



ORGANIZATIONAL AMBIDEXTERITY, ORGANIZATIONAL LEARNING CAPACITY, AND MARKET ORIENTATION: A POSSIBLE INDICATORS OF ORGANIZATIONAL PERFORMANCE

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Abstract: In the near past, management scholars and practitioners explore the concept of organizational ambidexterity that is the combination of exploration (new knowledge) and exploitation (application of existing knowledge) practices and their effect on organizational performance. Today's organizations are obliged to manage the conflicts and tensions arising from finding an appropriate balance between exploration and exploitation that may lead to yield synergistic effect. The current research attempts to empirically test the combined effect of exploration and exploitation (i.e., Ambidexterity) and organizational learning capacity on organizational performance in Medical Teaching Institutes (MTIs). A total of 220 doctors and head nurses are participated in the study. Data were collected through a structured questionnaire. Confirmatory factor analysis and Cronbach alpha were applied to test the scale validity and reliability. The results indicate that both organizational ambidexterity and organizational learning capacity have a significant relationship with organizational performance. Furthermore, market orientation moderates the relationship between organizational ambidexterity and organizational learning capacity with organizational performance. Thus, we conclude that the relationship between ambidexterity, organizational learning capacity, and organizational performance is higher when market orientation is high and vice versa. Implications and future suggestions are highlighted.

Keywords: Ambidexterity, Organizational Learning Capacity, Market Orientation, Organizational Performance, MTIs

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INTRODUCTION

In organization management, organizational ambidexterity (OA) is a new phenomenon (Zheng and Ouyang, 2017). To be successful in the long run, organizations need to consider both forms (exploitation and exploration) as they are different in implementing new ideas and concepts (Duncan, 1976). In today's turbulent environment, organizations face difficulty in developing new products and services, while the concept of ambidexterity focuses on both exploitation and exploration simultaneously (Vinit et al., 2016). Raisch et al. (2009) argued that OA is the dynamic adjustment between exploitation and exploration. Exploitation and exploration are typically treated as a trade-off, but both must be treated complementary. A trade-off means that an organization either focuses on acquiring new abilities or enhance its management ability (Kristal et al., 2010). As the market environment is frequently changed, exercising and focusing on a single capability is not enough to fulfill the growing demand. Although it is challenging to develop a mechanism through which we manage contradictions and conflicts.

Previous findings highlight a positive linear relationship between exploration/exploitation and a firm's performance (Botella-Carrubi and Gonzalez-Cruz, 2019; Cao et al., 2009; Menguc and Auh, 2008), while a limited focus on to explore the nonlinear relationship between the tested variables. As mentioned, past studies have found that ambidextrous strategy has positive associations for performance; although, few studies also found that they have a negative association (Menguc and Auh, 2008). Tushman and O'Reilly (1996) argued that ambidexterity had been proved successful in a situation where there are a common culture and substantial social control that combines both exploitation and exploration in the firms.



Organizational learning capacity is the ability to develop new knowledge and improve existing knowledge (Nafei, 2015). This capacity can be enhanced by focusing on information sharing, knowledge acquisition, system orientation, dissemination orientation, utilization orientation, and climate learning orientation (Teo and Wang, 2005). Jones (2000) argued that organizational learning capacity is the process through which managers may increase their employees' capabilities through accepting decisions that increase their performance and to fit organization with the environment continuously. Past findings examined a positive association between organizational learning capability and organizational performance (Nafei, 2015; Ramirez et al., 2011). Savaneviciene and Stankeviciute (2010) argued that to achieve a competitive advantage, organizations must enhance their performance through availing continuous learning opportunities.

Marketing research highlights that market orientation has been considered a dire form of culture that enhances exploration and exploitation and provides positioning advantages to the organizations. Researchers argued that market orientation is a complete organizational culture where exploitation and exploration merge and make an overall structure instead of a trade-off relationship (Menguc and Auh, 2008). Our study investigated whether the integration of exploration and exploitation may yield superior organizational performance through market orientation.

Our research focuses on exploring the link among organizational ambidexterity, organizational learning capacity, and organizational performance from a managerial perspective. Our study's model explores a possible boundary condition where an increase in ambidexterity (exploration and exploitation) may harm or inappropriate for the organization's performance. We added a possible moderator (i.e., Market orientation) to the tested model to further nourish this relationship. Our study also validates ambidexterity instruments in the context of Pakistan.

