the objective to gather the primary data. Following almost all the work conducted in HRM-performance link, the targeted respondents in the present study were HR directors. All the 104 firms were contacted in person, of which 99 agreed to participate in the survey. Questionnaires were delivered by hand and collected in person. Cross-checks reveal data to be consistent and reliable. The matching financial data from profit and loss accounts and balance sheets of 99 firms were collected from the financial statements from ASE. Fortunately, government policies and regulations require all the listed companies to report the financial data in a consistent manner, which makes the inter-firm comparisons meaningful and unbiased.

3.2 Construction of HR practices

We were required to build scales to measure HR practices and employee turnover for the first half of the study. We developed these measures based on existing SHRM literature. The major part of our deliberation on HR practices has been developed based on the work of Delery and Doty (1996) and Pfeffer, (1998), with the former having identified a set of HR practices of strategic import. In turn, their work is notably based on the theoretical and empirical work of Miles and Snow (1984), Osterman (1987), Kerr and Slocum (1987), and Sonnenfeld and Peiperl (1988). In this study, the HR practices scale covered 5 areas of HRM: recruitment and selection; training; internal career opportunities; appraisals; and incentives and rewards. These common practices are most likely to be found in most organisations with a HR department or the basic HR functions. In addition, our measures on HR practices are different from most of the empirical work conducted in SHRM-Performance link (more details on our measures of HR practices can be found in Singh *et al*., 2012). For instance, prior work which has investigated such a relationship under terms such as 'high-performance work system', 'high-involvement practices' or 'high commitment practices' has mostly employed one single item to reflect each practice which in our opinion is not enough to measure the construct or the practices of HRM. Such measures of HR practices would make the practical implementation for HR directors and professionals a complex process. In the case of the present work, each measure on HR practices has been reflected by several items as a result of the factor analysis. Our results show that each set of items can make up a composite measure, and also indicate that they are correlated and each one can be measuring broad phenomena. Such measures can be easier to understand, making the practical implementation and the theoretical development of HRM issues less problematic.

The recruitment and selection comprised questions on formal and informal qualifications and personal characteristics that companies considered in appointing an employee to a middle-grade general management job. This question offered 12 items. The training questions related to the most applicable methods (of training) had 4 items; internal career opportunities—referred to as the main criteria of individual or group performance used in assessing cases for promotion—had 6 items. Importantly, all questions were measured on a Likert scale ranging from 1 'not applicable' to 5 'always applicable'. The performance appraisal question inquired into how frequently and by what methods appraisals were conducted, as well as how feedback was dispensed.

Finally, in the incentives and rewards section, three questions were asked: the first one queried how the salary differentials were explained to employees (4 items); the second asked questions on policies adopted in order to retain key staff (6 items); and the third questioned the benefits for an employee working for the company (4 items)? All of these questions and their items were measured on a Likert scale ranging from 1 'not important' to 5 'very important'. As noted above, more details of these measures on HR practices can be found in Singh *et al*., (2012).

3.3 Outcome variables

Employee Turnover: this is an important outcome variable. The inability to retain competent and skilled employees has been identified as a barrier to organisations' success (Holt, 1993). Most studies (e.g., Arthur, 1994; Huselid, 1995; Wood and De Menezes, 2008) conducted in the context of the HRM-Performance link have taken into consideration employee turnover as a vital outcome and an important indicator of organisational performance. Following the work of Arthur (1994), Huselid (1995), and Way (2002), employee turnover rate is measured through the use of a simple and direct question concerning the percentage of total employees that voluntarily leave the company each year.

3.4 Financial performance

Return on Assets (ROA) and Return on Equity (ROE) are two essential outcome variables that have been considered in the literature as indicators of firm financial performance (see, for example, Keats, 1988; Snell and Youndt, 1995; Delery and Doty, 1996). ROA has been used as a measure of efficiency and resource-exploitation in organisations (Keats, 1988; Snell and Youndt, 1995). ROE, in contrast, represents the eventual measure of the strength of any financial organisation (Earle and Mendelson, 1991). Retaining these variables for our study, data were obtained from the ASE database. The study also follows the cross-sectional design adopted by other authors (such as Arthur, 1994; MacDuffie, 1995; Delaney and Huselid, 1996; Bae and Lawler, 2000; Way, 2002; Wright *et al.,* 2005) wherein both predictors and outcome variables are measured on one occasion only. The measures of ROA and ROE for this study were the year-end measures for 2007.

