

The Impact of High-Performance Work Systems on Firm's Performance in the Presence of Innovation Behaviour of Insurance Companies at Jordan

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Abstract

The current research aims to investigate the impact of high-performance work system (HPWS) on firm's performance in the presence of innovation behaviour. The dimensions of the high-performance was (ability, motivation, opportunity). The population consisted of all managers on the top and middle managerial level at insurance companies in Jordan. A purposive sample was composed of (300) managers, where the questionnaires returned (270), with responding rate (90%) but the valid for statistical analysis were (263). Structural equation modeling was used for statistical analysis and testing hypotheses. The result indicated that the innovation behaviour mediate the impact of high-performance work systems and firm's performance. Thereby, the recommendations were suggested to the managers and decision-makers to focusing on extensive training programs in order to enhance employees' creativity that lead to improve organisation's outcomes.

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1. INTRODUCTION

Firm performance has taken a lot of attention by managerial science, where it provides intensive information about how organisation achieve to its objectives (Butt et al., 2019). Moreover, it deems as an effective manner to highlight of utilisation an organisation's resources related to human resource, raw materials, and knowledge in optimal ways in order to attain its both financial and non-financial goals (Berraies and Hamouda, 2018).

Hence, a firm's performance aims to provide a rapid and detailed view about the result that an organisation accomplished in the previous period to work on improving these result (Onyango et al., 2014).

Persons tend to ascribe their behaviour to internal reasons such as their motivation or ability, while they ascribe the behaviour of others to external causes for example situations or conditions (Hewett et al., 2018). This idea formed the base of attribution theories that have been used to

various research fields, including human resource management practices to help of improving an organisation's employees' performance through submitting high-performance work systems theory (Sanders and Yang, 2016). The high-performance work systems are focused on a set of human resource practices and work structures which increase the employees' abilities, skills, and work flexibility (Babic et al., 2019). Moreover, it is enhancing their effectiveness and efficiency (Appelbaum et al., 2000) and sense of their value and security (Wood and de Menezes, 2011) which lead an organisation to achieve competitive advantage (Combs et al., 2006).

According to violent competition, globalisation and technology developments in the last decenniums, organisations need to innovate continuously for coping with challenges (Tajeddini, 2010). Therefore, (Ivanova and Cepel, 2018) illustrate that a vital factor of the increasing competitive advantage is supposed that is the innovation behaviour of organisations, which is deemed the number of novel products and services that the organisation is indeed offering (Domi et al., 2019).

The insurance industry has made strides in recent decades, driven by the steady growth of the inhabitants, the improvement of the standard of living, and

a multifaceted economic boom. Moreover, the insurance sector is keeping pace with the social and economic changes in Jordan market, represented by the increase in insurance awareness, which in turn has increased the demand for different types of insurance, and obtaining insurance contracts in various commercial and industrial projects. Thereby, this research is seeking to investigate the impact of high-performance work systems on firm's performance, as well as identifying the mediating role of innovation behaviour in the insurance companies on Jordan.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. High-Performance Work Systems (HPWS)

Recently, the domain of strategic human resource management has considered human resource management practices are complementary together (Wei, 2006). Internal coherence among these practices increases their effectiveness. Thus, they are emphasising of human resource management practices on the system perspective (Gardner et al., 2011). The human resource management system perspective highlights the significance of complementary resources by considering the separate human resource practices have restricted ability to create competitive advantage, while they can enable the organisation to attain

competitive advantage when they are a combination (Liu and Lin, 2019).

The term of high-performance human resource practices was shaped by (Appelbaum et al., 2000) to highlight human resource practices which are internally harmonious for formulating interconnected bundles of practices that interaction together to effect on employees' attitudes and behaviours. In this context, the bundles of human resource practices that are recognised as high-performance work systems can lead to generating synergy that significantly contributes to accomplishing an organisation's goals and improve its employees' outcomes compared with individual human resource practices (Boselie, 2010; Liu and Lin, 2019; Obeidat et al., 2016).

