

The Impact of Organizational Learning on Innovation and Competitive Advantage: The Mediating Role of Organizational Culture

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Abstract

This research investigated the relationship among organizational learning, innovation and competitive advantage in consideration of organizational culture mediating the relationship between organizational learning and innovativeness of the organization. This research study is based on the positivist paradigm and is quantitative in nature. The survey was conducted to collect the data from the selected banking and multinational firms located in Faisalabad and Lahore (Punjab province, Pakistan). A questionnaire was used for data collection. Sample respondents were selected through convenience sampling. Analyses have been performed using SPSS version 20 and LISREL 9.1. The results show that reliability of variables ranged between 0.68 – 0.85 which shows satisfactory reliability of the instrument. The model results are significant and show that the learning culture has a positively significant impact on innovation and competitive advantage. The findings of this study are of interest to the administrators and policy makers; whereas, it will also serve as a basis of reference for future studies and investigations. This study examines the impact of organizational learning on innovation and competitive advantage mediated with organizational culture. This study analyzes how organizational learning assists the organizations to boost their practices and performance of an individual as well as an organization. Organizational learning not only facilitates the organizations to flourish in the dynamic and viable environment but also upgrades the processes and practices.

Keywords: Organizational learning, Organizational culture, Innovation, Competitive advantage

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Introduction

Global dynamic challenges force the managers and organizations to pursue new opportunities. Global market practices realized the significance of continuous learning and teamwork in order to remain competitive for the enactment towards up gradation. Organizational learning assists the organizations to boost their practices and versatility which leads to organizational benefit. Organizational learning not only helps the organizations to prosper in the dynamic and competitive environment but also helps in upgrading the processes and practices (Berends, 2011). Organizational learning constitutes the effective processing and interpretation of knowledge; and responding to the internal and external predicament of the organization and environment (Easterby-Smith & Araujo, 1999). Organizational learning is a process through which organizations perceive, interpret, and manage their knowledge and experience; and by following this process, unproductive perspective of learning is converted into a productive combination (Argyris & Schön, 1978).

Cyert and March (1963) stated that the organizational learning has gained much importance in organizational research paradigm in perspective of knowledge handling and processing. Fiol and Lyles (1985) also comprehended the organizational learning in course of change in the organizational knowledge i.e. knowledge assimilation, knowledge utilization, knowledge protection i.e. and knowledge application with the key capacity to manifest changes in the behavioral aspect of an organization. In the 1990s, the paradigmatic up-thrust in the organizational learning fostered its prominence and revealed its need to managers and executives to avail the opportunities (Bapuji & Crossan, 2004; Crossan & Guatto, 1996). Organizational learning occurs in a context that covers the organization as well as the environment in which organization is embedded (Glynn, Lant, & Milliken, 1994).

Organizational learning emerges when organizations attain the basic knowledge and understanding, techniques, and procedures by any means to reach to the ends (Argyris & Schön, 1996). Organizational culture along with atmosphere in the organization affect the kinds as well as specifications of learning outcomes and workers' encouragement to pass on recently attained knowledge to an organizational level. The extensive framework of an organizational learning culture, an inspiration to transmit knowledge and process, has not yet been discovered comprehensively. The attention in human resource development has been focused on emergent effects of organizational learning and culture on stimulation and accomplishment of organizations' development. Hence organizational culture in our investigation is taken as a mediator without

which in Pakistani economy organizational learning leads neither to innovation nor to the attainment of competitive advantage. Stata and Almond (1989) stated that knowledge management is also closely linked to organizational learning.

Argyris (1977) explains organizational learning as a process into which workers of organization point out errors and correct them through the utilization of organizational knowledge. More specifically, many people support organizational learning as the basic goal of knowledge management (King, 2009). By development, establishment, allocation, and application of knowledge, knowledge management has an advantage by using organizational procedures as a way of continuing improvement (King, 2009). According to Dimovski and Reimann (1994), research studies in strategic management area focused on the impact of organizational learning on competitive advantage. Most of the prior studies have found that relations exist between organizational learning and organizational culture. Hence, a genuinely innovative organization must be surrounded by the well-built culture that enhances the commitment in innovative performance. Moreover, studies strongly emphasize on organizational culture as a means to managing innovation (Lazonick, 2010).