LITERATURE REVIEW

Organizations face a lot of challenges to survive in this highly turbulent and competitive environment. The question may arise about how organizations manage all these consistent difficulties? Organizations can handle such situations through adaptive processes and can explore new markets and updated technologies to reconstruct their resources to explore new opportunities in the marketplace (Nieves and Haller, 2014; Yamakawa, Yang, and Lin, 2011). Based on organizational learning theory and Yamakawa et al., (2011) research, exploration is the creation of new knowledge by the organizations through the use of new methods, updated technologies, restructuring business processes and exploring new markets (Cho, Lee, and Shin, 2019; Lee and Seo, 2018). Exploration processes mainly focus on finding new opportunities and encourage innovation and creativity with scarce resources. Exploration compels the firm to develop new markets, create new products and services, accept the changes brought by the market environment, and shape adaptive organizational structure (Jansen et al., 2008). On the other hand, the exploitation theory proposed that organizations focus on refining the existing knowledge and capabilities, products, technologies, and processes in the existing markets (Yamakawa et al., 2011; Wu, 2010). Exploitation compels the organization to focus on the existing markets and move into the new markets when they develop capabilities (Peng and Lin, 2019; Prange and Verdier, 2011).

Ambidexterity and Organizational Performance

An adequate amount of exploitation is required for an organization to face the problems and to confirm its current viability. In the interim, the organization should focus on exploration to confirm its future viability (March 1991). Exploitation processes enhance organizational productivity and reliability, while exploration processes enhance an organization's ability through exploring new knowledge and add it to the existing knowledge to introduce new



products and services to the demand of new markets (Levinthal and March 1993). Researchers argued that those organizations that focus on efficiency and flexibility simultaneously had lower performance than those whose focus is on a single and concentrated strategy (Ebben and Johnson, 2005). Furthermore, researchers also argued that a single strategy is sufficient to adopt for the short-term, while long-term effects can be achieved by adopting both strategies (Knott and Posen, 2005). An initial attempt was made by March (1991) and concluded that both exploration and exploitation is needed for organizational growth. Later on, studies also confirm the March (1991) argument and found that the combination of both exploitation and exploration (i.e., Ambidexterity) positively affects organizational performance (Peng and Lin, 2019; Li, Han, and Shen, 2019; Jiang and Li, 2009; Gibson and Birkenshaw, 2004). Thus, we proposed that:

H₁: Organizational ambidexterity is positively related to organizational performance

Organizational Learning Capacity and Organizational Performance

Organizational learning capability is the ability of an organization to improve current knowledge and new knowledge (Hult et al., 2002). Teo and Wang (2005) proposed that organizational learning capacity can be improved by focusing on knowledge acquisition and utilization, learning climate, information sharing, dissemination, and system orientation. Through learning capacity, organizations become able to bring continuous innovation that ultimately leads to performance. Chen et al. (2015) found that organizational innovation enhances organizational performance. Robbins and Judge (2016) argued that for organizational success, both management and technological innovation are required. Alanoglu and Demirtas (2016) argued that innovation is the learning process of an organization coping with environmental changes. Similarly, Chin and Chuang (2015) and Shahadan and Oliver (2016) indicated that innovation is the result of an organizational learning process that ultimately leads to better performance. Siddique (2018) found a positive relationship between organizational learning and organizational performance. Thus, we proposed that:

H₂: Organizational learning capacity is positively related to organizational performance

Market Orientation a Possible Moderator

Past researches suggested that management synergy, in terms of exploitation and exploration, needs diverse structures, cultures, and strategies (He and Wang, 2004). Our research focuses on the role and importance culture of the stated relationship. Exploration and exploitation are vital to organizational success, but it is also a challenging task as they are associated with paradoxical values (Cao et al., 2009; Menguc and Auh, 2008). The combination of exploration and exploitation (ambidexterity) is successful, where an organization has an influential common culture and social control (Tushman and O'Reilly, 1996). Menguc and Auh (2008) argued that market orientation is an organizational culture where exploitation and exploration merge to make a tradeoff or complementary relationship. In addition to this cultural perspective, researchers also highlighted that market orientation stimulates operative behavior in an organization by collecting, evaluating, and sharing relevant information regarding customers and competitors (Homberg and Pflesser, 2000). Furthermore, firms can enhance their production capacity by promoting coordination, collaboration, and communication across departments within the organization (Narver and Slater, 1990). Thus, based on the previous literature, it is evident that the organization can improve its performance by relying on the different values of flexibility and efficiency (related to market culture and hierarchy). Literature in marketing highlights how exploitation focuses on efficiency, and exploration focuses on advances inefficiency. Thus, to deliver superior customer value, market orientation fosters organization culture and creates a balance between exploitation and exploration. Thus, we proposed that:

H₃: The relationship between organizational learning capacity and performance will be more reliable when organizations are characterized by market orientation.