High-performance work systems seek to enhance human capital by ensuring the availability of appropriate capabilities for an organisation's employees, motivating them to attain planned objectives, and allowing them to prove themselves and contribute on achieving the organisation's goals (Babic et al., 2019; Sanders et al., 2019). The high-performance work systems distribute human resource management practices into three major bundles that are express to high-performance work systems dimensions which indicate to ability,

motivation, and opportunity depending on (Beltrán-Martín and Bou-Llugar, 2018; Khoreva and Wechtler, 2018; Ma et al., 2017; Marin-Garcia and Martinez Tomas, 2016; Traeger and Alfes, 2019).

Ability enhancing human resource refers to a set of human resource management activities that aim to guarantee a suitable competence pool among staff hired by the organisation, as well as bringing knowledge, dexterities and capabilities to an organisation's environment (Ma et al., 2017). Therefore, the organisations emphasise on the critical role that comprehensive selection play as a human resource practice to help an organisation for finding the right person for each vacancy and assure that there are the host of nominees for each position (Ali et al., 2019). Moreover, it is focusing on the formulation of extensive training programs for employees to develop their capabilities and further improve its human capital (Liu and Lin, 2019).

Whereas the idea of motivation to enhancing human resource based on orienting an organisation employees' efforts to fulfil its goals by encouraging them to improve their work outputs (Subramony, 2009). Hence, fair rewards are influencing on the employees' perceptions about the fairness of the management decisions and they are free

from bias that drives to increase their productivity and decrease work turnover (Liu and Lin, 2019). Furthermore, developmental performance appraisal, which is focusing on significant of employees' performance debate, listening to their feedback, and working on solving their problems lead an organisation's employees to exert a higher level of effort to achieve an organisation's objectives (Kuvaas, 2007; Selden et al., 2013).

Moreover, the opportunity that is enhancing human resource is one of the significant dimensions that impact on employees' behaviours by empowering them to share on decision making related to their jobs and support self-management through enhancing teamwork (Marin-Garcia and Martinez Tomas, 2016). Also, it is emphasising on building the two-way communication bridges among an organisation's employees and their management that contribute to creating an extensive sharing environment which is helping to attain effectively and efficiently to an organisation's objectives (Sanders et al., 2019; Zacharatos et al., 2005).

2.2. Innovation Behaviour

The administrative literature has provided general concepts of innovation by considering it as the activities to formulation the novel and useful ideas then implement these ideas to produce new

products and services or new business models (Quaye and Mensah, 2019). The different aspects of management have interested in studying innovation by recognising it as one of the critical factors to cope with the business environment challenges (Yuliansyah, 2018). Innovation is predominately conceived at an organisational level (Chen et al., 2005; Reade and Lee, 2016). Still, it is also connecting with individual or group levels by a set of creative behaviours which were adopted to deal with development cogitation (Audenaert et al., 2019). Moreover, Innovation is essential to develop an organisation's performance, attaining competitive advantage, and longer-horizon survival (Anderson et al., 2014; Chatzoglou and Chatzoudes, 2018).

The innovation has described as a complex process due to not only limited to providing new product and services, it also related to human behaviour, which conducting to create creative ideas (Carmeli et al., 2006). Innovation behaviour referred to the employee's intention of introducing or the production of new ideas or business models to contribute an organisation's development (Domi et al., 2019). Moreover, the authors argued that creative behaviour, which is noticed as behaviour related to the generation of ideas that are both new and

useful (Newman et al., 2018), different from innovation behaviour that included not only generating new ideas inside an organisation but also adopting ideas from the surround which are deemed as a new for the organisation's work (Uddin et al., 2019). As well as innovation behaviour is in contrast to creative behaviour, where innovation behaviour is collecting among generating new ideas and implementing those ideas together in order to enhance an organisation's competitive position (Yuan and Woodman, 2010).

