
Organizational Performance and Entrepreneurial Orientation: The Intervening Role of Organizational Learning

Sheema Matloob¹

School of Management, Universiti Sains Malaysia, Malaysia

Muzaffar Hussain Shah

College of Business, Universiti Utara Malaysia, Malaysia

Saeed Abbas Shah

Sukkur IBA University, Pakistan

Muhammad Wasim Jan Khan

Institute of Southern Punjab, Pakistan

Abstract

Many past studies have examined the association between entrepreneurial orientation (E.O.) and organizational performance (O.P.). However, these studies have not adequately addressed the mediating roles of acquisition learning (A.L.) and experiential learning (E.L.) on organizational performance. Given this gap, we have developed a new model that contains six direct relationships, three mediating relationships, and one multi-mediating relationship. The focus of the study was on Indonesian Pharmaceutical SMEs. We have collected a sample of 365 respondents non-randomly. For statistical analysis, we have used Smart PLS version 3.2. The statistical analysis includes reliability, validity, and descriptive statistics. The results confirm that acquisition learning (A.L.), experiential learning (E.L.), and entrepreneurial orientation (E.O.) promote organizational performance (O.P.). We also found that entrepreneurial orientation (E.O.) impacts acquisition learning (A.L.) and innovative performance (I.P.) but does not affect organizational performance (O.P.). However, the results suggest that acquisition learning (A.L.) and experiential learning (E.L.) are positively linked. Our results also support all the mediating relationships.

Keywords: *Acquisition learning, experiential learning, entrepreneurial orientation, innovative performance, organizational performance, SMEs, Indonesia.*

¹Corresponding Author: Sheema Matloob; Email: sheemamatloob1100@outlook.com

Introduction

SMEs contribute to employment generation, financial and economic development. (Siriattakul, Sawasdee, Kalawong & Jermsittiparsert, 2019). SMEs help in mitigating unemployment, reducing poverty, and contributing to other socio-economic issues. In Southeast Asia, about 80% of workers are employed in SMEs with a contribution towards GDP of about 50%. Also, SMEs represent 96 % of business entities in this region (Rosli, Lokman, Aziz & Hamidi, 2015). Indonesia's SMEs, especially the pharmaceutical sector, is considered a strategic industry for growth and development. Thus, it needs support from the government regarding soft loans, low taxes, and rebates on imports of plants and machinery (Wibowo, Ahmad & Fauzi, 2019). However, recently the performance of pharmaceutical SMEs in Indonesia has declined significantly.

In 2014, the Indonesian pharmaceutical sector gross sales were about USD 23.2bn. In the same year, pharmaceutical SMEs' total sales in countries such as the United States, Canada, and Japan were USD 1000bn, USD 600bn, and USD 700bn, respectively. Additionally, the Pharmaceutical SMEs' contribution to GDP in 2009 was 0.880%, which decreased to 0.65% by 2014. SMEs' contribution to the Indonesian economy is presented in Table 1. The table reflects the importance of SMEs for the growth and development of the Indonesian economy.

Table 1: SMEs Contribution in Indonesian Economy

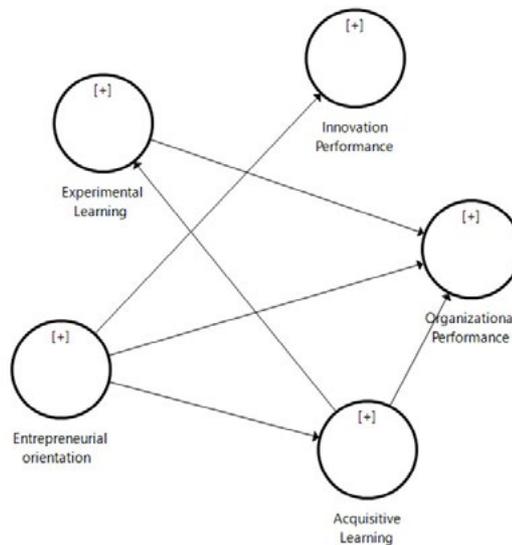
Types	GDP	Employment
Micro	30.06%	89.17%
Small	12.54%	4.74%
Medium	14.49%	3.11%
Total	57.08%	57.08%

Given the importance of SMEs in Indonesia, we have examined the consequence of entrepreneurial orientation (E.O.) on organizational performance (O.P.) and the mediating roles of organizational acquisition learning (A.L.) and experiential learning (E.L.) on the organizational performance (O.P.)

