

HRM practices and organizational performance in the UAE banking sector

The mediating role of organizational innovation

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Abstract

Purpose – The purpose of this paper is to examine the impact of human resource management (HRM) practices on organizational performance in the banking sector in the United Arab Emirates (UAE), to test the mediating impact of organizational innovation on the HRM-organizational performance relationship, and to test HRM practices as mediator of the relationship between innovation strategy and organizational innovation.

Design/methodology/approach – Data were collected from 168 managers working in UAE banks. A structured questionnaire containing standard scales of HRM practices, innovation strategy, organizational innovation, organizational performance, and some demographic variables was used. The analytical method used to empirically test the hypotheses proposed is the structural equation modeling technique using PLS. The two steps are: the assessment of the outer model and the assessment of the inner model. Moreover, a bootstrapping method is employed in order to test indirect effects.

Findings – Results found that organizational innovation fully mediates HRM-organizational performance link. Moreover, with the existence of innovation strategy, HRM mediates the relationship between innovation strategy and organizational innovation.

Research limitations/implications – The limitations of common method bias and cross-sectional data are discussed in light of implications for future research. Nevertheless, the results provide new insights on the influence of HRM on organization innovation and performance in a non-Western context of the UAE by testing the role of some mediators in influencing the relationship between HRM and performance.

Practical implications – In general, enhancing the effectiveness of HRM can result in higher level of performance and innovation. In particular, the choice of an innovation strategy implies the use of an effective incentive-based compensation, training and development, recruitment and selection and performance appraisal.

Originality/value – This study is considered the first study to examine the mediating role of organizational innovation on the relationship between HRM and organizational performance in the Middle East. Also, the study is the first study to test the role of HRM as a mediator for the innovation strategy-innovation performance relationship in a non-Western context.

Keywords Innovation, Organizational performance, UAE, HRM

Paper type Research paper



Introduction

Human resource management (HRM) has become an increasingly important topic for research. In particular, a burgeoning body of HRM research has shown that the use of a HRM system intended to enhance employees' knowledge, abilities, and skills is associated with positive outcomes such as lower turnover (Batt, 2002), productivity increase (MacDuffie, 1995), and financial performance gains (Huselid, 1995). In general, empirical work on the HRM-performance link has demonstrated that HR practices are related to a set of organizational performance measures (Wright and Kehoe, 2008).

Despite the numerous studies which have been carried out on the relationship between HRM and organizational performance, considerable issues remain regarding the intermediary variables that influence this link. Some studies have tried to look inside this link by identifying the possible mechanisms through which HRM practices influence organizational performance (Katou and Budhwar, 2010; Macky and Boxall, 2008; Martin-Tapia *et al.*, 2009). For instance, Katou and Budhwar (2010) conducted empirical research to investigate the mediating effect of a set of variables (i.e. employee skills, attitudes, and behaviors) on the HRM-performance relationship. Macky and Boxall (2008) focussed their empirical work on "employee attitudes" as a mediating variable influencing HRM and performance. In particular, they aim to test the mediating effect of the attitudinal variables of job satisfaction, trust in management, and organizational commitment on the HRM-performance link. These and other studies recognize the relevance of employee-related variables as intermediaries, such as employees' ability and motivation, employees' skills and behavior, and organizational commitment. Previous empirical studies found support for the intermediary effect of these variables on the HRM-performance link. Hence, considering additional intermediary variables simultaneously provides a broader and more complete picture of the relationship between HRM and organizational performance.

This paper contributes to the extant literature in several ways. First, with an attempt to unlock the "black box" of the HRM on organizational performance relationship, we propose that the positive effects of HR practices on organizational performance are mediated by organizational innovation. A critical review on previous research conducted by Jiang *et al.* (2013) about the mediating mechanisms in the HRM-performance relationship found only a few studies which examined innovation as a mediator (e.g. Jiménez-Jiménez and Sanz-Valle, 2008; Zhou *et al.*, 2013). This calls for more examination of the possible impact of organizational innovation as a mechanism through which HRM influences performance. Second, the current study also includes innovation strategy as an important factor contributing to organizational innovation through HRM practices. In particular, we argue that the adoption of innovation strategy will more likely lead to organizational innovation by applying an effective HRM. Finally, most of the studies examining the relationship between HRM and organizational performance have been conducted in Western context. It is argued that additional studies are required in different non-Western contexts in order to get a broader view of the relationship between HRM and organizational performance (Guest, 2011). Therefore, it would be vital to understand whether Western models could be applied in other contexts, particularly in the Gulf countries. To fill this gap and further examine the proposed model of HRM and organizational performance relationship, this study was conducted in the United Arab Emirates (UAE) banking sector.