The literature regarding organizational learning is comprehensive and established. But the role of organizational learning as an open, adaptable, and involved culture leading an organization towards innovativeness and ultimately attaining a competitive advantage is still unexplored. Organizational culture is taken as a mediator in our study. We examine empirically how organizational learning measured by knowledge management leads a firm towards innovation and attainment of competitive advantage mediated by organizational culture. Our study proceeds by reviewing the literature and developing a framework with the objective to investigating the likely relationships amongst the consequent variables.

Literature Review

Organizational Learning

Nonaka, Takeuchi, and Umemoto (1996) proposed that an organization's victory is hidden in its creative potential, knowledge, and methods. DiBella, Nevis, and Gould (1996) classify four steps or stages of organizational learning, which are listed below:

- Knowledge assimilation: the improvement of expertise, collaboration as well as associations
- Knowledge protection: to keep knowledge implicit and explicit to further application and utilization

- Knowledge application: distribution of the knowledge that has actually been learned in an organization
- Knowledge utilization: the assimilation of knowledge so that it is easily accessible as well as can be applied to situations at hand.

Even though past researchers explain numerous definitions regarding an organizational learning ability, they usually consider it as a component of the knowledge formation. This research considers organizational learning potential being composed of two parts (1) the absorptive ability and (2) the transformative ability for growth, subsequent to the study of Cohen and Levinthal (1990) and Garud and Nayyar (1994). Regarding assimilation ability, Cohen and Levinthal (1990) highlight the capability to assess as well as use the external knowledge that is directly related to previous knowledge. Knowledge management shows a capability for assimilation of recent knowledge, applying it and utilizing it to attain business-related goals. Garud and Nayyar (1994) explain that organizational learning potential is the organization's capability to soak up and alter recent knowledge and relate it to latest creation, expansion, and competitive advantage along with elevated production speed.

Hunt and Morgan (1995) identify learning ability as a vital and complex resource which can generate competitive advantage. Organizational learning focuses on developing and utilizing recent knowledge to further organizational outcomes (Slater & Narver, 1995). The process of organizational learning directly influences innovation. Organizations possessing the capability to achieve recent knowledge and adding to existing knowledge with different strategies will perform better to enhance innovation and production processes. In other words, better an organization's learning ability, the better is the innovation adaptability (Therin, 2003). states that development and learning in the recent product expansion procedures increase innovation as well as perk up recently manufactured goods. Organizational learning ability in the high-tech industries shows organizational capability.

Ericsson, Charness, Feltovich, and Hoffman (2006) proposed that organizational learning is necessary to attain expertise as well as competitive advantage. Informative and instant feedback is essential in order to improve knowledge and proficiency hence it is concluded that for future progress and sustainability it is inevitable for the organizations to enhance the level of organizational learning (Argote, 2011).

Organization Learning and Effectiveness of Organizational Culture

Forming a learning culture means that an organization acquires the skills and competencies that are needed to deliver its products and services and empowers the people to attain significantly improved

outcomes as compared to traditional organizations. Jacques (1952) states that organizational culture is a custom based and traditional means of performing things, which is mutually shared to a more or less extent by all existing employees. The new associates have to learn and, at least to some extent, accept this culture in order to be adopted for the firm's services. Schein (2010) proposed the notion of supposition, vision, opinions, learning and broadly defined organizational culture as follows: it is arrangement of simple assumptions by a certain group as it learns to solve the troubles of exterior adaptation as well as interior incorporation.

Organizations that have a well-built learning culture are excellent at creating, attaining, and transferring knowledge; and modifying behaviors to reflect knowledge and insight (Garvin, 1993; Huber, 1991). Argyris and Schön (1996) define organizational learning more broadly by asserting that organizational learning initiates when organizations acquire information.