H₄: The relationship between ambidexterity and performance will be more reliable when organizations are characterized by market orientation.

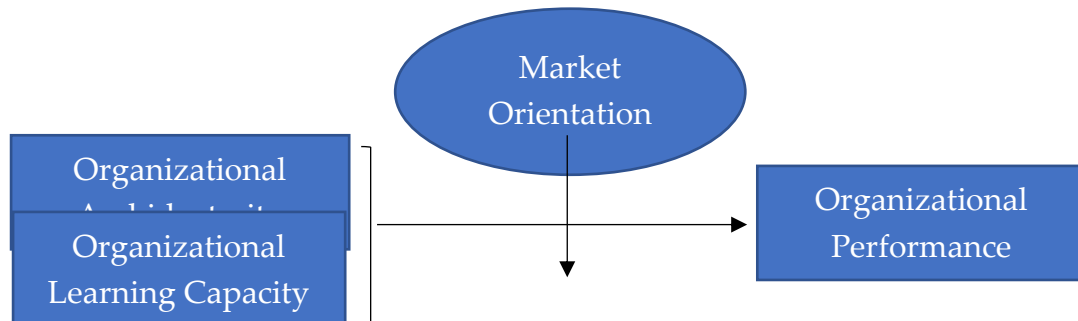


Figure 1: Conceptual framework of the current research

METHODS

Participants and Data

We tested the proposed model in medical teaching hospitals (MTIs) operating in Khyber Pakhtunkhwa, Pakistan. This sector was selected on the notion that their survival in the marketplace based on productivity and reliability as well as enhancing their markets through consistent innovations in services and efficiency. Furthermore, the government introduces MTIs with the notion that it will better serve the community and finance themselves; thus, their financial performance is essential for their survival and growth. Through purposive sampling, we collected the data from top-level managerial employees. We choose top-level employees (Medical Officers, Managing Directors, Senior Doctors, and Heads of different units) as they know the major strategic decisions. Through the survey instruments, we accumulate the data from the selected employees. Based on the previous practices regarding sample size, we distribute 600 questionnaires among top-level managerial employees. time lag research design was chosen to overcome common method variance (CMV). In Time 1 we received 367 responses. After three weeks break the same respondents were contacted to capture their responses. We get 282 response in Time 2. Finally, after three weeks break, in Time 3 we received a total of 220 filled questionnaires was received with a response rate of 36.6%.

The demographics of the respondents show that the majority of them were males (78%). The respondent's length of experience varies from 15 years (36%), 10 years (54%), and 5 years (20%). Most of the respondents obtained an FCPS degree (73%), followed by MBBS (27%). The majority of the respondents were heads of a different department (33%) followed by medical officers (27%), managing directors (23%), and senior doctors (17%), respectively.

Measurements

We captured the respondent's responses through adopted questionnaires. We used He and Wang (2004) and Lubatkin et al., (2006) scale to measure exploration and exploitation practices. This scale consists of four items that measure exploration and four items that measure exploitation practices. The sample item includes "our organization extends the product range from the last three years" and "our organization improves production flexibility from the last three years." Organizational learning capacity was measured through a sixteen-item scale initially developed by Tao and Wang (2005). The sample item includes "in my organization, and learning is seen as a key to guarantee the firm's existence in its sector." The organizational performance was measured through a perceived measure assessing through profitability (three

items), organizational effectiveness (three items), and growth (three items). Upper-level managers were asked about their firm's performance compared to their competitors for the last three years. Market orientation was assessed through fifteen items scale developed by Menguc and Auh, (2008) and Narver and Slater (1990). The sample item includes "in our organization; our salespersons share information about competitors." All items of the selected scales were assessed through a five-point Likert scale indicating 1 = strongly disagree to 5 = strongly agree.

RESULTS

Before applying advanced statistics, we first ensure the instrument's reliability through Cronbach alpha and discriminant and convergent validity through confirmatory factor analysis (CFA). Table 1 reports the details of both methods and found that the instrument has a good reliability score as all the alpha values are closer to 1 and well above the threshold level of 0.6. Similarly, CFA statistics are satisfactory as all the four variables have good fit indices. The standardized loading values of all measurement variables fall between 0.62 to 0.91, and all these are statistically significant. The model is a good fit as the values fall in the acceptable range. The values of CFI are above 0.90, and RMSEA values are below 0.05. GFI and AGFI values are near to 0.90, and χ^2/df values are below 4.