Therefore, this study contributes to the understanding of the role HRM practices play in organizational innovation at the UAE banking sector. By utilizing the "black box" concept, this study examines "Organizational Innovation" as a mediator for the HRM and

organizational performance link, and its role in adopting a novel strategy for promoting organizational innovation, which will ultimately lead to performance improvements.

The next section reviews the relevant literature and develops the study hypotheses. This is followed by a section on research methods. Then, the analysis section is presented followed by discussion of results and finally, the study conclusions and limitations.

Literature review and hypotheses development

The relationship between HRM and organizational performance

Extensive previous research has been concerned with the impact of HR strategies on organizational performance (Boxall *et al.*, 2007; Fu *et al.*, 2015). The resource-based view (RBV) of the firm provides some justification of the importance of human resources as a source of sustainable competitive advantage (Wright *et al.*, 2001). In particular, the RBV emphasizes the role of HR practices in influencing the human capital within organizations in a way which may lead to organizational success. Building upon the RBV, the nature of the relationship between HRM and organizational performance has become the focus of the entire subject area (Boselie *et al.*, 2005).

The previous research has shown the positive influence of HRM on different indicators of organizational performance (Becker and Huselid, 1999; Huselid, 1995; Darwish and Singh 2013). In particular, HRM was found to positively influence financial performance (Huselid, 1995; Shih *et al.*, 2006), employee productivity and satisfaction (Bartel, 2004; Huselid, 1995), turnover rate (Arthur, 1994; Batt, 2002), and absence rate (Hoque, 1999; Wood and De Menezes, 1998). For example, Arthur (1994) studied the US-based steel companies in order to investigate the relationship between HRM and productivity. The results showed the positive influence of HRM systems on organizational performance. Moreover, Way (2002) verified the positive relationship between HRM practices and firm performance by small US enterprises. Datta *et al.* (2005) conducted a study that revealed the relationship between high-performance HRM practices and firm performance, particularly with employee productivity. In summary, extensive literature was found which examines the HRM and performance link. However, only a few studies were found which examined this relationship in the banking sector (e.g. Bartel, 2004; Darwish and Singh, 2013).

With respect to an examination of the HRM-Performance link in the Gulf countries in particular, only a few studies were found. For example, MoideenKutty *et al.* (2011) examined the link between high-performance HRM practices and organizational performance in Oman, one of the Gulf countries. Results show a positive link of HRM with both objective and subjective measures of performance. Through this summary, the relationship between HRM practices and organizational performance has become more obvious, which necessitates further investigation, especially within the UAE context where studies are scarce.

Based on the above discussion, the following is hypothesized:

- H1. There is a positive relationship between HRM practices (i.e. recruitment and selection, training and development, compensation/incentives, performance appraisal) and organizational performance.

The relationship between HRM and organizational innovation

Research in innovation has been extensive in the past two decades due to the important role innovation plays in today's competitive market (Zhou *et al.*, 2013; Park and Kim, 2013). Ries and Trout (1981) perceive innovation as a form of learning. Other scholars

suggest innovation is a mean through which organizations respond to a variety of environmental changes (Peters and Waterman, 1982). Innovation refers to the intentional introduction and application of new ideas, processes, products, and procedures that will benefit the job, the work team, or the organization (West *et al.*, 2004). Organizational innovation reflects the company's ability to engage in innovation (Hult *et al.*, 2004) state that innovation refers to the process of providing new and enriched competencies. Lumpkin and Dess (1996) argue that the concept of innovative organizations supports new ideas, provides adequate resources with new ideas, and transforms the new ideas into new products, new services, or new management means.

Previous literature distinguishes between different types of innovation (Hilman and Kaliappen, 2015). Avermaete *et al.* (2003) identify four types of innovation, which are product, process, organizational, and market innovation. These types are interrelated. Both product and process innovation are considered as technological innovation as they represent the adaption of new product/service or the implementation of new technology. Organizational innovation focusses on basic activities in the organization such as administration, management, sales, and others. Market innovation, on the other hand, reflects the ability to utilize and take advantage of territorial areas and segments in the market (Avermaete *et al.*, 2003). This study focusses attention on both product and process innovation in the so-called organizational innovation. Process innovation emphasizes the creation of improvements in techniques, process, systems, and procedure (Wan *et al.*, 2005; Zhuang *et al.*, 1999). Product innovation, on the other hand, could be in a form of new products or service (Wang and Ahmed, 2004). It aims at reducing cost and enhancing the quality, ultimately leading to high performance (Qin, 2007). Both types of innovation are important for the success of organizations.