3.5 Control variables

It is essential to include control variables in the study owing to their possible association with dependent variables. The literature review shows that firm size and age are commonly utilised control variables in the studies on HRM-Performance link, and can cause significant variations in the impacts of HRM practices on organisational performance. Firm size, in particular, has been found to be an important control variable (see, for example, Collins and Clark, 2003). In this study, we employ firm size and firm age as a control variable, measured respectively in natural logs (see also Kimberly, 1976) by the number of employees in each company, and the number of year the company has been in operation.

3.6 Methods

In order to test the listed hypotheses, the following approaches were adopted. First of all, exploratory factor analysis was conducted for all HRM practices in order to summarise and group together the data that was correlated. Additionally, in order to test the validity of the variables under consideration, confirmatory factor analysis was carried out. The descriptive analysis of data (Table 1 and Table 2) includes the mean, standard deviation, skewness and kurtosis, and zero-order correlations. Hierarchical regression analysis was adopted for modelling the data.

Before conducting the regression analysis, data was screened and tested for the multivariate assumptions. Outliers test was conducted and results revealed no extreme cases. Furthermore, the results of normality test revealed that the variables' skewness and kurtosis values lie within the acceptable limit of ranges, except for in relation to firm size and firm age, both of which were then transformed into logs. The relationships between variables were homoscedastic; they all met the normality assumption (Tabachnick and Fidell, 2007). Tests also revealed the absence of multicollinearity between the variables.

3.7 Exploratory factor analysis of HR practices

We performed principal component factor analysis with Varimax rotation for all the HR practices. The outcomes generated only one factor for each variable with the exception of incentives and rewards. Two factors were generated for this variable, which explained 41.65% of the total variance. The first factor is more commonly associated with extrinsic incentives and rewards, such as pay increase and valuable fringe benefits;

the second factor, in contrast, is more keenly associated with intrinsic incentives and rewards, such as friendly and supportive work-environment. This is consistent with the theoretical structure proposed by DeCenzo and Robbins (2005). The results confirm a robust and comprehensive structure of incentives and rewards; therefore, the first factor was labelled as 'extrinsic incentives and rewards', whilst the second factor is 'intrinsic incentives and rewards'.

3.8 Convergent and discriminant validity of HR practices

Confirmatory factor analysis was conducted, which provided three main indicators for assessing the convergent validity in the form of factor loadings, average variance extracted (AVE), and reliability of the construct (Hair *et al*., 2010). The results show that the factor loadings of each construct' indicators are significant, ranging from 0.56–0.90, thus demonstrating a strong association between constructs and their factors. Furthermore, the results indicate that AVE values were higher than the threshold value of 0.50, therefore demonstrating adequate convergence of the constructs. Finally, the results of the Cronbach's Alpha test indicate that the scales satisfy the reliability criterion, with values ranging from .61 to .93. Taken together, the results of factor loadings, AVE, and reliability tests provide sufficient confirmation of the convergent validity. Moreover, we compared the square roots of AVE values with the constructs' correlations from where the results showed that the squared roots of the AVE values were higher than any correlation of the HRM practices' constructs, indicating an acceptable level of discriminant validity (Fornell and Larcker, 1981).

4. Results

4.1 Descriptive results

Table 1 reports the means, standard deviations, skewness and kurtosis of all variables. Table 2 presents the results of zero-order correlations of all variables under consideration. It is instructive to note at the very outset that the relationship between HR practices is significant. Additionally, recruitment and selection, training, internal career opportunities and extrinsic incentives and rewards are also significantly related to ROA and ROE, and negatively with employee turnover. Performance appraisals, however, is negatively and significantly related to financial indicators. Expectedly, ROA and ROE are significantly correlated.