Literature Review

Many studies have found a positive association between entrepreneurial orientation (E.O.) and firm performance (F.P.) in the United States. However, Tang et al. (2008) and Wang (2008) suggest that not many studies have replicated this relationship outside the United States. Moreover, there are several intervening variables that many studies have not incorporated in their studies. We believe that acquisition learning (A.L.) and experiential learning (E.L.) are not only directly associated, but they act as mediators

between entrepreneurial orientation (E.O.) and organizational performance (O.P.). Given this gap, we have developed a new model that has six direct relationships, three mediating relationships, and one multi-mediating relationship. The developed model, presented in Figure 1, is followed by a discussion of the proposed relationships. We believe that this study may cross-fertilize the domains of entrepreneurship and organizational learning (O.L.).



Hypothesis Development

Acquisition Learning and Experiential Learning

Organizational learning (O.L.) is a recurring and dynamic process that changes with an organization's internal and external environment (Teng, 2007; Nonaka & Takeuchi, 1995). Thus, it implies that both acquisition learning (A.L.) and experiential learning (E.L.) have a bidirectional association. That is, acquisition learning (A.L.) has a causal effect on experiential learning (E.L.) and vice versa (Zahra & George, 2002). Dess, Ireland, Zahra, Floyd, Janney and Lane (1997) believe that the dynamics of an economy and technology are not stagnant but change drastically. Thus, it must enhance the current knowledge gaps by assimilating outside knowledge for an organization's sustainability. Firms that promote an internal learning culture can benefit from external and experimental learning (Su, Tsang & Peng, 2009).

Similarly, Leonard-Barton (1995) suggests that organizational creativity depends on two aspects of learning: internal and external knowledge. Consequently, these aspects enable firms to internalize new and innovative ideas. Thus, firms that take advantage of acquisition and experiential learning are comparatively less rigid than other firms (Leonard-Barton, 1995).

Keil (2004) based on a case study, concluded that business entities could acquire new competencies by integrating “acquisition learning and external knowledge” through experiential learning. These competencies not only give a competitive edge to firms, but it makes it difficult for competitors to imitate their acquired skills (Cohen & Levinthal, 1990; Leonard-Barton, 1995). Consequently, it promotes sustainable growth in a firm. Zahra et al. (1999) believe that the acquired knowledge and competencies break the status quo of an organization and prepare it to take advantage of the ever-changing economy and maintain sustainability. Thus, external experience is a precursor to an organization’s learning process (Armstrong et al., 2008).

H1: Acquisition learning (A.L.) promotes experiential learning (E.L.).

Learning and Firm Performance

The association between leaning and firm performance is well established. For example, a study on organizational learning concluded that business entities that give importance to knowledge are successful both locally and internationally (Kropp, Lindsay & Shoham, 2008). Similarly, Lynn, Skov and Abel (1999) believe that firms with a high orientation towards learning are more successful in developing innovative products as compared with others. Both experiential learning (E.L.) and acquisition learning (A.L.) are critical for sustainable growth of a firm. However, their effect on organizational performance (O.P.) is different. Firms that are capable of understanding this difference are in a better position to utilize scarce resources efficiently. Cohen and Leviathan (1990) suggest that firms that are willing to access external knowledge generally give better performance than firms that rely solely on internal knowledge. Matusik (2002) believes that firms that have a high inclination to acquire and use external knowledge are more efficient. Atuahene-Gima (2005) also concluded that firms who believe and practice acquisition learning (A.L.) are more successful in recognizing new business opportunities. Additionally, such firms are in a better position to recognize consumer preferences and exploit new business opportunities. On the contrary, many researchers believe that acquisition learning (A.L.) through external sources may not give a competitive edge to a firm, since external knowledge is not unique, and is also available to competitors (Barney, 1991). In the competitive era, firms have limited resources, therefore spending it on acquiring knowledge that is not unique is considered a waste of scarce resources (Hughes & Morgan, 2007; Sirmon, Hitt & Ireland, 2007).

Many researchers have concluded that acquisition learning (A.L.), as compared to experiential learning (E.L.), is time-consuming. They believe that in the acquisition learning (A.L.) process, firms have to align their external knowledge with their vision and competitive strategies, which is time-consuming (March, 1991). Additionally, external experience is complex, and many firms cannot integrate external knowledge with their competencies (Cohen & Levinthal, 1990; Kogut & Zander, 1992). Similarly, March (1991) argues that firms seeking external knowledge may gather too much information, of which many of them may be undeveloped ideas and irrelevant to their requirements. Mowery, Oxley, and Silverman (1996) believe that external knowledge may not be aligned with the firm's core knowledge and cultural values.