Three dimensions of organizational culture have been taken from literature in our study: openness, adaptability, and involvement. Openness simply means that it is important to create an organizational culture where employees feel safe, pointing out improvement opportunities and experimenting with new ways of working. Variations in markets that occur because of economic, political, and cultural changes often make it difficult for business organizations to be adaptable to new conditions (Ribeiro, 2012). Furthermore, pointing towards the significance of openness to experience, Ekehammar and Akrami (2003) established that it creates attitudes towards variety. Likewise, according to Vora (2013) change management is vital when change is implemented to achieve success in business. Hence, employees must be provided with a culture where they can be involved. Ovidiu-Iliuta (2014) adds that main element that helps to attain good performance is to develop a strong organizational culture.

H1. Organizational learning has a positive relationship with organizational culture.

Organizational Learning and Innovation

The recent situation of the business environment involves uncertainty, high risk, and volatility so the firms need to be innovative to maintain their competitiveness. The ability to innovate is a key factor that influences firm's performance (Hurley & Hult, 1998). Innovativeness is the conversion of opportunities into practice (Tidd, Bessant, & Pavitt, 2005) and is beneficial for an organization when it is actually adopted in practice (Schumpeter, 1934). So the innovation support tools encourage both individuals to group and group to organization learning by providing the important information related to

innovations. The extent of innovation shows the degree of recent knowledge acquired in an innovation. Firms with more innovation ability will attain an encouraging response from the market, attaining more capabilities required to enhance organizational performance and achieving a competitive advantage (Calantone, Cavusgil, & Zhao, 2002; Zaltman, Duncan, & Holbek, 1973).

This relationship was also conceptualized by Sinkula, Baker, and Noordewier (1997). They state that an organization's learning abilities perform a crucial role in creating innovations. Even as organizational learning abilities are fundamental for innovation; it is stated that, primarily, firms working in a competitive industry undertake more learning through a wider set of learning directions. Their study confirmed the effect of external environment on the organization's value-creating policies and new product development plans and, in turn, on innovation (Weerawardena, O'Cass, & Julian, 2006). The foundation of inter-firm, cross-national acquaintance of knowledge through innovation, not only boost the expansion of organization but also increase innovation. Dunlap, Marion, and Friar (2014) explored the process of organizational learning in all types of business associations as well as its effect on innovative goods or services development. Organizational learning actually comes to lead through system collaboration and purpose of speeding up the new product development. Furthermore, the firms apply the proficiency in exchange of ideas, communication as well as experience intended for knowledge transfer. Thus, previous research built an unambiguous link between knowledge management (organizational learning) and new inventions and concluded that development of new products and their effectiveness is enhanced by organizational learning (Liu, 2015).

H2. Organizational learning has a positive relationship with innovation.

Organizational Learning and Competitive Advantage

A competitive advantage of an organization is mainly an edge with the objective to outperform its competitors. Organizational learning is taken as a strategic resource for an organization to sustain successfully for a specific period of time (Hult, Ferrell, & Hurley, 2002). This was evidently observed by Baker and Sinkula (1999) and Maria Leticia Santos-Vijande, Sanzo-Perez, Alvarez-Gonzalez, and Vazquez-Casielles (2005) that organizational learning increases recent adaptations in the market and organizations become more competitive. Bapuji and Crossan (2004) believe that an organization can constantly improve its procedures and produced goods if it is capable of integrating this type of learning which takes an organization towards sustainable and strong competitive

advantage. If there are nonstop information and knowledge entering into an organization through internal as well as external sources the firm wants to utilize this knowledge to gain competitive advantage (María Leticia Santos-Vijande, López-Sánchez, & Trespalacios, 2012).

Our model conceptualizes that organizational learning leads toward competitive advantage. Stata and Almond (1989) investigated the effect of organizational learning on competitive advantage and stated that organizational ability to learn faster than its competitors is a necessary condition for sustainable competitive advantage. Business performance can be analyzed by an organization's proficiency to learning and performing (Robbins, DeCenzo, & Coulter, 2008).