TABLES 1 AND 2 ABOUT HERE

4.2 Test of the first hypothesis

This first hypothesis concerns the direct relationship between HR practices and employee turnover. We conducted hierarchical multiple regression through multiple steps (Bae and Lawler, 2000). As shown in Table 3, the value of R^2 for this model is highly significant (R^2 =.73, F = 30.92, p < .001), which means that the predictors account for 73% of the variation in employee turnover rate. The adjusted R^2 is .71, which indicates how well the model generalises, and ideally reflects the same as, or close to, the value of R^2. The difference between R^2 and the adjusted R^2 is 2% where the shrinkage reflects the idea that, if the model was derived from the population rather than a sample, it would account for approximately 2% less variance in employee turnover. Moreover, Stein's equation was also used to cross-validate the model. The result of the adjusted R^2 Stein's method is .70, which is almost the same value given from the regression model. Accordingly, this value indicates that the cross-validity of this model is very good (Field, 2009). Regarding the independent errors assumption, the value of Durbin-Watson test is 1.8, thus indicating that the assumption is met for this model[3] (Crown, 1998; Field, 2009).

In the first step when only the firm size and firm age are included, the coefficient for size turns out to be significant and negative; this is a little bit counter-intuitive as, with the increase in the size of the firm, the turnover rate would also be expected to go up. This may be explained by the fact that, for financial firms, the incentives to stay with the firm may also go up *pari passu* with the increase in the size of the firm. With the firm expanding, it may like to retain its experienced staff through the use of greater incentives, which may partly explain the fall in the turnover rate. However, the level of significance reduces (from .010 to .197) when additional variables are introduced into the equation.

[3] The Durbin-Watson test is largely used in time-series data. However, the statistic of the test can be an important diagnostic indicator even when the researcher is not utilising time-series data. A statistically significant Durbin-Watson test when the researcher is testing a model based on cross-sectional data can be an indication of specification error such as omitted variables or incorrect functional form (Crown, 1998).

Notably, what becomes significant is the firm age, which is an interesting result: it says that the turnover rate is positive and significant for firms as they grow older. As the results show with firm size and firm age controlled, significant changes in R^2 over what the controls significantly explained (R^2 =.069, F = 3.57, p < .05) provide preliminary support for the first hypothesis. Some of the HR practices in the second step are significantly related to employee turnover (ΔR^2 = .66, F for ΔR^2 = 37.34, p < .001). More specifically, three of the HR practices are significantly related to employee turnover: recruitment and selection (b = -.19, p < .05), training (b = -.54, p < .001), and internal career opportunities (b = -.22, p < .05). These results support some of the relationships specified in the first hypothesis. Regarding the rest of the HR practices, the results indicate no unique contributions in their relationship with employee turnover.

TABLE 3 HERE

4.3 Test of the second hypothesis

In this hypothesis, we test the direct relationship between HR practices and financial performance, as represented by ROA and ROE. The results of the hierarchical regression for this hypothesis are shown in Table 4, where control variables are entered during the first step, and HR practices are entered in the second step. The value of R^2 for the ROA model is significant (R^2 =.43, F = 8.42, p < .001), which means the predictors account for 43% of the variation in ROA. In contrast, R^2 for ROE also shows significant level of explanation of the outcome (R^2 =.25, F = 3.83, p < .05), but not as much as the amount explained in the case of ROA.

Adjusted R^2 values for ROA and ROE are .38 and .19 respectively, and the difference between R^2 and the adjusted R^2 is .05 for ROA and .06 for ROE. Using Stein's equation, adjusted R^2 values for ROA and ROE are .36 and .16, respectively, which are very close to the normal R^2 values. Accordingly, these values indicate that the cross-validity of this model is good enough. Regarding the independent errors assumption, the Durbin-Watson test revealed no serious residuals correlation. The values for ROA and ROE are 2.2 and 2.1 respectively, which confirm that these models meet the independent errors assumption.

After controlling for firm size and firm age, the results show that HR practices explain the significant incremental level of variance beyond what the controls explained in ROA ($\Delta R^2 = .38$, F for ΔR^2 10.06, $p < .001$) and in ROE ($\Delta R^2 = .25$, F for $\Delta R^2 = 4.94$, $p < .001$). Consequently, we can conclude that the regression model results in significantly better predication of ROA than ROE, as can be clearly seen from the value of F statistics for ΔR^2, which is much higher in the case of ROA. Nonetheless, these results only provide weak support for the second hypothesis in terms of the number of the specified relationships with financial performance. Importantly, of the six HR practices, training is the only practice found to be positively related to ROA ($b = .52$, $p < .01$) and marginally positively related to ROE ($b = .34$, $p < .10$). Regarding the rest of the HR practices, the results reveal no significant effects on financial performance.