According to the resource-based view (RBV), knowledge acquired through experiential learning (E.L.) is available within the organization, which gives a competitive edge to firms. Thus, in experiential learning (E.L.), firms use historical experience and information, which is more reliable and unique (Barney, 1991; Lynn, Skov, & Abel, 1999). Firms through experiential learning (E.L.) generate new knowledge based on existing skills and know-how of firms. Thus, when using internal knowledge, a firm does not face conflict and resistance from established norms (Kogut & Zander, 1992; March, 1991; Nelson, 1982). New knowledge generated through experiential learning (E.L.) may not be unique but difficult for competitors to copy (Grant & Baden-Fuller, 2004; Kogut & Zander, 1992). Burpitt (2004) argues that firms who adopt the experiential learning (E.L.) process may benefit from increased revenue and find themselves in a better position to exploit new market opportunities.

In a strategic alliance context, the experiential learning (E.L.) process is more effective as it helps firms integrate and internalize knowledge with its business processes (Grant & Baden-Fuller, 2004). Many studies did not find any conclusive evidence on the association between external expertise and alliances' value. These studies concluded that it is more convenient for firms to manage intra-firm knowledge as it is aligned with their standards. On the contrary, inter-firm experience may have a conflict with the internal and external expertise. Thus, if firms focus on experiential learning (E.L.), they can upgrade their internal capabilities for value creation and tapping new market opportunities.

H2: Acquisition learning (A.L.) enhances organizational performance (O.P.).

H3: Experiential learning (E.L.) enhances organizational performance (O.P.).

Entrepreneurial Orientation and Acquisition Learning

Firms with high entrepreneurial orientation (E.O.) can only grow if they recognize and assimilate knowledge (Huber, 1991). Thus, organizational learning (O.L) is a critical facet for entrepreneurship since it helps acquire and utilize knowledge (Ireland, Hitt & Sirmon, 2003). Entrepreneurial firms acquire new knowledge, as they believe that it is a source of competitive advantage (Keh, Nguyen & Ng, 2007). Similarly, Sapienza, de-Clercq and Sandberg (2005) believe that proactive firms are more focused on acquiring and utilizing knowledge than firms that are not proactive. A study found that dynamic firms in the U.K. are more innovative, willing to take risks, and promote a knowledge sharing culture. Thus, these firms are in a better position to develop a knowledge-based learning process, due to which their capabilities to tap new opportunities increase considerably (Fosfuri & Tribó, 2008; Slater & Narver, 1995). Firms with high entrepreneurial orientation (E.O.) promote a culture of organizational learning, which is a precursor to strategic benefits and dynamic capabilities (Zahra, Nielsen, & Bogner, 1999).

Taheri, Bititci, Gannon and Cordina (2019) believe that firms in transitional economies have to deal with a dynamic environment. In this situation, firms with entrepreneurial orientation (E.O.) are more inclined towards organizational learning, enabling them to adapt and respond to new opportunities. The effect of experiential learning (E.L.) and acquisition learning (A.L.) on a firm are not the same because both of them have different features (Dess et al., 2003). Innovation is a complex process, and firms can either acquire knowledge internally or externally from the market (Peng, 2003). Domestically acquired knowledge provides information to firms, which is organization-specific. This information helps firms to perform complex and innovative tasks (Argyris & Schon, 1996). On the other hand, many firms acquire external knowledge from their inter-organizational partners or the external environment (Matusik, 2002). Many researchers believe that entrepreneurial success depends on learning (Sapienza et al., 2005). However, little empirical evidence is available on the impact of entrepreneurial orientation on experiential and acquisition learning (Sapienza et al., 2005).

Experiential learning (E.L.) is critical for firms in transitional economies because they lack resources and have to acquire knowledge about technological development from external sources (Teng, 2007). On the contrary, Dess et al. (2003) and Zhou et al., (2005) believe that a firm which adopts the experiential learning (E.L.) process has to spend fewer resources, and has specific outcomes. Thus, entrepreneurial firms can bridge the gap of required information through internally generated information (Dess et al., 2003; Zhou et al., 2005). Zhou et al., (2005) emphasize that firms with a high level of entrepreneurial orientation can benefit from experiential learning (E.L.) by extending their business practices to meet the changing requirements. Additionally, in

experiential learning (E.L.), the new knowledge generated internally may not conflict with the internal business process and may have more adaptability (Kogut & Zander, 1992). Thus, entrepreneurs proactively focus on gathering and assimilating internally generated knowledge to align with the changing business models.