Accordingly, innovation behaviour deemed as a process based on generating ideas and implementing these ideas (Audenaert et al., 2019; Domi et al., 2019; Wang et al., 2017). In this research, innovation behaviour measured through two dimensions that representing the principal bundles to orient innovation process (Audenaert et al., 2019; Newman et al., 2018; Scott and Bruce, 1994). Generation the ideas that consider the first step on the innovation activities by searching on novel ideas that may use to create new products or services, identifying what per idea need of an organisation's resources, and evaluating all ideas in order to select the best for moving to the next step (Oldham and Da Silva, 2015; Watts et al., 2019). The second step indicates to implementation of which

selected idea by converting the idea details into procedures and activities, acquiring what needed resources, building applicable models and evaluating them, then select the most effective and efficient model that helps an organisation to attain creativity competition (Tang, 2006).

2.3.Organisational Success

Performance considers as a broad term that is using in different aspects to measure how extent achieved the objectives (Okeyo et al., 2016). As well as, (Soto-Acosta et al., 2017)indicated performance as how an organisation success of managing its business to generate value that is delivered to its customers and gaining benefits for its stakeholders. Besides, a firm's performance referred to the organisation's readiness to gain its goals by the optimum exploitation of its resources (Wamba et al., 2017).While it defined as the effectiveness of an organisation's operations related to interacting with both the internal and external environment(Butt et al., 2019).

In light of the above, researchers have provided many methods in order to measure firm performance based on the organisation work nature, the planned objectives of performance measurement, and the managerial domain related to those research (Oduor and Kilika, 2018).

In light of the above, researchers have provided many methods in order to

measure firm performance based on the organisation work nature, the planned objectives of performance measurement, and the managerial domain related to those research (Mone and London, 2018). (Zahra and Garvis, 2000)described the firm performance as the evaluation of the competence and efficacy of an organisation's actions, including assessing the ability of an organisation to create value that is delivered to customers and stakeholders related to an organisation. While (Wachira et al., 2014) identified firm performance by financial and non-financial indicators related to the return on equity, return on investment, market share, and social and environmental responsibility. According to (Gathungu et al., 2014) who measured firm performance through the quality of provided products, speed of delivery, products prices, and flexibility. Accordingly, firm performance deems as an integrated strategic path to enhance the effectiveness of the organisation by developing the shared capacity of the teams and individual in the organisation (Mohammad, 2019).

2.4.High-Performance Work Systems and Firm's Performance Through Innovation Behaviour

High-performance work systems treat as a principal means that the organisations are using to influence their employees' knowledge and capabilities, as well as their

behaviours and attitude thereby attaining organisational goals (Chen and Huang, 2009; Do and Shipton, 2019). Consequently, high-performance work systems are considered as a significant strategic lever, both as a manner to improve and maintain core competencies and as a substantial condition for strategy enforcement (Sun et al., 2007).The complementarily viewpoint discusses that amalgamation of human resource practices. These practices are based on developing decision-making processes by providing training in job-related skills and reward to employees for offering suggestions to improve an organisation's work, that yield to direct them to search new ideas and develop an organisation's business models for enhancing an innovation process (Uwizeyemungu et al., 2018). Moreover, cross-function teams allow a forum where these varied views can be spread to introduce innovative ideas while rewards contribute to admit that innovation behaviours are valued (Laursen and Foss, 2014).

The organisations which are strongly oriented toward innovation by creating products and services, thus increasing an organisation's ability and its offer on the market that affect its competitive position among rivals (Heimonen, 2012). Furthermore, (Janssen, 2000) determined

the innovation behaviour as intentional generating and implementing of novel and useful ideas within a team or organisation in order to improve the firm's performance of the team or organisation. Hence, high-performance work systems that managers are adopting by enhancing human resource practices working on encouraging an organisation's employees and teams to participate in innovation behaviour by continuously developing products and services lead to perform their duties more efficiently which support to favourable performance of an organisation (Ramamoorthy et al., 2005). Thereby, the major research hypothesis formulated as shown:

H: There is a significant impact of high-performance work systems on firm performance in the presence of innovation behaviour.

