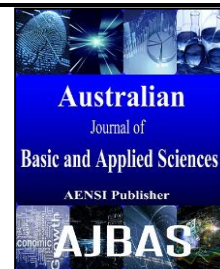




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Organizational Learning, Innovative Performance and the Moderating Effect of Entrepreneurial Orientation among Jordanian SMEs

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ABSTRACT

Background: Technology, knowledge, innovation are the main characteristic of successful organizations in today's economy. Innovative performance as a key asset is fundamental to building the competitive advantage of SMEs. It has also been shown that the innovative performance is a new concept, that firms are aspiring to achieve largely social interactions and technological relationships which allow easier accessing to information, reducing the amount of time and investment required to increase the levels of knowledge by organizational learning processes. **Objective:** The present study investigates empirically the role of moderating effect of entrepreneurial orientation in relationship between organizational learning and innovative performance among Jordanian SMEs. Results: The results of this study showed that dimensions of organizational learning (information acquisition, and organizational memory) were found positively and significantly related to innovative performance. Unexpectedly, it showed that there is no relationship between information distribution, information interpretation and innovative performance. In addition; this study did not support the effect of entrepreneurial orientation that moderate in relationship between organizational learning and innovative performance. **Conclusion:** organizational learning are good for enhancing innovative performance, which implies that SMEs must do to enhance these four dimensions of organizational learning (information acquisition, information distribution, information interpretation, and organizational memory) . In addition, this study did not support the effect of entrepreneurial orientation as moderator in relationship between organizational learning and innovative performance among SMEs in Jordan.

INTRODUCTION

Firms are faced with challenges concerning their survival and as such, they are continuously promoting differentiation and innovation whether or not it is related to the new product and service creation (Khalil, Nejadhussein & Fazel, 2013; Comlek, Kitapci, Celik & Ozsahin, 2012). Majority of firms are in need of creating innovative performance to direct them to create new products/services and enhancing the quality of their goods or services as well as acquiring an organizational structure that meets the requirements of competitive environment (Khalili *et al.*, 2013; Riani, 2013).

Therefore, in the context of SMEs, entrepreneurial environment with effective innovators are needed if such enterprises are desirous of increasing their level of expert and their survival level (Fernandez-Mesa & Alegre, 2015). SMEs displaying innovative performance may be affected by limitations in resources like the lack of qualified and experienced workforce or financial capabilities (De Leeuw, Lokshin & Duysters, 2014). However,

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there is a need for more empirical research to be conducted to shed light on the organizational learning concept in order to furnish an accurate description of the its effect. Prior studies reported that firm size positively and significantly influence innovative performance (Chen, Chen, & Vanhaverbeke, 2011).

According to Global Innovation Index (GII, 2016) report published by Cornell University, INSEAD International Business School, and the World Intellectual Property Organization (WIPO), Jordan falls to 9th place among Arab nations, and 82ed on a global scale in terms of overall innovative performance. On the basis of the index, Jordan went from the 64th position in 2014, 75th in 2015 to 82ed position in 2016 (GII, 2014; GII, 2015; GII, 2016).

In the present study, the researcher focuses on small and medium-sized enterprises (SMEs) in Jordan that have limited operations, minimal capital outlay and a few human resources. The SMEs are significantly different from their larger counterparts in their business models and thus, call for a divergent approach from them (Nasir, 2013). In the context of Jordan, although Jordanian SMEs contribute significant to the economy, the sector has been plagued with challenges beginning from when Jordan developed into a highly deregulated and open market economy. Jordanian government has acknowledged the importance of innovation in developing the country economy.

Literature Review:

Innovative Performance (IP):

Differentiation and continuous innovation are the main challenges for firms to survive, whether it is related to new products and services to be created (Khalili *et al.*, 2013). So, according to Khalili, *et al.* (2013) focused to definition of innovative performance in newness of products and services, they defined innovative performance as it concludes new goods or new services which are leading to improve the quality of products / services, and developing structure of organization with requirements of competitive environment.