We next assessed the practical significance of the impact of training as the only HR practice affecting financial performance by calculating the consequence of a one-standard-deviation (SD) increase in training on the numerator of each dependent variable. Results indicated that one SD higher than the average on training is estimated to be 2.93 higher in regard to ROA. As for ROE, in contrast, firms one SD higher than the average on training are estimated to be 3.12 higher on ROE. Accordingly, considering that such models control on firm size and firm age, the impact of training on financial performance is practically, as well as statistically, significant.

TABLE 4 HERE

4.4 Test of the third hypothesis

In order to test this hypothesis, we first conducted the three-step analysis to investigate the mediation effects. Table 5 shows the results of employee turnover as the mediating variable in the relationship between HR practices and financial performance. Following the first step, training is the only variable to be involved in this test as it is the only practice positively affecting financial performance (ROA and ROE) of the companies. Testing for mediation for the rest of the HR practices violates the first condition which Baron and Kenny (1986) propose in this method. Regarding the second step, training has a positive impact on employee turnover when we test it as an outcome variable. Moving on to the third step, in addition to the main predicator, we added the mediator variable to the model. The inclusion of employee turnover leads to slight decrease of

the standardised *b* for training from .51 to .48 in its relation with ROA. In contrast, however, the inclusion of the mediator variable leads to a slight increase of the standardised *b* for training from .33 to .36 in its relation with ROE.

TABLE 5 HERE

Based on the results of the three-step method, we would conclude that employee turnover partially mediates the relationship between training and ROA as the standardised *b* has slightly decreased from .51 to .48 whilst remaining significant (Preacher and Hayes, 2004). On the other hand, however, it may be safe to conclude that there is no evidence of mediation in the relationship between training and ROE as the value of the standardised *b* increased from .33 to .36.

4.5 Test of the fourth hypothesis

This hypothesis concerns the impact of HR bundles on financial performance; in actual fact, the complementarily thesis is one of the core theoretical concerns in strategic HRM. Nonetheless, the measurement of this thesis is still a matter of debate amongst researchers (Guest, 2011). Markedly, it is commonly assumed that the impact of HR complementarities on organisational outcomes must be more than simply the additive sum of each practice's independent effects (Macky and Boxall, 2007). Instead, the concept of the complementarities of HR practices implies that such practices must have a synergistic or mutually reinforcing impact on performance (Huselid, 1995; MacDuffie, 1995; Macky and Boxall, 2007). Thus, researchers who have examined this argument consider the interaction effects (Venkatraman, 1989) amongst HR practices as the best indicator of HR-bundling. Further, Huselid (1995) argues that researchers should examine the interaction effects or the internal fit amongst the practices in order to prove the impact of the complementarily thesis.

FIGURE 1 HERE

We tested for interaction affects, and Table 6 shows the standardised regression coefficients for the interaction effects amongst HR practices. These results do not support this hypothesis; only one statistically significant interaction effect is found to impact both ROA and ROE. The interaction between internal career opportunities and

performance appraisals has a positive significant effect on ROA (b = .60, p > .05) and ROE (b = .64, p > .05). Regarding the rest of the interaction terms amongst HR practices, no significant interaction effects were found. These results failed to confirm that bundles of HR practices positively impact on performance to a greater degree than their individual effects.

TABLE 6 HERE

5. Discussion and Conclusions

This study responds to the calls of researchers, and is conducted within an emerging market setting. The study contributes to our understanding of HR practices' impact on organisational effectiveness (employee turnover rate, ROA, and ROE). A survey of literature revealed four testable hypotheses, i.e. HR practices will reduce employee turnover and will positively impact on financial performance; employee turnover mediates the relationship between HR practices and financial performance; and fourthly, there is a positive relationship between a bundle of HR practices and financial performance.