3. METHODOLOGY

3.1. Research Population and Sample

The insurance sector represented a critical component of the Jordanian financial sector, which is given great attention by the government. The

Jordanian government worked to maximize the role of the insurance sector because of its central participation in economic growth, protection of investments, and the maintenance and development of savings. Thereby, the research population consists of all employees in insurance companies in Jordan, which the number are 24 companies based on the report issued by the Ministry of Industry and Trade at the beginning of 2019. Depending on the nature of the research's variables, the managers in the top and middle management are considered the most suitable to answer the questionnaires, where the managers' number was (758). A purposive sample of (300) managers was selected, and the research's questionnaire was distributed to them based on (Sekaran and Bougie, 2016), where (270) questionnaires were retrieved with a response rate of (90%). It was found that the valid questionnaires for statistical analysis were (263) questionnaire. Table (1) shows characteristics related to the study sample.

Table 1: Sample Characteristics (N=263)

Variables	Categories	Frequencies	Percentages
Gender	Male	217	82.51%
	Female	46	17.49%
	Less than 30	36	13.68%
Age Group	From 30 to less than 40	109	41.44%
	From 40 to less than 50	94	35.74%
	50 and greater	24	9.14%
Qualifications	Diploma and less	11	4.18%
	Bachelors	199	75.66%
	Master	38	14.44%

3.2. Research Instrument

The research instrument consisted of 31 items to measure the research variables. High-performance work system (HPWS) was measured using 15 items by adopting ability, motivation, and opportunity (AMO) model. Innovation behaviour was

measured by eight items, while firm performance was measured using eight items. The table (2) shown the details of the instrument with distribution the items on variables dimensions, as well as the references which used to develop it.

Table 2: Research Instrument Details

Variables	Dimensions	No. Items	References
High-Performance System (HPWS)	Ability	5	(Beltrán-Martín and Bou-Llugar, 2018; Marin-Garcia and Martinez Tomas, 2016; Traeger and Alfes, 2019)
	Motivation	5	
	Opportunity	5	
Innovation Behaviour	Generation	4	(Domi et al., 2019; Wang et al., 2017; Wu et al., 2018)
	Implementation	4	
Firm performance	---	8	(Butt et al., 2019; Lin et al., 2019; Mohammad, 2019; Wamba et al., 2017)

3.3. Validity and Reliability

Exploratory Factor Analysis (EFA) is often used in the domains of psychology and education to consider the manner of choice for explaining self-reporting questionnaires (Perry, 2015). EFA is a multivariate statistical proceeding that has numerous uses (Al-Hawary, 2013). Firstly, EFA decreases a large number of items into a smaller set of items. Secondly, it identifies implicit dimensions between measured variables and latent structures. Thirdly, it gives construct validity directory of self-reporting scales (Williams, 2010).

This research conducts EFA for confirming the validity and reliability of data collected and identify the distribution of items on its dimension (Al-Hawary et al., 2017), where it is using factor loading (λ) to determine approved items, Average Variance Extracted (AVE) for measuring the convergent validity, square root of the average variance extracted (\sqrt{AVE}) for highlighting the discriminant validity, and McDonald's omega coefficient (ω) for testing instrument reliability (Bajpai and Bajpai, 2014).

Table 3: Exploratory Factor Analysis Results

Variables	Items	Λ	AVE	Ω	\sqrt{AVE}
Ability	AB1	0.714	0.534	0.851	0.730
	AB2	0.708			
	AB3	0.766			
	AB4	0.698			
	AB5	0.764			
Motivation	MO1	0.688	0.536	0.852	0.732
	MO2	0.792			
	MO3	0.751			
	MO4	0.738			
	MO5	0.687			
Opportunity	OP1	0.812	0.603	0.883	0.776
	OP2	0.795			
	OP3	0.748			
	OP4	0.772			
	OP5	0.753			
Generation	GE1	0.698	0.547	0.828	0.739
	GE2	0.738			
	GE3	0.746			
	GE4	0.774			
Implementation	IM1	0.783	0.586	0.849	0.765
	IM2	0.775			
	IM3	0.768			
	IM4	0.734			
Firm performance	FP1	0.725	0.581	0.917	0.762
	FP2	0.766			
	FP3	0.781			
	FP4	0.749			
	FP5	0.824			
	FP6	0.744			
	FP7	0.736			
	FP8	0.768			