Many firms believe that knowledge generated within a firm is outdated and private. Thus, it cannot be used to compete globally (Matusik, 2002). These firms also believe that the knowledge acquired through networking, alliances, and collaboration is more conducive to improve organizational performance and compete globally (Liao et al., 2013; Lyons, 2007). Bhuian, Menguc, and Bell (2005) suggest that experiential learning (E.L.) has a linear association with acquisition learning (A.L.), and entrepreneurial orientation (E.O.) has a non-linear impact on acquisition learning (A.L.). Firms with low entrepreneurial exposure avoid taking risks and have little inclination to change their existing strategies. They are also reluctant to innovate using external knowledge. This inert behavior of a firm adversely affects its performance (Atuahene-Gima & Ko, 2001; Murray et al. 2005).

Contrarily, firms with high entrepreneurial orientation (E.O.) are more open to adopting innovative ideas. These firms believe that new ideas emerge from internal knowledge (Kim & Mauborgne, 2005; Atuahene-Gima et al., 2001). Thus, such organizations tend to develop innovative ideas by exploiting knowledge within the organization (Bhuian et al., 2005; Liao & Wu, 2009). Many organizations have moderate levels of entrepreneurial orientation (E.O.). Such organizations use both internal and external knowledge related to new market opportunities and technological innovation.

H4: Entrepreneurial orientation (E.O.) enhances acquisition learning (A.L.).

Entrepreneurial Orientation and Innovative Performance

Entrepreneurial orientation (E.O.) significantly depends on a firm's "capabilities and intention to develop new products and services." Highly innovative firms develop a culture in which all employees are encouraged to participate and share their opinion on existing operations. Consequently, such a culture enhances the innovativeness of the employees (Mbizi, Hove, Thondhlana & Kakava, 2013). However, few studies have used both innovativeness and upgrading in the context of entrepreneurial orientation (E.O.). However, many researchers believe that "upgrading" is a function of innovativeness. Innovation is a process in which firms ensure that their products and services continue to improve. Upgrading is a function of innovativeness but is specifically related to value-added products. In the case of up-gradation, a firm launches its new upgraded product in a new market segment. A firm's entrepreneurial innovativeness depends on four

facets, which are “process, product, chain or functional upgrading” (Kaplinsky & Morris, 2003). Many researchers agree with the four aspects of entrepreneurial innovation proposed by Kaplinsky and Morris (2003).

On the contrary, some researchers believe that technological innovation and up-gradation are the same (Song, Ma & Yu, 2019; Al-Jinini, Dahiyat & Bontis, 2019). For example, technological innovativeness (T.I.) consists of many steps, including “technological, scientific, and commercial development” (Ireland et al. 2003). Entrepreneurial firms spend considerable resources on promoting innovation. Consequently, as a firm’s becomes more innovative, its performance improves. Additionally, factors that contribute to a firm’s creativity include “research and development, training, and marketing strategies.” Lyons et al. (2007) have described innovation as a creative application of the business process for achieving innovative excellence. Thus, innovativeness is a process of generating new concepts by focusing on ideas and information shared by a firm’s employees. Many studies have found a positive association between innovativeness and profitability (Roberts, 1999; Lyons et al., 2007). Thus, firms with high entrepreneurial orientation (E.O.) regularly enhance their innovative performance, which results in increased market share and profit (Ireland et al. 2003). Innovation provides a monopolistic advantage to entrepreneurial firms. However, this advantage has a short period since competitors also develop similar innovative products (Hamel, 2000).

H5: Entrepreneurial orientation (E.O.) enhances innovative performance (I.P.).

Entrepreneurial Orientation and Organizational Performance

Many past studies have documented that firms with high entrepreneurial orientation (E.O.) take more risks than other firms. Consequently, such firms achieve sustainable growth and competitive advantage (Roxas, Ashill & Chadee, 2017). Altinay et al. (2015), based on a survey in Northern Cyprus, concluded that more innovative and risk-taking firms have a larger market share and sustainable growth. In the same context, Roxas, Ashill, and Chadee (2017) found that many SMEs in the Philippines who adopted an aggressive stance towards a sustainable environment have better organizational performance than others. Altinay et al. (2015), based on a meta-analysis of 51 articles, concluded that firms that promote an entrepreneurial culture are more successful than those firms whose inclination towards entrepreneurship is low. Wiklund and Shepherd (2005) based on a survey of 808 Swedish SMEs, found that three facets of entrepreneurial orientation (i.e., “innovativeness, proactiveness, and risk-taking”) individually and collectively affect organizational performance.