Khalili, *et al.* (2013) proposed assessments to measure the innovative performance in firms that include; number of new products or service, number of innovations for processes and methods of work, number of innovations which are patented, adapting of organizational structure in mentally changing conditions of environment, how to marketing new products before than others competitors and finally the percentage of new products in the total of production. Furthermore, Hagedoorn and Cloudt (2003) defined innovative performance as the achievements of firms in terms of ideas, sketches, and models of new devices, products, processes and systems. But, Lokshin, Van Gils and Bauer (2009) focused to its definition of innovative performance as radical and incremental innovations which are the two extremes on the novelty degree of a product. According to Gunday, Ulusoy, Kilic & Alpkan (2011) that innovative performance is the integration of the overall organizational achievements that stems from its renewal and improvements efforts in different innovative aspect of firm namely, processes, products, and structure.

Previous researches have been shown that here are many factors that could effect on innovative performance. Some of these factors have a positive relationship with innovative performance. Some of factors include the organizational learning (Comlek *et al.*, 2012; Fernandez-Mesa & Alegre, 2015; Sanz-Valle, Naranjo-Valencia, Jiménez-Jiménez and Perez-Caballero, 2011; Wang, 2008; Wang & Ellinger, 2011), and entrepreneurial orientation (Khalili *et al.*, 2013; Riani, 2013). Furthermore, there is a lack of studies on entrepreneurial orientation that focusing on organizational learning and innovative performance. Hence, the researcher did not find single study that explains the moderating effect of entrepreneurial orientation in the relationships between organizational learning and innovative performance. Therefore, it is an indicator that entrepreneurial orientation, as a moderating variable with innovative performance, has not been extensively examined.

Organizational Learning:

The essence of organizational learning (OL) in creating knowledge within the organization works towards sustaining competitive advantage that leads towards the creation of novel markets and positions (Jones & Macpherson, 2006). Stated clearly, an organization's knowledge is considered as an asset that contributes when managed towards the innovative performance of the firm (Wang & Ellinger, 2011). However, non-systematic and inconsistent practices of learning are still common in SMEs where firm infrastructure and HR-related solutions are relatively weak (Tam & Gray, 2016).

The present study defines organizational learning as a process which involves information acquisition, information distribution, information interpretation, and organizational memory among employees in the organization (Wang & Ellinger, 2011). This definition covers all main dimensions of organizational learning which includes both adoption of behavior change and creation of knowledge at multiple levels within an organization and is most suitable definition for SMEs' learning context (Wang & Ellinger, 2011; Wang, 2008; Huber, 1991).

Organizational Learning and Innovative Performance (IP):

A review of literature also reveals that majority of the studies concerning organizational learning and innovative performance has shown a mix results when tested in various settings. Some prior studies that reported a positive and significant relationship between the two variables organizational learning and innovative performance (e.g. Abo-Kashef, 2013; Dada & Fogg, 2014; Fernandez-Mesa & Alegre, 2015; Santos-Vijande, López-Sánchez & González-Mieres, 2012); Wang & Ellinger, 2011; Zhou, Hu, H & Shi, 2015). Contrastingly, Comlek *et al.* (2012) and Abo-Kashef (2013) revealed positive impacts as some of OL dimensions on innovative performance but such impact was insignificant.

In conclusion, many studies have been conducted and found all four organizational learning dimensions such as information acquisition, information distribution, information interpretation, and organizational memory were positively and significantly related to innovative performance (Comlek *et al.*, 2012; Fernandez-Mesa & Alegre, 2015; Sanz-Valle *et al.*, 2011; Wang, 2008; Wang & Ellinger, 2011). Therefore, it is hypothesized that:

- H1: There is positive relationship between organizational learning and innovative performance
- H1a: There is positive relationship between information acquisition and innovative performance
- H1b: There is positive relationship between information distribution and innovative performance
- H1c: There is positive relationship between information interpretation and innovative performance
- H1d: There is positive between organizational memory and innovative performance

Entrepreneurial Orientation as Moderating Variable:

In order to maintain innovation and success in markets, it is important for firms to have assets, processes and structures that contribute to its flexibility and opportunities for sensing and acquiring (Jantunen, 2005). Lumpkin and Dess (1996) defined entrepreneurial orientation as the processes, practices and activities of decision making that facilitates new entry. It is a process of entrepreneurship that is known and accepted for its five dimensions namely innovativeness, riskiness, proactiveness, aggressive competitiveness and autonomy.