Table 1: CFA and Alpha Statistics

Var	Items	Alpha	CMIN	DF	χ^2/df	RMR	GFI	AGFI	CFI	RMSEA
OA	8	.904	42.234	23	1.836	.046	.902	.853	.929	.036
OLC	16	.949	104.254	58	1.796	.048	.962	.867	.951	.043
OP	9	.817	106.412	59	1.803	.047	.896	.879	.926	.048
MO	15	.890	108.352	57	1.901	.049	.954	.863	.948	.044

Recommended values by Hair et al, (2006) ≤ 4 $\geq .05$ $\geq .9$ $\geq .9$ $\geq .9$ $\geq .05$

Table 2 reported below highlights average variance extraction (AVE), composite construct reliability, and intercorrelation among the study variables. Based on Harman's one-factor test, both tests ensure that there is no issue of common method bias (Lee et al., 2013). Correlation coefficients are significant, and the values of CCR are above 0.70.

Table 2: CCR, AVE and Correlation

	OP	OA	OCL	MO
OP	1			
OA	.652**	1		
OLC	.528**	.428**	1	
MO	.582**	.413**	.387**	1
Mean	3.54	3.37	3.82	3.77
SD	.865	.839	.766	.719
AVE	.710	.796	.685	.752
CCR	.815	.903	.947	.891

Regression coefficients of the proposed models are highlighted in table 3. Based on the results, the first two hypotheses i.e. H1 and H2 is accepted with 95% confidence interval (coefficient = 0.382, t = 3.375; coefficient = .425, t = 3.789 respectively).

Table 3: Regression Coefficients

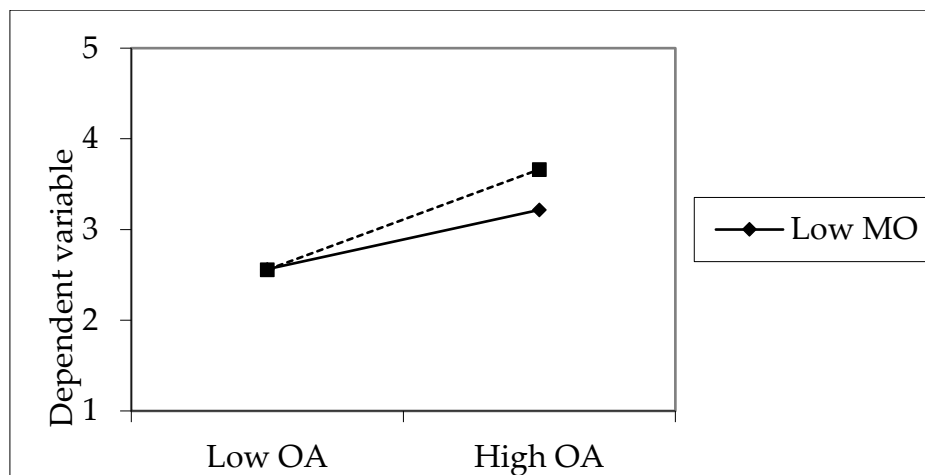
Path	Coefficients	Std. Error	t	p
OA → OP	.382**	.113	3.375	.001
OLC → OP	.425**	.112	3.789	.000