Previous HRM research found support for the closed link between HRM and organizational innovation (e.g. Jiang *et al.*, 2012; Prieto and Pérez-Santana, 2014). In particular, some research focussed on the role human resources play to support innovation. Hayton (2005), for example, observed that companies should attract, retain, and develop talented employees in order to develop an environment that facilitates innovation. In particular, human resources are perceived as important capital with a set of traits, expertise, skills, and motivation to innovate (Wright *et al.*, 1994; Zhou *et al.*, 2013). Consequently, effective HRM practices can promote the desired individual attributes needed to promote innovation (Cooke and Saini, 2010; Diaz-Fernandez *et al.*, 2015).

A number of scholars have studied the relationship between HRM practices and organizational innovation (Fu *et al.*, 2015). Laursen and Foss (2003), for example, found that most HRM practices adopted by manufacturing companies led to innovative performance. Moreover, an empirical study by Tsai (2006) in the semiconductor design industry showed that HR practices are positively related to innovation. Gloet and Terziovski (2004) found that HRM activities can directly influence product and process innovation. Ling and Nasurdin (2010) in their study on Malaysian manufacturing firms found that only two HR practices, which are training and performance appraisal, are significantly and positively related to organizational innovation. A recent study by Zhou *et al.* (2013) which investigated the impact of different HRM systems on firm innovation performance found a positive link.

Taking each practice separately, previous research showed some support for the link of HR practices to organizational innovation. For example, the use of comprehensive recruitment and selection process can play a major role in creating a talented pool of people who are needed for organizational innovation (Jiang *et al.*, 2012).

Raghuram and Arvey found support for a consistency between external sources of recruitment and innovation.

With regard to the degree of employees' training, there is an agreement that appropriate training aimed at enhancing their skills and knowledge is critical for facilitating organizational innovation (Lau and Ngo, 2004). Some studies proposed a broad application of training in order to develop the skills and knowledge of employees (Schuler and Jackson, 1987). Others suggested that limited training programs are required (Miles and Snow, 1984) as talented people can be brought from the external market when needed. In general, there has been empirical support for the link between providing extensive training programs and organizational innovation (Mark and Akhtar, 2003; Lu *et al.*, 2015).

With respect to performance appraisal, results of previous research showed a connection between performance evaluation and an increased level of creativity (Lu *et al.*, 2015). Schuler and Jackson (1987) argued that performance appraisal that is more oriented toward long-term and group-based achievements will encourage innovation. Moreover, some empirical studies regard results oriented (Miles and Snow, 1984) and performance oriented (Mumford *et al.*, 2000) appraisal as important for becoming an innovative organization. Adding to this, the feedback provided for employees can enhance the intrinsic motivation for innovative ideas.

The reward system can motivate employees to become innovative as well. Several studies have emphasized the use of pay for performance and profit sharing in order to improve organizational performance. While an effective incentive system can be used in order to motivate employees at work, it can also be an effective tool for attracting and retaining innovative people to work at the company. Cano and Cano (2006) found that the most effective HRM practices that can stimulate innovation is providing employees with financial rewards as well as recognizing their achieved performance. In general, providing appropriate rewards which are linked to new ideas provided and applied by employees may encourage employee innovativeness.

Finally, inconsistencies were found in the literature with regard to the importance of employment security for promoting organizational performance. While some scholars argue for temporary employment in order to ensure innovativeness (Miles and Snow, 1984; Sheppeck and Militello, 2000), others emphasize the need for employment security in order to get highly committed employees which will result in positive outcomes, particularly innovation (Schuler and Jackson, 1987; Diaz-Fernandez *et al.*, 2015). In a similar vein, Jiménez-Jiménez and Sanz-Valle (2008) conclude that companies which provide its employees with employment security can generate talented employees who are self-confident, risk adoption-ready, and who are involved in innovative practices. Overall, while there is no guarantee that all employees will become innovative, the provision of employment security can create a sense of commitment by employees. Consequently, employees will be more willing to engage in innovative activities. Therefore, we propose the following hypothesis:

- H2.* There is a positive relationship between HRM practices (i.e. recruitment and selection, training and development, compensation/incentives, performance appraisal) and organizational innovation.