Working on the population of financial firms, the results provide moderate support for the positive effects of SHRM practices on employee turnover and financial performance of the companies; however, recruitment and selection, training, and internal career opportunities are found to have a strong positive impact on reducing employee turnover. These results indicate that, if an extensive formal training is provided to employees, fewer employees will leave the company each year. Likewise, companies recruiting internally and promoting from-within have a lower employee turnover rate; this result is logical in that employee turnover is a behavioural outcome of performance—unlike other market or financial indicators. Therefore, effective and well-planned HR practices should have a direct and positive impact on employees' behaviours. These findings are consistent with the theoretical work to date. HRM researchers have also established that HR practices could strongly lead to lower turnover rate (see, for example, Arthur, 1994; Huselid, 1995; Guthrie, 2001; Guest *et al*., 2003; Guthrie *et al*., 2009).

Of all the HR practices, training was found to be statistically highly significant in having a strong impact on financial performance—in particular on ROA—and a weak effect on ROE. This result is considered to be in-line with other studies which have also established a positive impact of training on performance (see, for example, Delaney and Huselid, 1996; Bae and Lawler, 2000; Guthrie *et al*., 2009; Moideenkutty *et al*., 2011; Razouk, 2011). This result is also considered to be thoroughly consistent with that which Way (2002) argues, whereby formal training system can provide and develop employees' skills, abilities and behaviours, and accordingly motivate them to apply these skills and behaviours in their work-related activities, which, in turn, may improve their output to enhance the performance of their companies. Our study differs from other empirical studies in that we find evidence of positive impact of only selected HR practices on OP, as opposed to most HR practices (H1 and H2) that other studies find.

The empirical results of this study do not support H3. The results do not show evidence of mediation of employee turnover in the relationship between SHRM and financial performance. Our findings provide support for the direct approach in SHRM-OP link rather than the indirect one. Importantly, universalistic researchers argue that a group of best HR practices will continuously and directly generate superior performance—regardless of the circumstances. The contingency theory researchers, in contrast, claim that the achievement of high-performance is contingent upon the achievement of fit between HRM practices and other aspects of the organisation; in other words, organisations usually go through different stages in their lifecycle, and HR practices should be contingent upon such stages.

Despite the compelling theoretical arguments of the complementarily thesis, the test on the internal fit of the HR practices did not support H4, i.e. a bundle of HR practices do positively impact organisational performance. Our results instead confirm that the individual effects of HR practices affect performance to a greater degree than a bundle or system of practices. Notably, of the 15 interaction effects, only one statistically significant interaction effect was found to impact both ROA and ROE. These results support what Panayotopoulou *et al*. (2003) state, who conclude that HRM-Performance research has failed to consistently support or establish the efficacy of fit. Importantly, some other researchers—in particular, Delery and Doty (1996), Macky and Boxall, (2007) and Ahmad and Schroeder (2003)—also report similar results. Some

researchers, however, do confirm low-to-modest evidence of the internal fit on organisational performance (e.g., Huselid, 1995; Guest *et al*., 2003). Although it may sound logical to state that components of an equation can solve an equation better than just one unknown, it's not as yet safe to say that HR practices, as a bundle, are related to financial performance of companies more than its individual parts. It is possible that the optimal configuration may not only be contingent on national context, but due to the sector and the specific characteristics of the firm. Conducting a firm-level analysis may help researchers to identify consistent and inconsistent HRM patterns in future work. In this regard, we hope that future studies will shed more light on this issue by theoretically articulating and empirically testing this hypothesis.