Empirical approach by associates such as Morgan, Katsikeas, and Appiah-Adu (1998) has established that a positive relationship subsists between organizational learning and competitive advantage. Organizational learning critically plays a central role in providing an instrument through which an organization can acquire and protect competitive advantage (Senge, 1991). Furthermore, Kandemir and Hult (2005) proposed that organizational learning is associated with procedures through which the organization can work more efficiently than its competitors.

H3. Organizational learning has a positive relationship with competitive advantage.

Organizational Culture and Innovation

Organizations that have a well-built learning culture are excellent at creating, attaining, and transforming knowledge, and modifying behavior to reflect knowledge and insight which help the firm to innovate (Garvin, 1993; Huber, 1991; Sami et al., 2016). Škerlavaj, Song, and Lee (2010) extended the idea of organizational learning culture from competency viewpoint alone to a conception that covers the sections while not ignoring the significance of connecting learning prospects with organizational activities. Secondly, the involvement of our study is related to the examination of an important research query how to enhance innovativeness within organizations.

Mark Easterby-Smith and Lyles (2003) also investigate organizational learning while emphasizing the procedure, knowledge management, and contents of the knowledge that an organization acquires, creates, routes, and finally utilizes.

H4. Organizational culture has a positive relationship with innovation.

Organizational Culture and Competitive Advantage

Development culture includes innovation, external support, resource acquisition, growth, and adaptation (Denison & Spreitzer, 1991). The extent of innovation shows the degree of recent knowledge acquired in an innovation (Damanpour & Aravind, 2006; Etlie, Bridges, & O'keefe, 1984). To sustain in market it is essential to upgrade an innovative culture of a firm so that all the employees look for recent products, services or systems. Hence innovation includes an adjustment or something new – e.g. new information or behaviours. Better organizational progression raises micro foundational resource of innovative abilities and enables the company to maintain a competitive advantage in swiftly varying business environments (Roth, Schneckenberg, & Tsai, 2015)).

H5. Organizational Culture has a positive relationship with competitive advantage

The Mediating Role of Organizational Culture

Organizational culture plays a mediating role which is measured through three dimensions i.e., openness, adaptability, and involvement. Research reveals that organizational culture impacts organizational learning, employee motivation, and employee productivity (Joseph, 2009). Hence, in absence of open, involved, and adaptable culture, organization will not be able to get a competitive advantage and ultimately innovations. Tidd (2001) investigated that organizational culture elaborates what people believe in addition to how they behave. If there is a positive fit, it will facilitate and strengthen innovative behavior. If it is opposite, for example, limiting communication, stressing hierarchy etc., it is expected to act as a footbrake on creativity and innovation. Therefore, the supportive organizational culture is a precondition to attaining innovativeness and competitive advantage. Organizational learning is the gateway for an organization to modify, progress, and sustain.

H6a. Organizational culture mediates the relationship between organizational learning and innovation.

H6b. Organizational culture mediates the relationship between organizational learning and competitive advantage.

Conceptual framework is presented in figure 1.

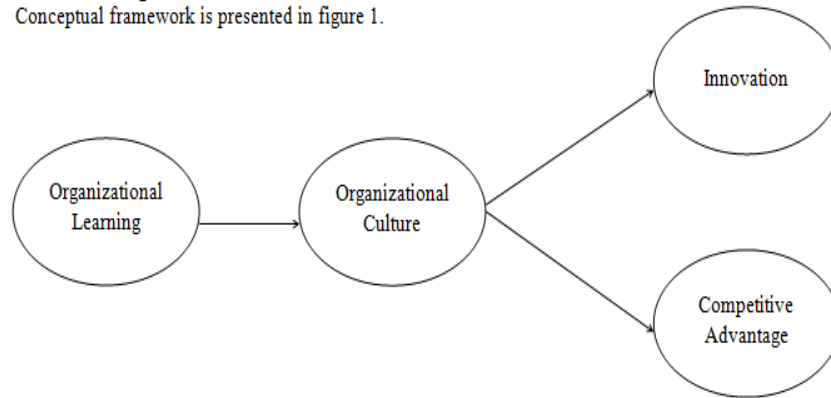


Figure 1: Conceptual Framework

Methodology

Participants and Procedure

Major Private banking companies along with multinationals which are easily reachable were the part of this research study. The sampling frame consisted of upper, middle as well as lower management employees of the above mentioned entities. According to Nesbary (2000) sampling frame is comprised of the definite number of the persons who are the part of the population.