The relationship between organizational innovation and organizational performance

There has been broad consensus that organizational innovation contributes to organizational performance (Han *et al.*, 1998; Jiang *et al.*, 2012; Lu *et al.*, 2015). Scholars have identified many benefits for innovation to companies like the changes in

organizational technology, innovations in managerial methods and processes, and product updates (Lu *et al.*, 2015).

Previous research that investigated the link between organizational innovation and organizational performance have shown mixed results (Rosenbusch *et al.*, 2011) and previous reviews of the innovation performance link describe the evidence as mixed and contradictory (Li and Atuahene-Gima, 2001). Despite this fact, various scholars have argued that innovation is an important factor that will benefit the creation of competitive advantage (Dean and Bowen, 1994; Powell, 1995). Others have shown that a primary reason for the positive effect of innovation on firm performance is that firms innovate to obtain the advantages derived from being first and from achieving better performance (Damanpour *et al.*, 2009). Cheng *et al.* (2010), on the other hand, found that product innovation has greater impact on organizational performance. Ho's (2011) study discovered that while administration innovation is the most important element influencing an organization's financial performance, market innovation is the key component in an organization's market performance. Finally, a study conducted on Malaysian hotels (Hilman and Kaliappen, 2015) found that both process and service innovation are positively linked with performance. In summary, the discussion of previous research conducted on organizational innovation and performance link provided good support. Accordingly, we put forward the following hypothesis:

H3. There is a positive relationship between organizational innovation and organizational performance.

In an attempt to unlock the "black box" of the HRM and performance link, previous research has looked for several intermediary variables in this relationship. Jiang *et al.* (2013) provided a review of the strategic HRM literature summarizing the mediating mechanisms in the HR-performance relationship (Jiang *et al.*, 2013, pp. 1456-1459). In their review, they were able to identify several mediators like job satisfaction (Barling *et al.*, 2003; Gould-Williams, 2003; Macky and Boxall, 2007), quit rates (Allen *et al.*, 2013; Batt, 2002; Batt and Colvin, 2011), and human capital (Hsu *et al.*, 2007; Takeuchi *et al.*, 2007). This overview highlights the important role mediating variables play in linking HRM to organizational performance.

Organizational innovation is considered as one of the intermediary variables which were previously examined (e.g. Zhou *et al.*, 2013). However, only few studies were found which investigated this relationship. One of the few studies is that of Jiménez-Jiménez and Sanz-Valle (2008) who argued that innovation can serve as an intermediary variable in the HRM-performance link. They found in their study that innovation contributes positively to business performance and that HRM enhances innovation. Moreover, Lu *et al.* (2015) show that the impact of high-performance HRM and organizational performance is partially mediated by innovation. To conclude, research that considers organizational innovation as a mediating variable is still inadequate.

According to the previous discussion, we hypothesize the following:

H4. Organizational innovation mediates the relationship between HRM practices (i.e. recruitment and selection, training and development, compensation/incentives, performance appraisal) and organizational performance.

The impact of the adoption of innovation strategy on promoting organizational innovation
Previous literature highlighted the importance of contextual factors as contingencies (Delery and Doty, 1996). Moreover, based on the contingency theory, various studies

provided evidence of the influence of business strategy on the relationship between HRM practices and organizational performance (e.g. Schuler and Jackson, 1987; Bowen and Ostroff, 2004; Wood, 1999). Taking this into account, business strategy facilitates the adoption of effective HRM system that leads to improved organizational performance. Lee *et al.* for example, investigated the link between business strategy, HRM practices, and firm performance. Their study found that integrating HRM practices with business strategies will be positively related to organizational performance. Moreover, Delery and Doty (1996) have suggested that a good fit between HRM strategies and the business strategy of the firm tends to lead to superior performance. Similar findings were apparent in Chow (2006). Richard and Johnson (2001) employed business strategy as a contingent factor on the HRM-performance link. Accordingly, business strategy is considered as an important contingency factor that can lead to the adoption of an effective HRM system to improve organizational performance.