In the present study, entrepreneurial orientation is defined by adopting the definition from literature that describes it as the willingness of the firm towards adopting innovative activities and taking risks to come up with new products/services and to introduce new markets, and proactively make a move prior to its competitors in availing of new opportunities in the market (Soininen, Martikainen, Puumalainen & Kyläheiko, 2012). This definition covers all dimensions of entrepreneurial orientation that are generally highly intercorrelated with each other, which drives to combining these dimensions into one single concept (Soininen *et al.*, 2012)

Various studies have been conducted in relationship between entrepreneurial orientation and innovative performance. The studies that reported significantly and positively relationship between entrepreneurial orientation and innovative performance include Khalili *et al.* (2013), Riani (2013), Madhoushi (2011). Wiklund and Shepherd (2003) showed EO can assist innovative SMEs in a process, creating and introducing new products and technologies, can generate extraordinary performance.

Thus, the entrepreneurial orientation has not been studied previously as moderating variable with innovative performance. The study would expect the entrepreneurial orientation as interacting with the organizational learning to identify the moderating effects on innovative performance. The study expects the entrepreneurial orientation can be enhancing organizational learning-innovative performance relationships. Also, there is still exists an unclear support that indicates a direct relationship between the variables. According to Wales, Gupta and Mousa (2013a) that some of entrepreneurial orientation applications are largely unexplored as moderating variable.

Reviewing the literature also has indicated that the effect of moderating role of entrepreneurial orientation on the relationship between organizational learning and innovative performance has received less attention from researchers. Therefore, this study intends to expand the knowledge on innovative performance of SMEs by examining the entrepreneurial orientation as a moderator on the relationship between organizational learning and innovative performance.

Previous studies indicate that dimensions of EO; innovativeness, risk-taking and proactiveness exhibit moderate to correlations with one another in practice highly (Covin, Green & Slevin, 2006). According to Wales *et al.* (2013a), the dimensions in aggregate were frequently examined by the empirical studies; with roughly three out of every four adopting a unidimensional approach, suggests that there is strong convergence in the literature. Most frequently to form a unidimensional conceptualization of EO were combined ;the innovativeness, risk-taking and proactiveness dimensions; about 80 per cent of the total unidimensional studies conducted as a construction (Wales, Parida & Patel, 2013b), such as: Fernandez-Mesa and Alegre (2015), Soininen, Puumalainen, Sjögrén, Syrjä and Richter (2015), Shehu and Mahmood (2014), Dada and Fogg (2014), Kreiser (2011), Wu, Chang and Chen (2008), Avlonitis and Salavou (2007), Covin *et al.* (2006), Wiklund and Shepherd (2003), Kreiser, Marino and Weaver (2002), Covin (1991) and Covin and Slevin (1989).

Though there was limited study that focusing on the moderation effect of entrepreneurial orientation on organizational learning and innovative performance, the Resource-based View theory (Barney, 1991) argued that having the suitable resources are important to compete in the market and this is conclusively a matter of

entrepreneurial orientation. As argued by Nahapiet and Ghoshal (1998), innovation is a process of integrating assets and thus, entrepreneurial orientation may facilitate the firm's ability to appropriately utilize resources and innovates. In other writing, Wiklund and Sheperd (2003) also recommended that entrepreneurial orientation can enhance the relationship between performance of companies and knowledge-based resources. Therefore, it is hypothesized that:

H2: Entrepreneurial orientation moderates the relationship between organizational learning and innovative performance

H2a: Entrepreneurial orientation moderates the relationship between information acquisition and innovative performance

H2b: Entrepreneurial orientation moderates the relationship between information distribution and innovative performance

H2c: Entrepreneurial orientation moderates the relationship between information interpretation and innovative performance

H2d: Entrepreneurial orientation moderates the relationship between organizational memory and innovative performance

Underpinning Theory:

Based on the Resource-based View theory (RBV), the heterogeneous resources are characterized as valuable, rare, inimitable and non-substitutable (VRIN) to obtain and maintain competitive advantage of firm that could lead to enhanced firm performance (Barney, 1991). Availability of ideas, talents, projects and knowledge base of managers' and employees' by organizational learning, it is necessary to achieving of innovative performance. RBVs also has entrepreneurial orientation as its core where appropriate resources can be used to gain competitive advantage in the market and this ultimately depends on entrepreneurial orientation as innovation requires the combination of assets (Wu *et al.*, 2008).

Theoretical Framework:

As a result, the organizational learning and entrepreneurial orientation appear to be major interests in order to develop the capacity for innovative performance in organizations. Consequently, the above discussion leads to the theoretical framework as given in Figure 1.

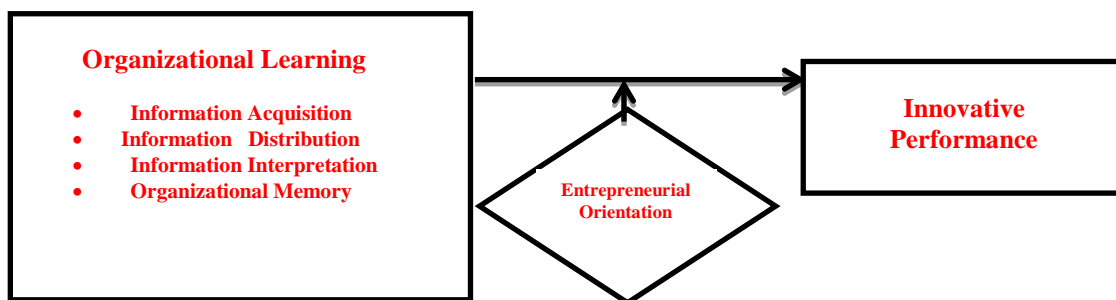


Fig. 1: Theoretical Framework

Research Methodology:

Respondents of the Study:

The total number of the SMEs in Jordan is 43091 (Social Security Corporation, 2016). However, for practical reasons, only 11227 SMEs in Amman, Irbid and Zarqa that have been in operation for more than 3 years were chosen in the population for this study. These cities were chosen as they are among the cities that have the most SMEs in Jordan.

Sampling method was a systematic random which applied in this study. 600 questionnaires were distributed through a representative appointed at each city. The distribution and collection of the questionnaires took approximately four months. Of the 600 questionnaires distributed to managers/owners of SMEs, only 325 questionnaires were collected to be usable for further analysis, that indicates a response rate of 54.1%. The respondents of this study consisted of 82.5% of the 325 SMEs in this survey were in Amman. Majority of the age of the SMEs (61.2%) were above ten years. According to type of industry that 51.4% of SMEs were manufacturing. In terms of the total number of employee in the SMEs, the category of 20 to 99 (medium enterprises) was the largest group (64.9%). Most of the ownership of SMEs had (46.2%) of limited liability.

Measurements:

All measures used a five-point Likert scale, whereby 1 represents ‘strongly disagree’, 2 represents ‘disagree’, 3 represents ‘neutral’, 4 represents ‘agree’ and 5 represents ‘strongly agree’. Firstly, innovative performance measured by seven items developed by Gunday *et al.*, (2011). Organizational learning was measured using by four dimensions namely, information acquisition, information distribution, information interpretation and organizational memory. Organizational learning is measured by 25 items developed by Wang and Ellinger (2011). Information acquisition was measured by seven items scale while information distribution was measure using by five items scale. Information interpretation is measured by five items and organizational memory was measured by eight items. Finally, entrepreneurial orientation is measured by 9 items developed by Soinenen *et al* (2012).