On the contrary, Hakala (2013) and Rauch, et al. (2009) believe that the association between entrepreneurial orientation (E.O.) and organizational performance is not consistent. The relationship depends on the type of measure used in a study or the context of research. For example, a study found a partial impact of entrepreneurial orientation (E.O.) on organizational performance (O.P.). While another study concluded that the effect of entrepreneurial orientation (E.O.) and organizational performance (O.P.) is non-linear (Kreiser, Marino, Kuratko & Weaver, 2013; Hakala, 2013; Rauch et al., 2009).

H6: Entrepreneurial orientation (E.O.) enhances organizational performance (O.P.).

Mediating Relationships

The sustainability of an entrepreneurial organization depends on the knowledge which it can acquire internally (i.e., experiential learning) and externally (i.e., acquisition learning) (Matusik, 2002). One of the disadvantages of experiential learning (E.L.) is that the internally generated information often is not aligned with the demands of the changing external environment. Many researchers believe that firms with high entrepreneurial orientation (O.E.) have an increased inclination to take risks. Therefore, they have a higher tendency to acquire knowledge from outside despite the high cost and misalignment of their experience with their vision (Liao et al., 2013). Firms with low entrepreneurial orientation (E.O.), avoid taking risks. Therefore, they tend to rely more on experiential learning (E.L.) (Bhuan, Menguc & Bell, 2005).

Technological advancement and globalization have contributed to a business environment, which changes drastically. Thus, a firm's sustainability depends on acquiring knowledge from both the internal and external sources (Zahra & George, 2002). However, firms should align the acquired knowledge from outside sources with its core business values and practices. Therefore, successful firms acquire knowledge from external sources, and by the process of experiential learning (E.L.), they decide which information they can use for their growth and sustainability. Thus, there is a positive association between acquisition learning and experiential learning (Teng, 2007; Nonaka & Takeuchi, 1995).

Grant and Baden-Fuller (2004) believe that firms in the prevailing dynamic business environment need to have foreign collaboration and alliances. Thus, firms for such an arrangement cannot rely on internally generated information. They need to acquire outside knowledge to integrate and internalize it with the firm's core values. Firms that can do that have sustainable growth and performance (Grant & Baden-Fuller, 2004). Firms in developing economies have limited resources. Therefore, many firms are

reluctant to spend their resources on acquiring external knowledge, which may or may not be aligned with their business processes (Dess et al., 2003). Thus, such firms believe that information available within the organization is more relevant for enhancing organizational performance. Additionally, Zhou et al. (2005) find that firms can improve their performance by extending the prevailing business practices to generating new and innovative business practices (Teng, 2007). Based on the interrelationship of “acquisition learning (E.L.), experiential learning (E.L.), and organization performance,” we proposed the following mediating relationships:

H7: Acquisition learning (A.L.) mediates the entrepreneurial orientation (E.O.) and experiential learning (E.L.) relationship.

H8: Acquisition learning (A.L.) mediates the entrepreneurial orientation (E.O.) and organizational performance (O.P.) relationship.

H9: Experiential learning (E.L.) mediates the acquisition learning (A.L.) and organizational performance (O.P.) relationship.

Multi-Mediating Effect on Organizational Performance

In the above section, we have provided theoretical support on the association between “entrepreneurial orientation, acquisition learning, experiential learning, and organizational performance”. Therefore, we argue that both acquisition learning (A.L.) and experiential learning (E.L.) would have a multi-mediating effect on entrepreneurial orientation and organizational performance.

H10: Acquisition learning (A.L.) and experiential learning (E.L.) have a multi-mediating effect on entrepreneurial orientation (E.O.) and organizational performance (O.P.).

Methodology

Sample and Procedure

The study has focused on Indonesian pharmaceutical SMEs. We distributed 400 questionnaires to the managers and owners of SMEs. We received 356 filled-in questionnaires. The respondents’ profile is as follows. Most of the respondents were males (i.e., 72%), and the remaining 28% were females. About 78% of respondents were married, and the remaining 22% were single. Majority of the respondents (39%) aged between 35 to 45 years. In terms of education, 40% of respondents had an education equivalent to high school. 45% of the respondents had bachelor’s degrees, and 15% had masters’ degrees.