Moreover, when business strategy employed by the company is emphasizing innovation, this will more likely lead to organizational innovation. In particular, innovation strategy emphasizes the developments of new product/service, new methods of production, new markets, new source of supply, and new organizational forms (Hilman and Kaliappen, 2015). The significance of innovation strategy is related to its ability to improve organizational performance and gain competitive advantage. This can be accomplished by creating an organization with innovation capabilities. However, this cannot be accomplished without the existence of an effective HRM system consistent with the innovation strategy. In particular, effective HR practices are required, such as formal recruitment and selection practices, extensive training and development programs, and performance evaluations, in order to develop employees with qualities that will enable them to be innovative (Huang, 2001).

According to the previous discussion, we can assume that when the company emphasizes an innovation strategy, this will more likely lead to an adoption of effective HRM practices and policies that will improve organizational innovation. Accordingly, this study hypothesizes the following relationship:

H5. HRM mediates the relationship between innovation strategy and organizational innovation.

The proposed model can be seen in Figure 1.

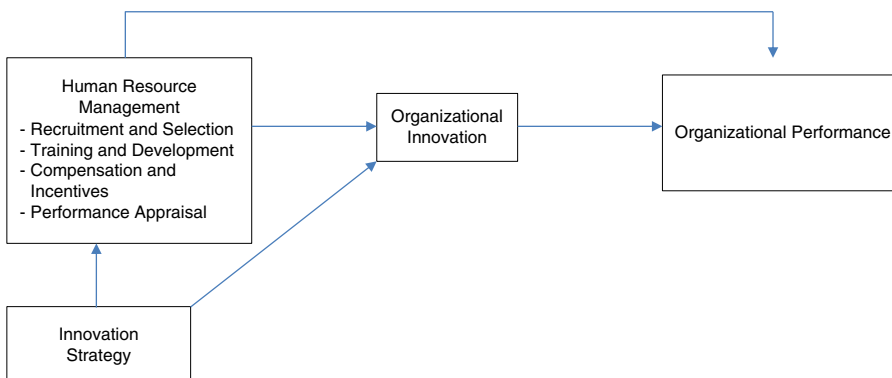


Figure 1.
The hypothesized
model

Research method

Sampling and data collection

This study presents the results of a quantitative research being applied on a UAE banking sector with the aim of determining any basis for assuming a positive relationship between HRM, organizational innovation, innovation strategy, and organizational performance across the population as a whole. Data were collected using a questionnaire administered in a banking sector, located in UAE. This sector plays a prominent role in the UAE economy. The most important role of banks is in spurring growth. They play a crucial role in providing financing for firms and helping them, and in the process, the overall economy to grow. They also allow individuals to effectively plan and manage their daily needs and financial outgoings. In the UAE, though the financial services sector accounts for about 1.1 percent of employment, it accounted for 10.2 percent of non-oil gross domestic product in 2012. Banks also contribute to the economic health of the UAE through employment, and through the job creation role that they play in enabling companies to be established, to thrive and prosper.

In order to reach high a response rate, a self-administered survey was distributed and collected using a drop-off and pick-up approach (Bryman, 2008). A total of 220 managers working in UAE banks were invited to participate in this research while a total of 168 managers actually completed the questionnaire. A total of 165 questionnaires were included in the analysis. This represented a response rate of 75 percent.

Measures

Organizational innovation. Organizational innovation was measured using a seven-point Likert scale which includes six items and is taken from Calantone *et al.* (2002). An example of the items used in this study “Our company frequently tries out new ideas.”

HRM. The scales used to measure HRM practices consists of 23 items that measure five practices which are: recruitment and selection, training and development, compensation and incentives, performance appraisal, and employment security. The scale was adopted from Lee *et al.* and Delery and Doty (1996).

Organizational performance. Subjective measures were used to measure organizational performance. Perceived organizational performance was measured using a scale adapted from Khandwalla (1977). The scale contains four statements and managers were asked to provide their perception about the performance of their bank over the past three years compared to the industry average.

Control variables. Reviewing the previous studies, managers’ age, gender, academic qualifications, and their overall experience working at their bank are used as control variables in the analysis of this study.

Analysis and results

The characteristics of respondents are shown in Table I. The table shows that the majority of respondents holds a bachelor degree. Moreover, about 54.5 percent of them have at least six years of experience the bank. This means that they are familiar with the company policies, practices, as well as its performance position.

Table II shows a descriptive analysis of the data and the bivariate correlations between variables. The means and standard deviations are listed, and a complete correlation matrix is presented. The mean score for HRM practices is above average ($M = 5.92$, $SD = 0.79$) showing good implementation of effective HR practices in the UAE banking sector.