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy = 0.892
Bartlett's Test of Sphericity – Approx. Chi-Square =776.44, df = 413, Sig. = 0.000

The results are shown in the table (3) that all items are accepted because the factor loadings are higher than the minimum threshold which is 0.50 (Al-Hawary and Al-Namlan, 2018; Hogarty et al., 2005). Moreover, it is indicating that the average variance extracted (AVE) was higher than 0.50 and the square root of the average variance extracted (\sqrt{AVE}) was higher than the bivariate correlation coefficients, hence it referred that the

instrument is valid (Kim and Lee, 2019). Furthermore, McDonald's omega coefficient (ω) was higher than 0.70 which means the instrument is reliable (Bajpai and Bajpai, 2014).

4. RESULTS AND ANALYSIS

The Pearson correlation coefficient determines the correlation between variables and allows to confirm that the variables are free of multicollinearity problem (Wang et al., 2018).

Table 4: Descriptive Results and Correlation Matrix

Variables	Mean	SD	1	2	3	4	5
1. Ability	3.79	0.982	-				
2. Motivation	3.63	0.871	0.412*	-			
3. Opportunity	3.85	0.967	0.385*	0.452**	-		
4. Innovation Behaviour	3.76	0.886	0.504**	0.451*	0.451*	-	
5. Firm performance	3.59	0.927	0.624*	0.591*	0.514*	0.527*	-

Notes: ** Correlation is significant at ($\alpha \leq 0.01$). * Correlation is significant at ($\alpha \leq 0.05$).

The results are shown in the table (4) refers that there is a correlation between variable, where the values between (0.385-0.624) with a significance level less than 0.05(Jiang, 2018).Furthermore, all correlation values less than 0.80, that mean independent variables free of multicollinearity problem(Hair, 2010).

Furthermore, the results indicate that the insurance companies in Jordan are adopting high-performance work systems that relate to ability with high level (M=3.79, SD=0.982). While they are adopting high-performance work systems that relate to motivation with moderate level (M=3.63, SD=0.871) they are adopting high-performance work systems that relate to the opportunity at a high level (M=3.85, SD=0.967). Also, innovation behaviour was at a high level (M=3.76, SD=0.886), and firm's performance was it a moderate level (M=3.59, SD=0.927).

Confirmatory factor analysis (CFA) is a statistical method that is applied to

emphasise the factor structure of a group of constructs studied(Hair, 2010). CFA permit researchers to exam the hypothesis whether the links between the constructs examined and the factor loading exists or not(Byrne, 2010).Therefore,(Al-Hawary and Alajmi, 2017)identify six indicators used to signify if the model used is fit or not, these indices were relative chi-square (χ^2/DF), the goodness of fit index (GFI), the comparative fit index (CFI), adjusted goodness of fit index (AGFI), the Tucker-Lewis index (TLI), and root mean square error of approximation (RMSEA).

The Figure (1) shown the result of CFA that are indicated that the model used is fit, where relative chi-square (χ^2/DF) value was less than 3(Marsh et al., 2019), all vales of the goodness of fit index (GFI), comparative fit index (CFI), adjusted goodness of fit index (AGFI), the Tucker-Lewis index (TLI) were higher than 0.90, and root mean square error of approximation (RMSEA) value was less than 0.05(Brown, 2015).

