

DO COMPETITIVE STRATEGIES MODERATE THE RELATIONSHIP BETWEEN LEARNING ORGANIZATION AND PERFORMANCE OF HIGHER EDUCATION INSTITUTIONS?

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ABSTRACT

This study seeks to examine the moderating effect of competitive strategies which include cost leadership, differentiation and focus strategies in the relationship between learning organization and organizational performance of Yemeni HEIs. The study employs a cross-sectional approach. A questionnaire was distributed to all deans of colleges or their representatives and 189 questionnaires were returned, with a total of 184 questionnaires being usable for further analysis, representing a 63 percent valid response rate. The researchers used SPSS for descriptive analysis, while Smart PLS 3.2.7 was used for analyzing the collected data. The results confirm the theoretical model, showing that there is a positive effect of the learning organization on organizational performance. The findings of the study also show that cost leadership strategy positively moderates the relationship between learning organization and performance of Yemeni HEIs, while differentiation strategy and focus strategy don't moderate this relationship. This research evaluates the interaction effect of the learning organization with competitive strategies in enhancing performance. Theoretical insights that cost-leadership plays prominent role in moderating the link between learning organization and performance were confirmed empirically.

Keywords: Learning Organization, Cost-Leadership, Differentiation, Focus, Organizational Performance, HEIs.

INTRODUCTION

Modern Higher Education Institutions (HEIs) are moving from being merely public service organizations to market-driven organizations; hence, they are confronted with the need to reform many of the management practices. One of the most significant of the current issues faced by HEIs is improving performance. However, improving performance of organizations, especially the HEIs, requires various characteristics that would lead to the achievement of the goals and objectives of the management. Therefore, HEIs must adopt promising managerial approaches and practices to improve their performance, including becoming learning organizations (Watkins, 2005); competitive strategies (Mathooko & Ogutu, 2014).

HEIs have increasingly begun to look at interventions of organizational learning as significant ways to understand how knowledge is employed and exploited (Jane et al., 2018). There are as several definitions as there are different approaches and models for defining and conceptualizing the learning organization (Örtenblad, 2018). A learning organization maximizes the capabilities of individuals in the organization to bring about change, to survive in a volatile

environment, to sustain competitive advantage and to boost the organization's overall performance. Like other organizations, HEIs should develop and adapt new strategies to respond to the rapid changes in the regulatory environment where they operate and to sustain competitive advantage. Individuals in a learning organization will compete with their counterparts and always endeavor to excel. On the other side, suitable competitive strategies can also enable organizations to best exploit their own core competencies to capture opportunities in their external environment (Porter, 1985). Competitive strategies can facilitate HEIs to perform better to attain a successful and sustainable position, to confront the forces that determine market competition (Mathooko & Ogutu, 2014).

Improving the performance of HEIs is a common concern in different countries around the world. Yemen is one of those countries in which its HEIs are operating in a volatile environment. This requires the HEIs to adopt new strategies to strongly curb the challenges, adopt new ways to survive and cope with changes imposed by the environment. This is because currently, HEIs in Yemen are operating in a highly dynamic and complex environment due to the presence of many executors in the higher education sector (Supreme Council for Educational Planning, 2014). Hence, their strategies need to be realigned and focused on the needs of their clients, such as the community, the government and the students at large.

As with any HEI in the developing countries, Yemeni HEIs face many obstacles in a volatile environment; they suffer many shortcomings that prevent them from attaining higher levels of performance and productivity. In this regard, Al-haimi et al. (2018) pointed out that Yemeni HEIs face several issues that affect their institutional performance in a competitive environment, similar to institutions in the same region or the rest of the world, which have led to fail to be listed among World Class Universities. For instance, HEIs in Yemen suffer from weak educational processes and a decline in institutional performance (Supreme Council for Educational Planning, 2014; World Bank, 2010). Therefore, solutions must be sought for all these challenges and issues experienced by this sector, which stimulate to conduct this study.

A review of extant literature has shown that there is a lack of studies on performance of HEIs in Yemen (Al-haimi et al., 2018). Therefore, the objective of this study is to examine the moderating role of competitive strategies between the learning organization-organizational performance relationships of HEIs in Yemen. This study fills the gap in the literature in terms of managerial studies, in general, and the setting of HEIs in Yemen, specifically.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Evidence from prior studies has indicated that the learning organization is an essential determinant to improve organizational performance (Marsick & Watkins, 2003) and is useful for creating competitive advantage. On this note, strategy adoption might enhance or obstruct the good practices of the learning organization in the relationship with organizational performance. Based on the Resource-Based View (RBV), the resources and capabilities owned by organization are critical determinants to enhance the performance of the organization, which in turn, contribute to the achievement of sustainable competitive advantage (Wernerfelt, 1984). Related literature deem the processes of learning within organizations as a fundamental strategic capability for organizations to outperform their rivals (Goh, 1998). This leads to the following hypothesis:

H₁: There is a significantly positive effect of the learning organization on performance of HEIs.