Data Analysis:

This study employed IBM SPSS Statistics for all descriptive analysis and partial least squares (PLS) path modeling using Smart PLS 2.0 software to perform data analysis (Wold, 1985; Hair, Hult, Ringle, & Sarstedt, 2014; Wong, 2013; Henseler, Ringle & Sinkovics, 2009). A model of PLS is analyzed and interpreted normally in two stages (Hair *et al*, 2014; Valerie, 2012); the measurement model and structural model to test the hypothesis.

Measurement Model:

According to Hair, Ringle and Sarstedt (2011), and Gotz, Liehr-Gobbers, and Krafft (2010), individual item reliabilities, convergent validity and discriminant validity were the three step procedures for evaluating the measurement model. All factor loadings (indicator loadings) should be higher than 0.70 (Hair *et al.*, 2014); Hair *et al.*, 2011). Based on the above recommendations, this study used a cut-off value for factor loadings at 0.70 as being significant. As shown in Table 1 and Figure 2, all item loads a range from 0.72 to 0.92 into their respective construct.

Next, the convergent validity of each construct was tested. According to Hair *et al.* (2011 and Valerie (2012) that convergent validity refers to the extent to which item truly represents the intended latent construct and indeed correlate with other measures of the same latent construct Convergent validity was assessed by examining the average variance extracted (AVE) and composite reliability (CR) of 0.70 (Hair *et al.*, 2011; Valerie, 2012). Chin (1998) recommends that AVE of above than 0.5 and the CR of 0.7 or above are deemed acceptable. As shown in Table 1, all loadings and AVE are above 0.5 and the composite reliability values are more than 0.7. Therefore, it can be concluded that convergent validity has been established.

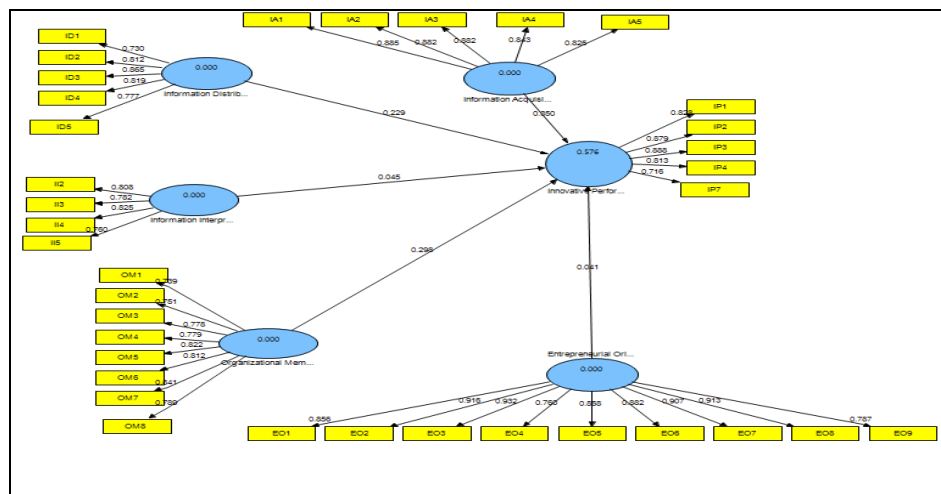


Fig. 2: Construct Validity for Study Model

Table 1: Result of the Measurement Model – Convergent Validity

Constructs	Items	Loading	AVE	CR
Innovative Performance	IP1	0.83	0.68	0.92
	IP2	0.88		
	IP3	0.89		
	IP4	0.81		
	IP7	0.72		
Information Acquisition	IA1	0.89	0.75	0.94
	IA2	0.88		
	IA3	0.88		