A survey of literature on strategic HRM practices and their impact on organisational performance revealed that empirical research results on this topic are, as yet, inconclusive. Because of this, several researchers have argued that it is difficult to make any generalised conclusions from the available results (Paauwe and Boselie, 2005; Paauwe, 2009; Guest, 2011), and that there is a need for further investigations from different contexts (Ericksen and Dyer, 2005; Wright *et al*., 2005; Chand and Katou, 2007). From the literature review, it is clear that more research is needed to clarify the SHRM-Performance link. Thus, the present study contributes by providing an insight into the impacts of value-added SHRM practices on employee turnover and financial performance in a Jordan. We would agree with researchers who argue that HR practices can ultimately enhance organisational performance. However, it is still uncertain which specific set of HR practices can consistently lead to better performance within different contexts. In the final analysis, it seems that, given a bundle of good HR practices, each practice might have varying impacts on OP by improving the retention rate and thereby improving their positive input of employees in the company. Of these HR practices, training stands out as an all-important one that, coupled with other good HR practices, will ultimately lead to improved financial performance, which is clearly the end-goal of all organisations. This is a major finding and insight which should be of interest to academic researchers, who can explore various aspects further in their research. Moreover, it is considered that the corporate world should also find the results useful. Training is broadly classified as either firm-specific or general-purpose, whereas general purpose skills (such as the operation of PCs, for example) are widely applicable, and firm-specific skills (a particular way of record keeping, for instance)

are unique to the firm and may also be costly to impart. Accordingly, firms are often hesitant to invest in expensive training programmes if they are not certain of employees' intentions, for when employees leave, those trained in general purpose skills become useful to rivals, and those trained in firm-specific skills result in a loss of training costs. However, the results in this study show that firms stand to gain substantially by spending funds and efforts on training its employees. This can come about by creating an atmosphere and history of trust with the employees.

Despite the contributions of the current study, we acknowledge some limitations. The study is conducted with regard to one sector (financial) and, although the population of firms was covered, the number could have been higher. Future researchers can include additional firms from the services sector. Furthermore, the study adopts a cross-sectional design: although we have argued that strategic HRM practices should lead to stronger organisational performance, our cross-sectional design does not allow us to rule out the possibility of reverse causation (Wright *et al*., 2001). With this in mind, a longitudinal design would help to strengthen the reverse causation possibility and to accordingly overcome time-lag effects of SHRM on performance (Anderson *et al*., 2007).

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Table 1: Basic statistics on variables

Variables	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Std. Error			Statistic	Std. Error	Statistic	Std. Error
Recruitment and Selection	41.14	.95	9.49	90.18	-.10	.24	-.89	.48
Training	13.25	.33	3.32	11.02	-.045	.24	-1.41	.48
Internal Career opportunities	23.19	.44	4.43	19.62	-.27	.24	-.75	.48
Performance appraisals	6.18	.13	1.37	1.88	.075	.24	-.21	.48
Extrinsic Incentives and Rewards	27.95	.56	5.58	31.16	-1.00	.24	-1.06	.48
Intrinsic Incentives and Rewards	14.03	.29	2.93	8.60	-.09	.24	.03	.48
Employee Turnover	3.48	.17	1.69	2.88	.25	.24	-1.20	.48
ROA	4.02	.57	5.69	32.42	-.04	.24	.09	.48
ROE	7.54	.93	9.29	86.33	-.40	.24	.90	.48
Firm Size	3.39	.19	1.94	3.78	.09	.24	-.38	.48
Firm Age	2.55	.09	.952	.90	-.35	.24	-1.08	.48

Table 2: Zero-order correlations

Variables	1	2	3	4	5	6	7	8	9	10	11
1.Recruitment and Selection	1										
2. Training	.73**	1									
3.Internal Career Opportunity	.67**	.67**	1								
4.Performance Appraisals	-.53**	-.52**	-.52**	1							
5. Extrinsic Incentives and Rewards	.63**	.65**	.67**	-.60**	1						
6. Intrinsic Incentives and Reward	.32**	.27**	.32**	-.15	.02	1					
7. Employee Turnover	-.71**	-.78**	-.68**	.40**	-.65**	-.27**	1				
8. ROA	.29**	.52**	.33**	-.31**	.34**	.10	-.43**	1			
9. ROE	.28**	.44**	.36**	-.33**	.34**	.07	-.35**	.76**	1		
10. Log Firm Size	.33**	.20*	.27**	-.16	.30**	.09	-.22*	-.21*	.07	1	
11. Log Firm Age	.26**	.14	.17	-.32**	.27**	-.08	-.05	-.13	.08	.66**	1