Following organizations were selected for collection of sample: Honda Pakistan, McDonalds, Nestle Pakistan, Pepsi, Askari Bank Limited, Bank Alfalah Limited, Habib Bank Limited, and MCB Bank Limited. The survey was carried out after taking consent for survey from the particular organization's top executives. Questionnaires were administered by the sections heads liable for the variety of tiers of the management. A cover letter explaining purpose of the research and ensuring confidentiality of the responses was a part of the questionnaire. This increased the probability of understanding along with easiness and comfort (De Vaus, 2002). Survey method was used because survey is an efficient method to gather the statistics from the huge segment of population (Babbie, 1989; De Vaus, 2002).

Forty five questionnaires each were distributed among all the 8 organizations mentioned above through mail or personally. Thus, total 360 questionnaires were distributed. Respondent were given the opportunity to fill up the questionnaire within fifteen days. They were requested to return filled questionnaires through postal mail or email to the researcher. Personal visits by principal author and coauthors were executed to expedite the progress of data collection. Personal interaction made it possible to receiving the information within predetermined time

frame. At the end of data collection process, total 270 usable questionnaires were obtained and were included in subsequent analysis, thus yielding 75% response rate.

Instruments

Organizational learning.

In our research organizational learning is measured by four dimensions: knowledge assimilation, knowledge protection, knowledge application, and knowledge utilization. To measure organizational learning dimensions knowledge assimilation, knowledge application, and knowledge protection questionnaire developed by Gold & Arvind Malhotra (2001) and later used by Gao, Fan, Jiang, & Han (2008) was employed. This instrument contains 20 items. For knowledge utilization questionnaire developed by Lansdale (1988) and later validated by Markus, Majchrzak, & Gasser (2002) was used. It contains 5 items measured on 5 points Likert scale ranging from “1 = strongly disagree” to “5 = strongly agree”.

Organizational culture.

To measure the dimensions of organizational culture (adaptability and involvement) questionnaire developed by Denison (2000) was used. This instrument contains 8 items. The third dimension (openness) was measured by the questionnaire developed by Smith (2006) and it contains 6 items measured on 5 points Likert scale ranging from “1 = strongly disagree” to “5 = strongly agree”.

Competitive advantage.

To measure competitive advantage questionnaire developed by Spicer & Sadler-Smith (2006) was used. It contains 4 items measured on 5 points Likert scale.

Innovation.

To measure innovation questionnaire developed by Gold & Arvind Malhotra (2001) was employed containing 6 items measured on 5 points Likert scale.

Statistical Techniques

As our model includes latent variables measured by multiple dimensions, that's why structural equation modeling was used to measure the relationships among study constructs. LISREL 9.1 was used with maximum likelihood estimation procedure; and the error variance of single-indicator constructs were set as one minus respective reliability coefficient.

Results

In this section, demographic distribution of data, descriptive statistics, and hypothesis testing results are described. Total number of

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respondents was 270 out of which 195 were male carrying 72.2. % and 75 were female which cover 27.8 % of the total sample. Regarding age, a vast majority of respondents were younger (44.8 % respondents were between 20 – 30 years of age). Forty two percent were 31-40 years of age group. Eleven percent workers were 41-50 years of age and 1.9 % employees were above 51 years. Almost 86 % of the respondents were highly educated and possessed a master’s degree. Regarding job position, it was observed that 48.1 % respondents belonged to top management positions; 50.4 % were from middle management positions; and 1.5 % were frontline employees. Demographic details of the sample are given in table 1.