Characteristics	Categories	Frequency	%	HRM practices and organizational performance
Age	Less than 25	2	1.2	
	25 to less than 35	57	34.5	781
	35 to less than 45	72	43.6	
	45 to less than 55	31	18.8	
	55 to less than 65	2	1.2	
Education qualifications	Diploma	42	25.5	
	Bachelor degree	90	54.5	
	Postgraduate degree	29	17.6	
Organizational tenure	Less than 1 year	5	3.0	
	1 to less than 3 years	18	10.9	
	3 to less than 6 years	51	30.9	
	6 to less than 10 years	70	42.4	
	10 years or more	20	12.1	
Working experience	Less than 3 year	4	2.4	Table I. Characteristics of respondents
	3 to less than 6 years	16	9.7	
	6 to less than 10 years	49	29.7	
	10 to less than 15 years	56	33.9	
	15 years or more	38	23.0	

Structural equation modeling analysis

The analytical method used to empirically test the hypotheses proposed is the structural equation modeling technique using PLS. The two steps are: the assessment of the outer model and the assessment of the inner model. Moreover, a bootstrapping method is employed in order to test indirect effects (i.e. mediation) (Henseler *et al.*, 2009).

Assessing the measurement model

To check the internal consistency, items' factor loadings were analyzed on their respective latent variables. All loadings for items retained in the model were greater than 0.7, with some exceptions (like: OI5), which were removed from the model. HRM practices were loaded as a single high-order factor, as presented in Figure 2.

Once the items were discarded, construct reliabilities were assessed by calculating the composite reliability (CR), the average variance extracted (AVE), and Cronbach's α (Hulland, 1999). Also, VIF values were calculated in order to check any multicollinearity. Researchers proposed 0.8 as a threshold for CR, 0.7 for Cronbach's α , and 0.5 for AVE (Hulland, 1999). Therefore, the measurements demonstrate that the outer model is internally consistent and reliable (Table III).

A number of tests were used to assess discriminant validity. First, results showed that the loadings of each indicator were greater than all of its cross-loadings, hence, the test for discriminant validity is acceptable. Moreover, all the calculated VIF values were less than the threshold value (VIF not exceeding 10). Finally, in order to further examine discriminant validity, the heterotrait-monotrait (HTMT) ratio was used. As can be seen in Table IV, all HTMT ratios are lower than the threshold value of 0.90, showing discriminant validity (Henseler *et al.*, 2015). Thus, multicollinearity is not a problem.

Assessing the structural model

Hypotheses were tested by estimating the structural model. The R^2 values of the endogenous constructs exceeded the acceptable moderate value recommended by

Table II.
Correlations among
variables

	Mean	SD ^a	Age	Education qualifications	Organizational tenure	Working experience	HRM practices	Innovation strategy	Organizational performance
Age	2.84	0.78	1						
Education qualifications	2.92	0.66	0.234**	1					
Organizational tenure	3.50	0.95	0.396***	0.144	1				
Working experience	3.66	1.02	0.605***	0.488***	0.410***	1			
HRM practices	5.92	0.79	0.124	-0.079	0.128	0.054	1		
Innovation strategy	5.89	0.78	0.162*	-0.027	0.144	0.106	0.708***	1	
Organizational innovation	5.68	0.97	0.001	-0.168*	0.126	-0.163*	0.588***	0.534***	1
Organizational performance	5.39	1.04	0.150	0.178*	0.034	0.225**	0.290***	0.274***	0.378***

Notes: ^aStandard deviation values. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$, all two-tailed tests

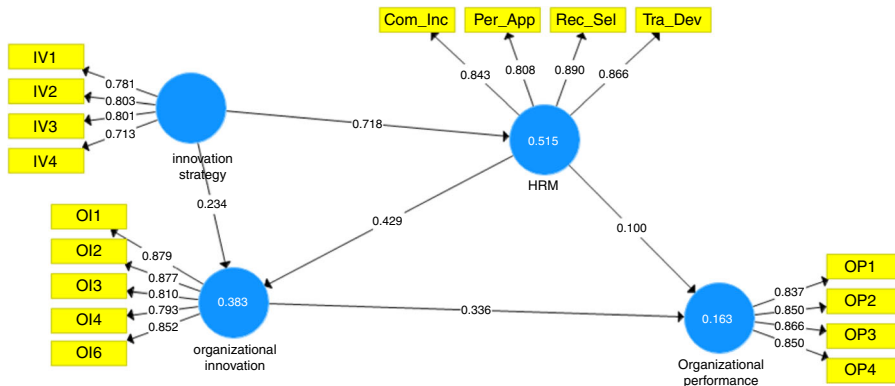


Figure 2.
PLS measurement
model analysis

Construct	AVE	Composite reliability	Cronbach's α
HRM	0.726	0.914	0.874
Organizational performance (OP)	0.724	0.913	0.874
Innovation Strategy (IV)	0.601	0.858	0.779
Organizational innovation (OI)	0.710	0.924	0.898