Scales and Measures

The measurement scale of variables was adapted from the previous literature. All the constructs were based on a “five-point Likert Scale, where one represents highly disagree, and five represents highly agree.” The questionnaire has five latent variables which are: (1) acquisition learning (A.L.) with 4 items, (2) entrepreneurial orientation (E.O.) with 5 items, (3) experiential learning (E.L.) with 5 items, (4) innovative performance (I.P.) with 5 items, and (5) organizational performance (O.P.) with 5 items. All the constructs were adapted from Zho et al., (2011) except organizational performance which was adapted from Frey (2019).

Results

Descriptive Statistics

In Table 2, we present the results of the descriptive statistics, including “mean, S.D., composite reliability and AVE.”

Table 2: Descriptive Statistics

	Cronbach's Alpha	Mean	SD	Composite Reliability	AVE
Acquisition Learning	0.848	3.86	1.13	0.908	0.768
Entrepreneurial Orientation	0.689	3.89	1.34	0.831	0.623
Experiential Learning	0.864	4.25	1.17	0.907	0.709
Innovative Performance	0.904	3.77	1.90	0.933	0.777
Organizational Performance	0.776	4.15	1.76	0.866	0.684

The results show that the Cronbach's alpha value range from 0.689 to 0.904. It is the highest for innovative performance (IP) (Mean=3.77, SD=1.90, α =0.904) and the lowest for entrepreneurial orientation (Mean= 3.89, SD=1.34, α =0.689). Thus, our results suggest that all the constructs have an acceptable internal consistency (Hair Jr et al., 2014). The results also show that composite reliability values range from (0.831 to 0.933). Also, the AVE values range from 0.623 to 0.777. Given the composite reliability values and AVE, we can infer that each construct's indicator variables are conceptually related.

Discriminant Validity

We have used the Fornell and Larcker (1981) criteria to examine “the uniqueness and distinctiveness” of the study's constructs. Table 3 contains a summary of results.

Table 3: Summary of Results

	AL	EO	E.L.	I.P.	OP
Acq. Learning	0.876				
Ent. orientation	0.475	0.789			
Exp. Learning	0.597	0.618	0.842		
Innovation Per.	0.437	0.617	0.615	0.882	
Org. Per.	0.875	0.518	0.715	0.495	0.897

The results suggest that all the latent variables are “unique and distinct” as the AVE’s square roots are greater than the correlation values (Fornell & Larcker, 1981).

Confirmatory Factor Analysis

We have performed confirmatory factor analysis for understanding the association between the latent variables and their indicator variables. The summarized results are presented in Table 4.

Table 4: Summary of CFA Results

	Acq. Learning	Entrepreneurial orientation	Exp. Learning	Innovation Performance	Org. Performance
1	0.878				
2	0.918				
3	0.831				
4	0.901				
5					
6		0.67			
7		0.843			
8		0.842			
9		0.845			
10					
11			0.856		
12			0.827		
13			0.845		
14			0.841		
15			0.863		
16				0.898	
17				0.92	
18				0.868	
19				0.840	
20				0.842	

21	0.795
22	0.887
23	0.796
24	0.754
25	0.750

Our results in the context of CFA shows that the factor loading of each indicator variable is greater than 0.60. Thus, we have inferred a theoretical association between latent variables and respective indicator variables (Ringle et al., 2005).

Direct Hypotheses

We have proposed six direct hypotheses that the study empirically tested through bootstrapping. Table 5 shows the results related to the direct hypotheses, whereas the measurement and structural models are depicted in Figures 2 and 3, respectively.

Table 5: Direct Effects

	Beta	T Statistics	P-Values	Results
Acq. Learn. -> Exp. Learn. (H1)	0.597	28.167	0	Supported
Acq. Learn. -> Org. Per. (H2)	0.663	39.633	0	Supported
Exp. Learn. -> Org. Per. (H3)	0.314	15.378	0	Supported
Ent. Orien. -> Acq. Learning(H4)	0.475	18.103	0	Supported
Ent. Orien. -> Inn. Per.(H5)	0.617	31.407	0	Supported
Ent. Orien. -> Org. Per. (H6)	0.009	0.526	0.599	Not-Supported

The results support all the direct hypotheses except H6, which relates to the “association between entrepreneurial orientation (E.O.) and organizational performance (O.P).”

Indirect Hypothesis

We have proposed four indirect hypotheses which we tested through bootstrapping. The study has presented the results in Table 6.