Table 1: Demographics

	Frequency	Percent
Age		
20 to 30	121	44.8
31 to 40	114	42.2
41 to 50	30	11.1
51 above	5	1.9
Total	270	100
Gender		
Male	195	72.2
Female	75	27.8
Total	270	100
Education		
Graduation	23	8.5
Masters	232	85.9
MS/PhD	15	5.6
Total	270	100
Designation		
Top management	130	48.1
Middle management	136	50.4
Frontline	4	1.5
Total	270	100

Means, standard deviations, reliability coefficients, and correlations are presented in table 2. Correlations present preliminary support for the proposed hypotheses. All four dimensions of organizational learning had positive and significant correlation with innovation as well as with competitive advantage. This provided preliminary support for H2 and H3. Organizational culture also showed significant positive correlations with innovation and competitive advantage; thus providing preliminary support for H4 and H5. All dimensions of organizational learning were positively correlated with organizational culture. This provided support to H1.

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Table 2: Descriptive Statistics and Correlation Matrix

	Mean	SD	1	2	3	4	5	6	7	8	9
1 Knowledge Assimilation	4.224	0.565	(0.824) ^a								
2 Knowledge Protection	4.026	0.659	0.603	(0.828)							
3 Knowledge Application	4.212	0.579	0.754	0.754	(0.782)						
4 Knowledge Utilization	4.045	0.729	0.533	0.539	0.727	(0.740)					
5 Involvement	4.08	0.73	0.630	0.592	0.732	0.742	(0.681)				
6 Adaptability	4.056	0.669	0.683	0.656	0.737	0.575	0.617	(0.823)			
7 Openness	4.106	0.646	0.681	0.639	0.754	0.536	0.605	0.787	(0.733)		
8 Competitive Advantage	4.111	0.689	0.669	0.696	0.699	0.616	0.560	0.619	0.736	(0.789)	
9 Innovation	4.164	0.605	0.596	0.665	0.671	0.598	0.594	0.648	0.702	0.655	(0.845)

^aValues at diagonals in parenthesis show Chronbach's alpha
 Note: N = 270; all correlations are significant at .05 level

Next, the results of structural model are reported. The structural equation model was run using LISREL 9.1 with maximum likelihood estimation. First, a partially mediated model was run in which direct paths from organizational learning to innovation and competitive advantage were included. The model revealed a good fit to the data. However, paths from organizational learning to innovation and competitive advantage were insignificant. These paths were, therefore, removed and a fully mediated model was run where organizational learning was linked to innovation and competitive advantage only through the mediating effect of organizational culture. Fully mediated model showed an excellent fit to data. This model is retained and its results are reported subsequently.

Regarding model fit, chi-square χ^2 had a value of 33.435 ($p = 0.1498$). This insignificant χ^2 indicates an excellent fit of the structural model (Kenny, 2011). The value of root mean square error of approximation (RMSEA) was 0.0361 which shows a good fit (Browne & Cudeck, 1993; MacCallum, Browne, & Sugawara, 1996). The value of standardized root mean square residual (SRMR) was 0.0332 which shows a good fit (Diamantopoulos, Siguaw, & Siguaw, 2000). The value of Normed Fit Index (NFI) was 0.976; Non-Normed Fit Index (NNFI) was 0.992; Comparative Fit Index (CFI) was 0.995; and Goodness of Fit Index (GFI) was 0.969. Threshold value for acceptance of these indices is 0.90 and values > 0.95 indicate excellent fit (Kenny, 2011). All of the above indices for our model revealed values greater than 0.95, thus, displaying an excellent fit to data.

Parameter estimates among constructs are reported in table 3 and figure 2. The path estimate from organizational learning to organizational culture was 0.961 ($p < .01$). H1 is, therefore, accepted. Similarly, path estimates from organizational culture to innovation as well as to competitive advantage were both positive and significant (0.704 and 0.755 respectively, $p < .01$). H4 and H5 are supported. However, H2 and H3 were not supported as these paths were found insignificant and were removed in subsequent analysis.