	IA4	0.84		
	IA5	0.83		
Information Distribution	ID1	0.73	0.64	0.90
	ID2	0.81		
	ID3	0.86		
	ID4	0.82		
	ID5	0.78		
Information Interpretation	II2	0.81	0.64	0.87
	II3	0.78		
	II4	0.83		
	II5	0.76		
Organizational Memory	OM1	0.74	0.62	0.93
	OM2	0.75		
	OM3	0.78		
	OM4	0.78		
	OM5	0.82		
	OM6	0.81		
	OM7	0.84		
	OM8	0.79		
Entrepreneurial Orientation	EO1	0.86	0.76	0.94
	EO2	0.92		
	EO3	0.93		
	EO4	0.76		
	EO5	0.87		
	EO6	0.88		
	EO7	0.91		
	EO8	0.91		
	EO9	0.79		

The discriminant validity as next step, according to Hair *et al.* (2011) stated that discriminant validity stipulates that each latent constructs' AVE should be higher than the construct's highest squared correlation with other latent construct (Fornell–Larcker's, 1981) and the indicators loadings should be greater than all its cross loadings. In the present study, discriminant validity of the measures was assessed through the Fornell and Larcker's (1981) criterion. Similar with correlation matrix depicted in Table 2.

Table 2: Discriminant Validity of Construct

	Entrepreneurial Orientation	Information Acquisition	Information Distribution	Information Interpretation	Innovative Performance	Organizational Memory
Entrepreneurial Orientation	0.98					
Information Acquisition	-0.03	0.97				
Information Distribution	-0.11	0.46	0.95			
Information Interpretation	-0.17	0.45	0.53	0.93		
Innovative Performance	-0.06	0.64	0.60	0.49	0.96	
Organizational Memory	-0.21	0.56	0.63	0.58	0.66	0.96

Note: Diagonal represents the square root of Average Variance Extracted (AVE) while the other entries represent squared correlations

Structural Model:

The structural model illustrates the relationships between latent variables or constructs that were hypothesized in the model of research. The significance of all path estimates and the variance explained (R²) of the endogenous constructs were applied to determine the goodness of the theoretical model (Chin, 2010). The results of the structural model are presented from the PLS output in Table 3 and Figure 3.

Information acquisition was found positively and significantly related to innovative performance ($\beta = 0.298$, $t = 2.046$, $p < 0.05$), hence, supporting Hypothesis 1a. In addition, Hypothesis 1b showed positive relationship and no significant between information distribution and innovative performance ($\beta = 0.079$, $t = 0.507$, $p > 0.10$), thus, this Hypothesis 1b was not supported. Similarly, information interpretation was found

positively and non-significantly related to innovative performance ($\beta = 0.098$, $t = 1.167$, $p > 0.10$), hence, Hypothesis 1c was not supported. Lastly, organizational memory was found positively and significantly related to innovative performance ($\beta = 0.389$, $t = 2.202$, $p < 0.05$), hence, supporting Hypothesis 1d.

Table 3 and Figure 3 present the results on the moderating effect of entrepreneurial orientation on the relationship between organizational learning and innovative performance. Hypothesis 2a predicted an interaction between Information acquisition and entrepreneurial orientation to effect innovative performance. However, the hypothesis was not supported ($\beta = 0.138$, $t = 0.505$, $p > 0.10$). Similarly, Hypothesis 2b, which predicted an interaction between information distribution and entrepreneurial orientation to effect innovative performance, hence, the hypothesis was not supported ($\beta = -0.400$, $t = 1.166$, $p > 0.10$). In addition, Hypothesis 2c, which predicted an interaction between information interpretation and entrepreneurial orientation to effect innovative performance, hence, the hypothesis was not supported ($\beta = -0.190$, $t = 0.841$, $p > 0.10$). Lastly, Hypothesis 2d, which predicted an interaction between organizational memory and entrepreneurial orientation to effect innovative performance, hence, the hypothesis was supported ($\beta = -0.218$, $t = 0.646$, $p > 0.10$).