Table 6: Indirect Effects

	Beta	T Stat.	P Values
Ent. Orientation -> Acq. Learning -> Exp. Learning (H7)	0.284	13.73	0
Ent. Orientation -> Acq. Learning -> Org. Performance (H8)	0.315	19.039	0
Acq. Learning -> Exp. Learning -> Org. Performance(H9)	0.187	12.946	0
Ent. Orientation -> Acq. Learning -> Exp. Learn. -> Org. Per. (H10)	0.089	9.804	0

Our results support all the four indirect hypotheses as all the t-values are significant at the 95% confidence level.

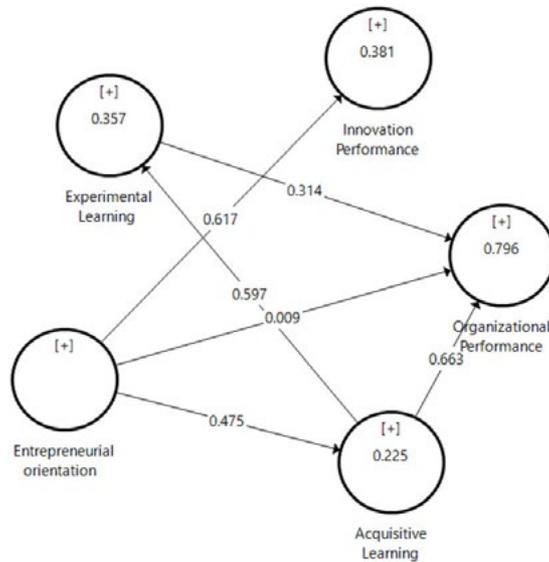


Figure 2: Measurement Model

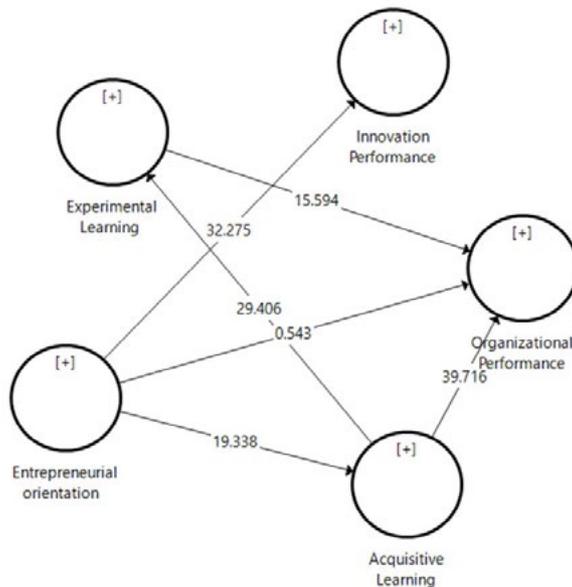


Figure 3: Structural Model

Discussion and Conclusion

This study has proposed six direct and four indirect hypotheses. Our results support all the hypotheses except one direct hypothesis related to “the association between entrepreneurial orientation (E.O.) and organizational performance (O.P.). The results and the theoretical support for each hypothesis is now discussed.

The results generated through structural equation modeling confirms that “acquisition learning (A.L.) has a positive relationship with experiential learning (E.L.)” A firm’s sustainability requires that it must have a culture of organizational learning (Teng, 2007; Nonaka & Takeuchi, 1995). Many organizations rely on acquisition learning, while other firms focus on experiential learning (E.L.). Progressive and dynamic businesses use both approaches. Many studies found a direct association between acquisition learning (A.L.) and experiential learning (E.L.), while other studies suggest that they both have a bi-directional relationship (Zahra & George, 2002).

Our results support “the association between acquisition learning (A.L.) and organizational performance (O.P.)” A firm’s sustainable growth depends on both external and internal knowledge. Firms that use external knowledge (i.e., acquisition learning) believe that information generated in the organization has a limited scope, and it may not be aligned with the upcoming challenges of innovation and technology diffusion (Matusik, 2002).

Our results also support the “association between experiential learning (E.L.) and organizational performance.” Firms that rely on experiential learning believe that information generated from outside the organization is generic and may not align with the firm’s core values. Additionally, these firms also understand that external data is also available to competitors. Therefore, such information cannot be a source of competitive advantage (Zhao, Li, Lee & Bo Chen, 2011; Zhou et al., 2011).