Table 3: Parameter estimates

Path From	To	Estimate	Std. Error	T-Value
Organizational Learning	Organizational Culture	0.961**	0.151	7.751
Organizational Culture	Innovation	0.704**	0.160	7.924
Organizational Culture	Competitive Advantage	0.755**	0.164	8.262

**P < 0.01 *P < 0.05

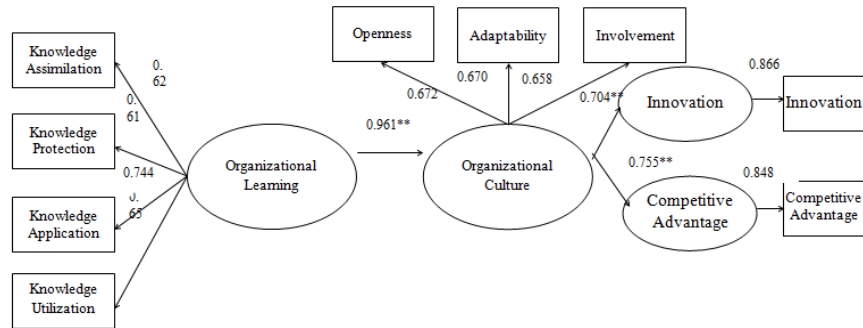


Figure 2: Structural Model – Path Estimates

Results of mediation analysis are reported in table 4. Indirect path from organizational learning to innovation through organizational culture was obtained by multiplying *path a* (from OL to OC) with *path b* (from OC to innovation). After doing the multiplication we arrived at indirect effect value of 0.677 ($p < .01$). Similarly, for competitive advantage, same steps were repeated and the value of indirect effect was obtained by multiplying *path a* (from OL to OC) with *path b* (from OC to competitive advantage). The value of indirect effect of organizational learning on competitive advantage through mediating effect of organizational culture was 0.726 ($p < .01$). These findings confirmed hypotheses 6a and 6b.

Table 4: Table Mediating Effect of Organizational Culture

Path: IV --> MV --> DV	Product of Coefficients			t value	Results
	ab	SE			
H6a OL --> Culture --> Innovation	.961*.704 = .677**	0.205		7.223	Supported
H6b OL --> Culture --> Comp. Adv.	.961*.755 = .726**	0.212		7.480	Supported

* $p < .05$

** $p < .01$

OL = Organizational learning

OC = Organizational culture

Comp. Adv. = Competitive advantage

The values of squared multiple correlation for endogenous constructs were moderate to high. These values are analogous to R^2 in multiple regression and indicate the amount of variance that independent variable(s) explain in dependent variable (Diamantopoulos et al., 2000). The value of squared multiple correlation for organizational culture was 0.923; for innovation it was 0.496; and for competitive advantage it was 0.569. These values indicated that independent constructs explain a reasonable proportion of variance in respective dependent constructs.

Moreover, we also calculated composite reliability (CR) and average variance extracted (AVE) for the study constructs. CR measures internal consistency reliability of a construct and values above 0.60 indicate an acceptable reliability (Nunnally & Bernstein, 1994). AVE is a measure of convergent validity and AVE values greater than 0.50 are indicative of good convergent validity. These values are given in table 5. An inspection of table 5 shows that CR values for all the constructs are comfortably above 0.60 indicating good reliability. AVE values for innovation and competitive advantage are 0.749 and 0.718 respectively. However, AVE values for OL and OC are 0.440 and 0.444 respectively. These values are slightly below the threshold but this does not pose any threat to the convergent validity of these constructs as AVE is a more conservative measure of convergent validity. Convergent validity can be established adequately on the basis of CR alone (Malhotra, 2010).

Table 5: Average variance extract and composite reliability

Construct	CR	AVE
Organizational Learning	0.757	0.440
Organizational Culture	0.706	0.444
Innovation	0.749	0.749
Competitive Advantage	0.718	0.718

Discussion

We have investigated the effect of organizational learning on innovation and competitive advantage in various sectors of economy. The model conceptualized two dependent variables i.e. competitive advantage as well as innovativeness and one mediating variable organizational culture. In our study organizational learning is measured through four unique dimensions: knowledge assimilation, knowledge protection, knowledge application, and knowledge utilization. Our model conceptualized that organizational learning led towards competitive advantage. The results of our research show that organizational learning has significant effects on innovation and competitive advantage.