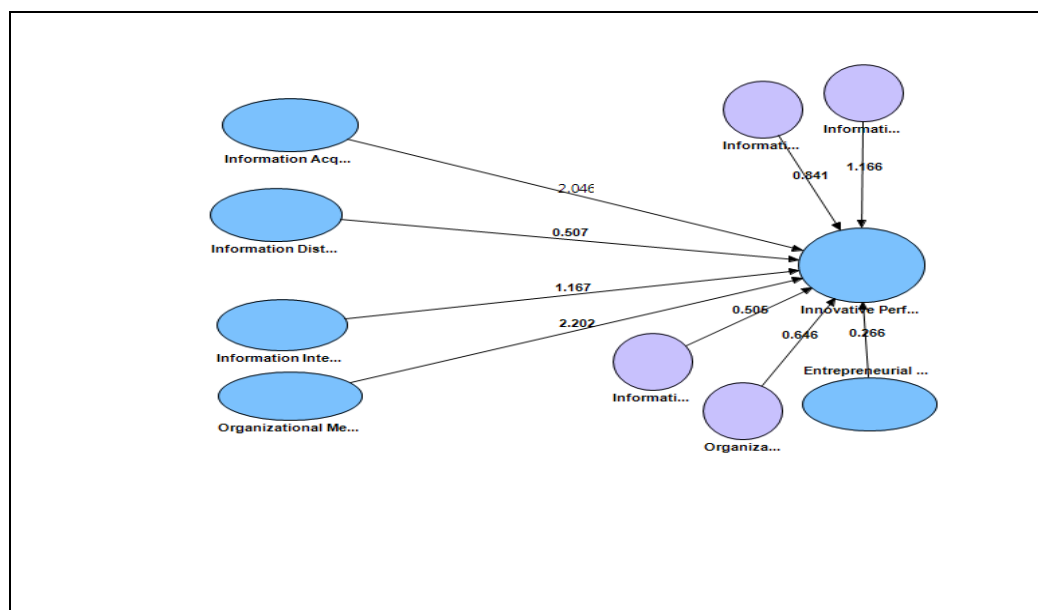


Fig. 3: The Structural Model

Table 3: Summary of the Structural Model

Hypothesis	Relation	Beta	Standard Error	T value	P-value	Finding
H1a	Information Acquisition -> Innovative Performance	0.298	0.146	2.046	0.02	Supported
H1b	Information Distribution -> Innovative Performance	0.079	0.157	0.507	0.3	Not Supported
H1c	Information Interpretation -> Innovative Performance	0.098	0.084	1.167	0.12	Not Supported
H1d	Organizational Memory -> Innovative Performance	0.389	0.170	2.202	0.01	Supported
H2a	Information Acquisition * Entrepreneurial Orientation -> Innovative Performance	0.138	0.273	0.505	0.3	Not Supported
H2b	Information Distribution * Entrepreneurial Orientation -> Innovative Performance	0.400	0.343	1.166	0.12	Not Supported
H2c	Information Interpretation * Entrepreneurial Orientation -> Innovative Performance	-0.190	0.226	0.841	0.2	Not Supported
H2d	Organizational Memory * Entrepreneurial Orientation -> Innovative Performance	-0.218	0.338	0.646	0.26	Not Supported

Note: ***Significant at 0.01 (1-tailed), **significant at 0.05 (1-tailed), *significant at 0.1 (1-tailed).

RESULTS AND DISCUSSION

In general, the findings of this study support previous studies, except the finding regarding to information distribution and information interpretation. The findings relating to information distribution and information interpretation are not as hypothesized; it shows that there is no relationship between information distribution, information interpretation and innovative performance. Hence, let's examine this finding first. Unexpectedly,

the current findings showed that information distribution is not a factor that could influence innovative performance; these findings are somewhat not consistent with prior research that has found relationship between information distribution and innovative performance. (Comlek *et al.*, 2012; Fernandez-Mesa & Alegre, 2015; Sanz-Valle *et al.*, 2011; Wang, 2008; Wang & Ellinger, 2011). One possible explanation for this situation is that information distribution is the spread of knowledge among the members of the organization to assist transference through individual organizational level of learning (Wang & Ellinger, 2011), but SMEs do not have enough of these resources that enhance the practices. Jordanians SMEs still lacking of activities that information distribution contains do help SMEs members to share and transfer their individual-level learning and organizational-level to improve innovative performance.