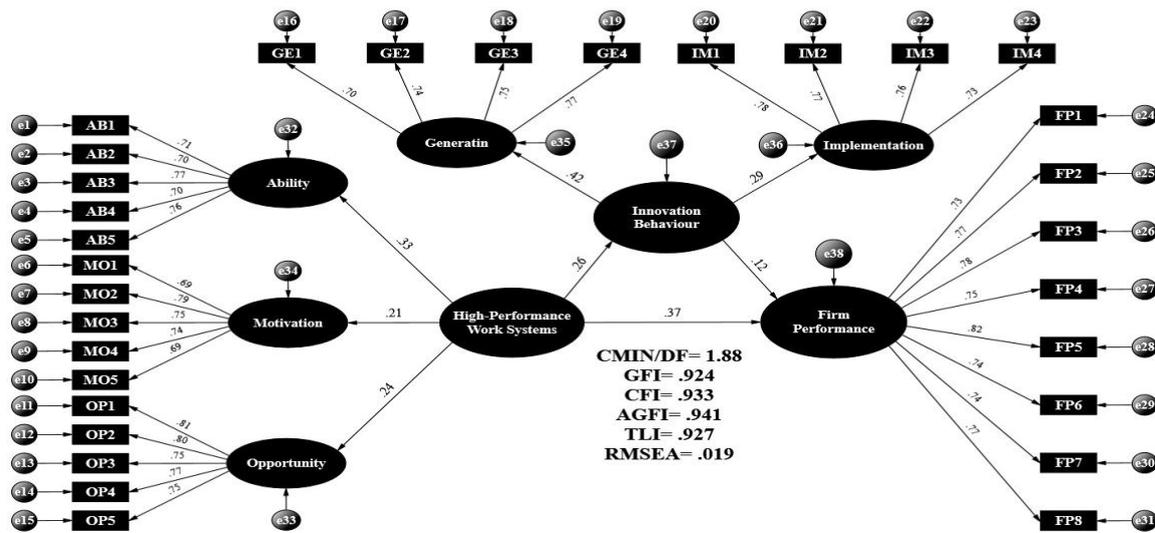


Figure 1: Structural Equation Modelling Results

Structural equation modelling used to test research hypotheses, where the results are shown that there is a significant impact of high-performance work systems on firm's performance where ($\beta=0.37$) with a p-value less than 0.05, there is a significant impact of high-performance work systems on innovation behaviour where ($\beta=0.26$) with a p-value less than 0.05, and here is a significant impact of innovation behaviour on firm's performance where ($\beta=0.12$) with a p-value less than 0.05. Thereby, there is an impact of high-performance work systems on firm's performance in the presence of innovation behaviour where ($\beta=0.03$) and p-value less than 0.05.

5. DISCUSSION

This research aimed to investigate the impact of high-performance work systems on firm's performance in the presence of innovation behaviour. The research's results refer that there is a statistically significant impact of high-performance work systems on firm's performance in the presence of innovation behaviour that consistent with (Do and Shipton, 2019; Domi et al., 2019; Rajiani et al., 2016). accordingly, the organisations that are focusing on developing their employees' abilities by searching on the talent from the work market, then attract them to fill the vacancy is provide of an organisation an opportunity to improve its performance through supporting the creative processes.

Furthermore, working on developing their employees' skills through extensive training help the organisation in creating products and services. Moreover, it leads to enhance an organisation's services quality in order to accomplish excellent performance.

Further, the focusing on empowering their employees by involving them in decision-making and developing communication between different administrative levels of an organisation increase its ability to attain its objectives through effective manners enable it to keep facing the challenges. Also, organisations could focus on supporting the employees through yield them with suitable reparations related to their performance result that increases their fulfilment and loyalty to accomplish an organisation's goals, as well as seeking to be sustainable of an organisation's business.

6. RECOMMENDATIONS

The research explains the impact of high-performance work systems on firm's performance in the presence of innovation behaviour of insurance companies in Jordan. Based on the result that attained, the current research recommended managers and decision-makers on insurance companies to emphasise on training programmes that enhance the employees' ability to discover novel ideas and improve their performance. Moreover, supporting employees' engagement by empowering them of decision-making and

developing the products and services that improve the company's outcomes.

7. LIMITATION AND DIRECTION FOR FUTURE RESEARCH

This research provided new contribution regarding its variables and the method that link between these variables. However, it contains some limitations. Firstly, this research applied to insurance companies that are considering as one of the service sector components. Hence, future studies could conduct on another population to identify the relationship between variables if the sector will be changed. Secondly, this research is linking high-performance work systems on firm performance in the presence of innovation behaviour. Therefore, future studies could link high-performance work systems on other variables, i.e. organisational success, competitive performance, and organisational citizenship. Finally, the research sample consisted of employees on insurance companies that have the same culture, thereby future studies could deal with another sample in another country to recognise the effect of cultural diversity.

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