Our results support “the association between entrepreneurial orientation (E.O.) and acquisition learning (A.L.)” An innovative environment is necessary for the growth of a firm. Firms with low entrepreneurial orientation (E.O.) tend to take few risks. Therefore, they spend fewer resources on external information as it has risky elements. Thus, they depend on experiential learning (Peng, 2003). These firms believe that the past and prevailing private information are firm-specific and can be used for developing innovative business processes (Dess, Ireland, Zahra, Floyd, Janney & Lane, 2003).

We found support for “the association between entrepreneurship orientation (E.O.) and innovative performance.” Entrepreneurial firms promote a culture where employees

without fear share their ideas about business processes and product development. Consequently, these firms with innovative performance development maintain sustainability and competitive advantage (Mbizi Mbizi, Hove, Thondhlana, & Kakava, 2013).

Contrary to most studies, our results do not support “the association between entrepreneurial orientation (E.O.) and organizational performance. However, we found literature that suggests that the association between entrepreneurial orientation (O.E.) and organizational performance is weak. (Hakala, 2013; Dess et al., 1997). Additionally, a few studies suggest that the association between these two variables is non-linear.

Conclusion

The results confirm that acquisition learning (A.L.), experiential learning (E.L.), and entrepreneurial orientation (E.O.) promotes organizational performance (O.P.). We also found that entrepreneurial orientation (O.E.) has an impact on acquisition learning (A.L.) and innovative performance (I.P.) but does not affect organizational performance (O.P.). However, the results suggest that acquisition learning (A.L.) and experiential learning (E.L.) are positively linked. In the context of indirect effects, we found that acquisition learning (A.L.) has a mediating effect on experiential learning (E.L.) and organizational performance (O.P.). The results also suggest that experiential learning (E.L.) has a mediating effect on organizational performance. In the context of multi-mediating impacts, we found both acquisition learning (A.L.) and experiential learning (E.L.) have a multi-mediating impact on entrepreneurial orientation (E.O.) and organizational performance (O.P.).

Limitations and Future Research

This study was a cross-sectional study. Future studies can use the developed model by obtaining the respondents’ data more than once (i.e., longitudinal study). The scope of the study was limited to one country and one sector. Therefore, it can be extended to other domains and countries. Cultural and demographic aspects were not analyzed, which future researchers may incorporate in their studies. We have used a limited number of variables. Future investigations may include other antecedents to organizational performance and entrepreneurial orientation. We also recommend that future research extends the model in a multi-cultural and multi-disciplinary setting. For example, comparative analysis between developed and developing countries may bring further insight into the issues.

Managerial Implications

We have derived managerial implications based on the empirical results. The study found that entrepreneurial orientation (E.O.) promotes acquisition learning (A.L.), entrepreneurial learning (E.L.) and enhances organizational performance. Thus, we suggest that firms create an environment in which all stakeholders are encouraged to share and learn from each other. A firm should not restrict itself on internal learning, but it should also rely on external experience. The literature suggests that both acquisition learning (A.L.) and experiential learning have a different impact on the organization's knowledge base. We recommend that restricting the learning process to only one type may not be beneficial. Therefore, firms should extend their learning process from both sources, i.e., internal and external. By assimilating both kinds of information, firms are likely to achieve sustainable growth and competitive advantage.

Annexure 1

Items and Construct in the Questionnaire

Entrepreneurial Orientation

- An attitude of adventure and pro activeness when faced with uncertainty
- A strong tendency for high-risk NPD projects which have a chance for very high returns
- A strong emphasis on R&D, technological leadership, and innovation
- A tendency to adopt a competitive “undo-the-competitors” posture
- A tendency to initiate actions for competitors to respond to
- A tendency to be a market leader, always first in introducing new products, services, or technologies

Firm Performance

- Change in market share
- Change in sales volume
- Change in firm reputation
- Change in firm reputation
- Change in asset size

Acquisition Learning

- Actively acquired new technologies from business partners
- Actively acquired market development skills from business partners
- Actively collected information on technological developments
- Actively collected information on consumer needs and preferences
- Actively obtained new and important information from business partners
- Actively collected government-related information
- Experiential Learning
- Cooperation among departments and job functions are encouraged
- Employees are encouraged to try new work methods
- Employees take part in decision making based on their experience
- Firm has a conducive environment of experimental learning

Innovative Performance

- Past / current innovation performance
- The demonstrated ability to create and capture sustainable and profitable value from innovation
- Future/expected innovation potential
- Effective/efficient innovation capacity
- The activated capacity to realize the firm’s full growth and innovation potential

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