Table III.
Scales' internal
consistencies

Construct	HRM	Organizational performance	Innovation strategy	Organizational innovation
HRM				
Organizational performance	0.333			
Innovation strategy	0.862	0.331		
Organizational innovation	0.664	0.430	0.641	

Table IV.
Discriminant
validity statistics
(HTMT Criterion)

Chin (1998): HRM has an R^2 value of 0.515, organizational performance has an R^2 value of 0.163, and organizational innovation has an R^2 value of 0.383.

Additionally, the effect size, f^2 , was also calculated. Results of f^2 values showed large effects for innovation strategy on HRM. They showed medium effects for the following relationships: HRM on organizational innovation, innovation strategy on organizational innovation, and organizational innovation on organizational performance. However, the effect was weak for the relationship of HRM on organizational performance. These results are shown in Table V.

The direct effects

In order to test the following hypotheses, *H1-H3* direct effects were assessed. The results, provided in Table VI, show that the three hypotheses were supported. In particular, HRM practices ($\beta = 0.306$, $p = 0.000$) and organizational innovation ($\beta = 0.342$, $p = 0.000$) are significantly and positively related to organizational performance. Also, HRM practices are significantly related to organizational innovation ($\beta = 0.599$, $p = 0.000$). This indicates that *H1-H3* were all supported.

The mediating effects
H4 and *H5* represent mediating effects. In particular, bootstrapping technique can be used to estimate standard errors and 95 percent biased-corrected confidence intervals (CIs) for indirect effects (Shrout and Bolger, 2002).
Results showed that HRM practices have a non-significant direct effect on organizational performance. Also, the direct effect between HRM practices and organizational innovation was shown to be significant ($p = 0.429$, $t = 4.220^{***}$). Moreover, the direct effect between organizational innovation and organizational performance was shown to be significant ($p = 0.336$, $t = 3.840^{***}$). This means that full mediation can be observed for OI on the HRM-OP relationship. Regarding *H5*, a positive and significant relationship was found between innovation strategy and HRM ($p = 0.718$, $t = 13.843^{***}$) and between innovation strategy and organizational innovation ($p = 0.234$, $t = 2.184^{***}$). This indicates that partial mediation can be noticed for HRM on the OI-OP relationship if other conditions of mediation are satisfied. Table VII shows the results of the analysis.

Table V.
 F^2 values

Variable	HRM	Organizational performance	Innovation strategy	Organizational innovation
HRM		0.008		0.145
Organizational performance				
Innovation strategy	1.062			0.043
Organizational innovation		0.087		

Table VI.
Test of total effects

Hypothesis	Path coefficient	t -value
HRM→OP	0.306	3.706***
HRM→OI	0.599	10.354***
IV→HRM	0.719	14.074***
IV→OI	0.544	8.482***
OI→OP	0.342	4.033***

Notes: $n = 121$. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table VII.
Test of direct effects

Direct effect	p -value	t -value
HRM→OP	0.100	1.250
HRM→OI	0.429	4.220***
IV→HRM	0.718	13.843***
IV→OI	0.234	2.184***
OI→OP	0.336	3.840***

Notes: $n = 121$. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

The bootstrapping technique was used in order to calculate the 95 percent CI of the indirect effect and to test the significance of the indirect effect of the independent variable and dependent variable through the mediator. Results are shown in Table VIII. The results provided evidence that both *H4* and *H5* are supported.

Discussion

Although, according to the literature, HRM is a key element for the success of innovation, not many empirical studies have provided support for it. The main purpose of this paper has been to fill this gap by analyzing the direct and indirect relationship between HRM and innovation. Using different strategies will require different employee skills, knowledge, and behaviors to be implemented (Lado and Wilson, 1994; Becker and Gerhart, 1996; Jimenez and Valle, 2005). Effective HRM practices can influence these employee characteristics. Hence, HRM practices should systematically vary with organizational strategy (Delery and Doty, 1996; Jimenez and Valle, 2005). On the one hand, there is agreement in the literature about, first, the relationship between innovation and HRM, and second, that in order to improve innovation the adoption of HRM practices is superior to any of the individual HRM practices of which they are composed. On the other hand, there are inconsistencies in the literature about the contents of these practices.