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

Table: 3 Hierarchical regression analysis for employee turnover

Variables	*Step 1* Employee Turnover		*Step 2* Employee Turnover	
	B	Sig.	*β*	Sig.
Controls:				
Log. Firms Size	-.34	.010*	-.10	.197
Log. Firm Age	.17	.181	.22	.007**
HR Practices				
Recruitment and Selection			-.19	.034*
Training			-.53	.000***
Internal Career Opportunities			-.22	.039*
Performance Appraisals			-.01	.853
Extrinsic Incentives and Rewards			.004	.971
Intrinsic Incentives and Rewards			.004	.958
R^2	.069 (.05)		.73 (.71)	
ΔR^2	.069		.66	
F for ΔR^2	3.57*		37.34***	
Durbin-Watson	1.81			

Notes: N = 99. Standardised regression coefficients are shown.
Adjusted R^2 is in parentheses † $p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

Table 4: Hierarchical regression analysis for ROA and ROE

Variables	*Step 1* ROA		*Step 2* ROA		*Step1* ROE		*Step 2* ROE	
	B	Sig.	*β*	Sig.	*B*	Sig.	*β*	Sig.
Controls:								
Log. Firms Size	-.21	.112	-.34	.003**	.03	.782	-.05	.701
Log. Firm Age	.005	.970	-.08	.457	.59	.666	-.02	.861
HR Practices								
Recruitment and Selection			-.16	.225			-.19	.202
Training			.51	.001**			.33	.050†
Internal Career Opportunities			-.04	.795			.04	.797
Performance Appraisals			-.16	.221			-.15	.292
Extrinsic Incentives and Rewards			.19	.227			.18	.294
Intrinsic Incentives and Rewards			.01	.849			-.01	.898
R^2	.05 (.03)		.43 (.38)		.008 (-.013)		.254 (.19)	
ΔR^2	.05		.38		.008		.25	
F for ΔR^2			10.06***				4.94***	
Durbin-Watson	2.18				2.11			

Notes: N = 99. Standardised regression coefficients are shown.

Adjusted R^2 is in parentheses † $p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

Table 5: Mediation analysis for employee turnover

Variables	ROA		ROE	
	B	Sig.	*β*	Sig.
Training	.51	.001**	.33	.050†
Training (after the inclusion of employee turnover into the model as predictor)	.48	.006**	.36	.067†

Notes: N = 99. Standardised regression coefficients are shown. † $p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

Table 6: Stepwise Hierarchical regression analysis for ROA and ROE

Variables	*Step 1* ROA		*Step 2* ROA		*Step1* ROE		*Step 2* ROE	
	β	Sig.	*β*	Sig.	*B*	Sig.	*β*	Sig.
Controls:								
Log firm size	-.21	.112	-.21	.194	.038	.782	.003	.984
Log firm age	.005	.970	0.12	.937	.059	.666	.07	.619
	VIF							
HR Practices								
Recruitment and Selection × Training	6.44		-.16	.519			-.21	.412
Recruitment and Selection × Internal Career Opportunities	7.28		.06	.818			.14	.589
Recruitment and Selection × Performance Appraisals	8.03		-.28	.332			-.18	.522
Recruitment and Selection × Extrinsic Incentives and Rewards	9.06		.15	.606			.20	.494
Recruitment and Selection × Intrinsic Incentives and Rewards	4.85		.33	.137			.31	.160
Training × Internal Career Opportunities	6.74		.21	.419			.19	.471
Training × Performance Appraisals	9.26		.03	.905			-.28	.357
Training × Extrinsic Incentives and Rewards	5.03		-.34	.137			-.30	.183
Training × Intrinsic Incentives and Rewards	6.45		-.38	.137			-.38	.127
Internal Career Opportunities × Performance Appraisals	8.24		.60	.040*			.64	.030*
Internal Career Opportunities × Extrinsic Incentives and Rewards	4.99		.06	.776			.05	.801
Internal Career Opportunities × Intrinsic Incentives and Rewards	3.50		.05	.791			-.11	.553
Performance Appraisals × Extrinsic Incentives and Rewards	8.38		-.35	.228			-.20	.476
Performance Appraisals × Intrinsic Incentives and Rewards	5.36		-.21	.354			-.37	.112
Extrinsic Incentives and Rewards × Intrinsic Incentives and Rewards	2.80		.06	.683			.18	.287

Notes: N = 99. Standardised regression coefficients are shown. † $p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$