Organizational culture plays a mediating role which is measured through three dimensions i.e. openness, adaptability, and involvement. The results showed that organizational learning has a positive impact on organizational culture and organizational culture has positive impact on innovation and competitive advantage. Hence, in absence of open, involved, and adaptable culture organization will not be able to attain competitive advantage and ultimately innovativeness.

Contributions

This study has numerous imperative contributions towards literature on strategic HRM. Previous research and literature showed the

positive relationship between learning and innovation as well as competitive advantage but the strong mediating role of organizational culture was not considered. We attempted to seek the modalities of cultural intervention in order to attain the competitiveness and innovation. In the context of the organization, organizational culture plays a vital role. In absence of supportive culture, organizational learning would not be able to get a competitive advantage and ultimately innovation. This study also provides impending intense information on the latest assessment of culture of employees inside the organizational boundaries by providing a base for theoretical framework of linkage between organizational learning towards innovation and competitive advantage via organizational culture.

Our work contributes theoretically in organizational learning and recommends improved gateway in favor of management learning. So, we drew distinctive dimensions of organizational learning: knowledge assimilation, knowledge protection, knowledge application, and knowledge utilization that may play a vital role in assisting organizational learning by amalgamating the existing literature. The economic as well as societal perspectives disclose that the impartiality in employee's suggestions (knowledge utilization) plays a vital role to keep up the spirits as well as the morale of workers so that they would be able to learn more. Emphasizing on organizational learning may also help us establishing connection among HR practices and competitive advantage as well as firm performance.

Hence our work coalesces that human resources are vital to improving a firm's capability to explore, share, and exploit the knowledge so that learning will be the consequent. Organizational learning itself is a simple idea, but employing an intellectual capacity can be difficult. So knowledge management (KM) performs an important role in sustaining the organization's competitive advantage through the practices and implementations.

Lastly, our findings are imperative implications intended for the functioning of an organization along with knowledge management within an economically backward country like Pakistan. So, this research can contribute to reducing this delinquency by offering knowledge management as a tool to develop open, adaptable, and involved culture in the context of Pakistan. In absence of better culture, organizational learning may not be able to obtain competitive advantage as well as innovation.

Limitations and Directions for Future Research

Though the research has certain limitations, it contributes to the existing knowledge foundation and draws attention to constructive

implications for upcoming research. Future research might make use of a larger sample as well as a longer period of time for research. Hence future studies should be conducted employing longitudinal research design. Firms selected for this research are medium sized that can rather effortlessly acquire technological knowledge due to the availability of funds. Future research may be conducted on small scale firms where research and development funds are scarce.

This paper addresses how innovation and competitive advantage is enhanced through organizational learning. Future investigation may explore how desirable knowledge can be enhanced, deconstructed, or customized. For instance, Dougherty (1992), Leonard-Barton (1995), and Hargadon and Fanelli (2002) have investigated that previous overlapping knowledge can also be taken as central inflexibility to stop an organization from transferring concerning new knowledge as well as the idea. So, the obliteration of such relational interactions of knowledge might be as vital as its construction and management. We cannot deny the possibility that the coexistence of two different types of ties might create internal conflict. Indeed, this issue requires further study.

Our research focuses that employees efficiently hunt for and acquire, apply, protect, and utilize knowledge from internal along with external sources. A suitable follow-up inquiry may take in for questioning how workers actually integrate and incorporate new knowledge within organizational activities.

This paper suggests that organizational culture plays a positive role in enhancing innovativeness and getting a competitive advantage. The future research may study that the organizational culture can even be considered as a barrier at times when organization is trying to execute new strategies.

Future research may explore the role of entrepreneurs as well as managers in process of organizational learning and development of open, involved, and adaptable culture for the sake of production of new products and accomplishment of competitive advantage. So future researchers are suggested to explore how organizations can manage to identify the incompatibility among new knowledge and prior knowledge and how they can reproduce and implement the recently launched knowledge.

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