This study is important from both theoretical and practical perspectives and these are discussed in the following sub-sections.

Theoretical implications

Theoretically, this study proposed a research model for empirical studies to link HRM practices, innovation strategy, and innovation performance with organizational performance. The results from a structural equation modeling approach provide strong support for the hypothesized relations. The results show that effective HRM practices leads to higher levels of innovation performance. The study shows that both HRM practices and organizational innovation have positive impacts on organizational performance. Also, the study empirically supports the mediating effect of organizational innovation on the relationship between HRM practices and organizational performance. HRM practices have both direct and indirect effect mediated by innovation on organizational performance. Moreover, the study reported that HRM practices partially mediated the relationship between innovation strategy and organizational innovation.

According to the results of this study, it can be concluded that an improvement in HRM practices leads to better organizational performance. Also, HRM practices could better improve organizational performance through organizational innovation. Although innovation and HRM have attracted considerable attention in the literature in Western cultures, only a few studies have been conducted in non-Western culture in general and the Middle East in particular. Also, only a few studies have analyzed the mediating roles of HRM capabilities in the relationships between innovation strategy and organizational innovation. Therefore, the empirical findings of this study fill the gap in the literature.

Hypothesis	Indirect effect	β	<i>t</i> -value	95% confidence interval		Results
				Low	High	
<i>H4</i>	HRM-OI-OP	0.144	2.595**	0.055	0.270	Significant (full mediation)
<i>H5</i>	IV-HRM-OI	0.308	3.727***	0.166	0.485	Significant (partial mediation)

Notes: *n* = 121. **p* < 0.05; ***p* < 0.01; ****p* < 0.001

Table VIII.
Results of
mediating effects

The results show that the capability of HRM in recruitment and selection, training and development, compensation/incentives, performance appraisal practices positively affects the firm's innovation capability. Furthermore, effective HRM practices act as a mediator in the innovation process by developing employees with qualities that will enable them to be innovative which means that when organizations emphasize an innovation strategy, this will more likely to lead to an adoption of effective HRM practices and policies that will improve organizational innovation in the UAE.

Managerial implications

In terms of managerial implications, this study has demonstrated the significance of HRM practices and how they are positively related to both organizational innovation and performance. For UAE managers to enhance organizational innovation, they should adopt effective HRM practices. In particular, the choice of an innovation strategy implies the use of an effective incentive-based compensation, training and development, recruitment and selection, and performance appraisal.

Moreover, UAE managers need to use HRM practices aimed at building a stable group of employees in the company, which can adopt experiments and embrace the new ideas that feed innovation. Top managers also need to review their HRM programs and redesign them in order to increase the integration between HRM and innovation strategy, which leads to improving organization innovation and performance.

Study conclusion and limitations

In conclusion, the purpose of this study was to investigate the direct and indirect relationships between the practices of HRM, innovation strategy, organization innovation, and organizational performance in the UAE banking industry. The study provides empirical support for the hypotheses that there is a positive relationship between the firm's innovation strategy and the HRM practices it develops. The study shows that both HRM practices and organizational innovation have positive impacts on organizational performance. Also, the study empirically supports the mediating effect of organizational innovation on the relationship between HRM practices and organizational performance. Moreover, the results confirmed the mediating impact of HRM practices on the relationship between innovation strategy and innovation strategy.

This study makes a significant contribution to our understanding of HRM practices, innovation strategy, organizational innovation and performance in the Middle East in general and the UAE in particular. There is relatively little management research that has focussed on this region. Because of the unique national culture and special features of the labor market in this region, such studies are important, and we hope that our study will stimulate further research in this area.

Despite the contributions of this study, it has some limitations to be taken into consideration. First, this study focusses on the UAE context, which may be different from others. Second, this study is limited because it includes a relatively small set of HRM practices. Although the practices included in this research are generally thought to be related to innovation, other HRM practices may be important. Thus, future studies should include more HRM practices and other organizational attributes that are related to both HR practices and innovation, such as technology. Another limitation of this study is the use of a cross-sectional research design, which does not allow us to examine the causality of the relationships between innovation and HRM in greater depth. Finally, it would be advisable to advance the analysis of these relationships and to study the effect of the fit between innovation strategy and HRM practices on firms' results.

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