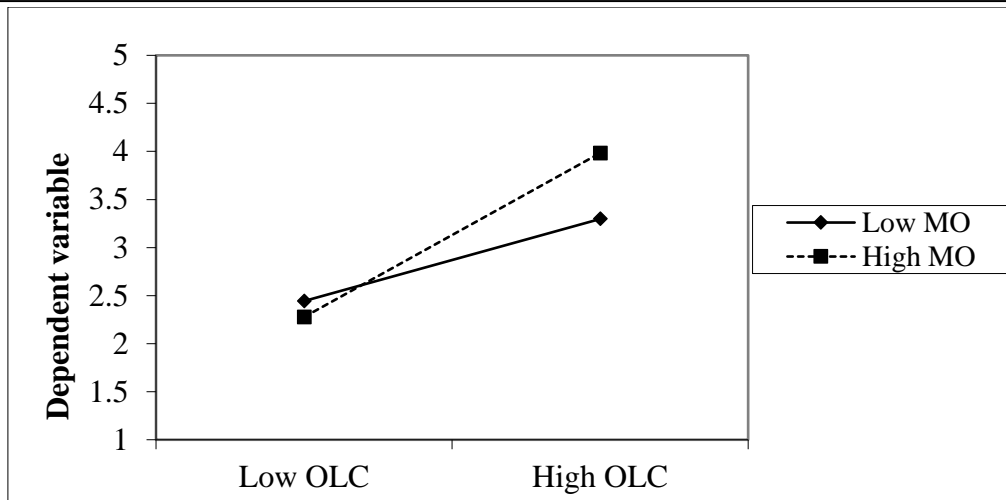
R² = .740, DW = 2.043

A Hayes and Preacher (2013) procedure of moderation analysis was applied to calculate the interaction effect. As per Hayes and Preacher's (2013) recommendations, our moderator moderates the relationship if the p-value of the interaction term is significant and upper-level confidence interval (ULCI) and lower-level confidence interval (LLCI) have no zero. In our case, the interaction term is significant, and LLCI and ULCI have no zero at all for both independent variables concerning the dependent variable in the presence of moderator i.e., Market orientation. Thus, market orientation significantly affects the relationship between OA and OP and between OLC and OP. It means that the relationship between OA and OP is strong when market orientation is strong. Similarly, the relationship between OLC and OP is strong when market orientation is strong. Thus, H3 and H4 of our study are accepted. We further confirm the moderation effect through Dowson's (2014) excel sheet for graphical representation.

Table 4: Moderation Results

Path	coefficient	se	t	p	LLCI	ULCI
OA to OP int_1	.113	.038	3.005	.003	.187	.139
OLC to OP int_1	.114	.037	3.003	.002	.186	.137





DISCUSSION AND CONCLUSION

The current research examined the extent to which Firm's performance is affected by organizational ambidexterity and organizational learning capacity. Furthermore, we also checked whether the relationship between OA, OLC, and OP is affected by market orientation. We found that OA has a positive and significant relation with OP. We also found that OLC has a significant positive relation with OP. We note that MTIs Hospitals tend to emphasize OA and OLC for efficiency and compatibility to enhance their performance. As organizational ambidexterity is the combination of both exploration and exploitation as discussed earlier, the fit between these capabilities (i.e., Exploration and exploitation) creates a reinforcing or synergistic effect on MTIs performance (Raisch et al., 2009). The balance between exploration and exploitation is mandatory for synergistic results. One cannot completely remove imbalance between them; however, successful organizations reconsider them again and again to achieve better organizational performance (Gibson and Birkenshaw, 2004). Our study provides direct empirical evidence that MTIs pursuing an organizational learning capability and ambidextrous strategy can achieve optimal organizational growth. Our findings are consistent with Kang and Kim (2019), as their study found that ambidexterity has a positive effect on performance. The results of the current research are also in line with Peng et al. (2019) and He and Wang (2004) as both studies found that a combination of both capabilities (i.e., Exploration and exploitation) is mandatory for organizational performance. They further argued that exploitation and exploration augment each other if it is combined with high-high matching.

Managerial Implications

Based on the findings of the current research, it is recommended that management balance exploration and exploitation capabilities that enable employees to make their own decisions and empower them regarding strategic organizational decisions about which capability should be adopted first. It is also recommended that in today's knowledge-based economy that management should enhance their employees learning capacity as it is vital for organizational growth and survival. We also found that other possible organizational factors like market orientation may also strengthen the relationship of ambidexterity and OLC with performance. We recommend that MTIs not only consider those factors that directly affect performance but also consider those factors that contribute to organizational performance in one way or another. Due to the robust competitive environment, it is recommended that MTIs



adopt possible efforts to explore, adapt, learn, and improve new things that directly impact organizational performance like human capital, innovation, branding, and social capital.

Future Area of Research

Our study has certain severe limitations that must be addressed. First, this study's nature was cross-sectional that may restrict us from knowing whether organizations may adopt any progressive strategy to flow their exploitation and exploration strategy. It will be better to conduct a longitudinal study to explore the phenomenon better. Similarly, we measure organizational performance on a subjective measure that may lead to misleading information. Only a longitudinal research design can address this limitation and provide a solution to know whether this higher performance is sustained for a longer time of periods. Second, we select a sample from only one industry i.e., MTIs that are comparatively new setup, and it is difficult to judge the parameters of their performance. Additional studies may explore other well-established industries like high tech and telecom to explain the relationships better. Third, we conducted this research by selecting managerial level employees from a single industry that may affect the generalizability of the findings.

Further studies are needed to explain this situation in different industries and cultures. Finally, our study is failing to check the individual effect of exploration and exploitation on firm performance. Future researchers are encouraged to conduct research that addresses each capability's special effect (i.e., Exploration and exploitation) on organizational performance.

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