According to findings of the study also revealed that information interpretation and innovative performance was not significantly related. These findings are somewhat not consistent with prior research that has found relationship between information interpretation and innovative performance (Comlek *et al.*, 2012; Fernandez-Mesa & Alegre, 2015; Sanz-Valle *et al.*, 2011; Wang, 2008; Wang & Ellinger, 2011). However, a plausible explanation for this inconsistent finding might be due to the information interpretation that included the sharing of the organization of its aims, knowledge and experience to its committed employees and the development of internal rotation programs for employee shifting from one department to the next while providing learning opportunities (Wang & Ellinger, 2011). Jordanian SMEs due to the obvious weakness in its internal environment to work, especially in teamwork, as well as Jordanian SMEs (especially small companies) continue to suffer in the training process and maybe this is due to the limited size of the companies and shortage of the government support to SMEs.

The result from the present study indicated that an information acquisition and organizational memory were positively related to innovative performance. This finding supports previous studies conducted by Comlek *et al.* (2012), Fernandez-Mesa and Alegre, (2015), Sanz-Valle *et al.* (2011), Wang (2008) and Wang and Ellinger (2011). Information acquisition is the important factor to gain new knowledge to improve performance of companies. In the context of Jordanian SMEs, external sources for new knowledge production are needed to development new innovation for performance. Lastly, the findings indicated that organizational memory was the important predictor to innovative performance, although organizational memory consider as final stage in the organizational learning process. In addition, it is important for SMEs to own and use updated databases to keep abreast of the current knowledge and experience.

Unexpectedly, from the findings, H2 is totally rejected. Entrepreneurial orientation did not significantly moderate on the relationship between organizational learning and innovative performance. However, a plausible explanation for this inconsistent finding might be due to Jordanian SMEs still suffering in the culture of entrepreneurship, although the correlation with knowledge and learning process, where is the source of ideas for raising the level of innovation in SMEs performance. Theoretically, reviewing the literature has shown that there are lack of studies that testing entrepreneurial orientation as a moderator in innovative performance. If there were studies testing entrepreneurial orientation as a moderator, it was in a different context and in firm performance only (Richard, Barnett, Dwyer & Chadwick, 2004; Wu *et al.*, 2008; Wales *et al.*, 2013b; Li, Zhao, Tan & Liu, 2008).

In this empirical study, it has some limitations; which recovery of them may open new research for further studies. In later studies, the model may be enlarged with some control variables, e.g. firm size and age and this mode of study may be examined over a big number of respondents covering a larger number of firms and industries which are still needed to discover the effects of relationship between organizational learning and innovative performance.

This study can make an effective contribution to understand the utmost way to plan for successful SMEs in Jordan. This study also should benefit both scholars and practitioners regarding ways for increasing the level of innovative performance among the SMEs. A literature search reveals limited empirical studies on the issues of organizational learning and innovative performance among Jordanian SMEs.

Conclusion:

In conclusion, organizational learning are good for enhancing innovative performance, which implies that SMEs must do to enhance these four dimensions of organizational learning. The present study investigates empirically the role of moderating effect of entrepreneurial orientation in relationship between organizational learning and innovative performance among Jordanian SMEs. The findings of this study showed that dimensions of organizational learning (information acquisition, and organizational memory) were found positively and significantly related to innovative performance. Unexpectedly, it showed that there is no relationship between information distribution, information interpretation and innovative performance. In addition; this study did not support the effect of entrepreneurial orientation that moderate in relationship between organizational learning and innovative performance.

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