Prior empirical literature has shown that strategy adoption is positively related to the performance of the organization (e.g., Mathooko & Ogutu, 2014). However, studies on the direct association between learning organization and performance of HEIs, have shown inconsistent findings; for instance, the studies Hussein et al. (2016), Kumar & Idris (2006) and Ponnuswamy & Manohar (2014) have shown that learning organization has significantly positive associations with the performance of HEIs; whereas the study of Al-Ahmar et al. (2014) concluded that there is insignificant relationship between organization of learning and performance of universities. In addition, previous studies on various sectors have also found inconsistencies in the influence of learning organization dimensions on performance, such as Selden (1998) and Akhtar et al. (2011). Therefore, the inconsistency in the results of prior studies in respect of the influence of the learning organization on performance of HEIs has led to the need to have a moderating variable between the two. According to Baron & Kenny (1986), when mixed findings are recorded among the variables of a study, there is a need for a moderating variable that can facilitate the relationship.

In addition, competitive strategy has played the role of moderator between several variables and performance in many previous studies, such as Mcalister et al. (2016), which have confirmed that strategy competitive strategies have moderating influence on the relationship of different organizational practices to performance. This justifies the reasons for employing competitive strategies in this study as moderating variables to investigate the linkage between the learning organization and performance of HEIs. Furthermore, to the best knowledge of the researchers, no previous research has explore the moderating impact of Porter's competitive strategies in this relationship, which contain strategies of cost-leadership, differentiation, and focus (Figure 1).

The RBV explains the necessity for harmony among the organization's internal capabilities and the external context in which an organization performs. In addition, dynamic capabilities indicate to an organization's ability to integrate the internal and external competencies to deal with the turbulent environment (Teece et al., 1997). The adaptability of a learning organization rapidly allows the re-allocation of the organization's resources when new opportunities emerge in the market (Beer et al., 2005). Therefore, the learning within the organization plays an important role in strategy adoption and implementation, for quickly adapting to the volatile environment. Thus, this study proposes the following hypotheses:

H₂: Cost-leadership strategy moderates the relationship of the learning organization with performance HEIs.

H₃: Differentiation strategy moderates the relationship of the learning organization with performance HEIs.

H₄: Focus strategy moderates the relationship of the learning organization with performance HEIs.



FIGURE 1
THE FRAMEWORK OF STUDY

METHODOLOGY

Population and Data Collection

The research employed a cross-sectional research design where the population of the study is all institutions in the public and private sectors which are classified as HEIs in Yemen. The study used the census approach to collect data from the entire population rather than sampling, to avoid any sampling bias and error because the size of the total targeted population is small and manageable (Zikmund et al., 2010). The questionnaire was distributed to deans, deputy deans or their representatives. In total, 189 out of 292 questionnaires were returned. But according to the suggestion of Hair et al. (2010), three questionnaires were not utilized as more than 50% of the questionnaire was incomplete. Through an appropriate data screening process, two questionnaires were deleted because extreme outliers. In total, the number of valid questionnaires for the further analysis was 184, specifying an effective response rate of 63 percent.

Measurements

Organizational performance was measured using 22 questions adapted from previous studies and by following Chen et al. (2009) and Hussein et al. (2016). Learning organization has 21 questions adapted from DLOQ of Marsick & Watkins (2003) and Watkins & Marsick (1997). Competitive strategies were measured using 12 questions adapted from previous studies and based on the measurements of Dess & Davis (1984) and Luo & Zhao (2004). All items of organizational performance and learning organization were evaluated by a five-point Likert scale, ranging from 1 to 5 (strongly disagree, disagree, neutral, agree, and strongly agree), while the items of competitive strategies were evaluated on a five-point scale, ranging from 1 to 5 (very low, low, average, high, and very high).

Descriptive Statistics

The majority of the participants are deans of colleges (57.5%), followed by deputy deans (39.3%), while other positions constituted 3.2%. Descriptive statistics also show that the majority of the respondents are between 40 to 49 years old (64.5%), followed by 50 years old and above (18.3%), while the lowest percentage is those less than 30 years old (0.5%). These results show the importance of work experience to have a top management position in Yemeni HEIs.

RESULTS

Before proceeding to assessment of measurement and structural model, it is essential to ensure that the collected data are suitable for conducting the analysis using PLS-SEM. The correlation matrix was employed to detect the presence of multicollinearity or not. Additionally, tolerance and Variance Inflation Factor (VIF) were also assessed to identify multicollinearity issue. According to Hair et al. (2017), tolerance value should be higher than 0.20, while VIF value should be lower than 5. Table 1 shows Pearson correlation matrix and the collinearity statistical results, the correlations values ranged between 0.412 and, 0.775, while the tolerance and VIF values for the independent variables are within the acceptable limit. Therefore, the results signify no violation of the multicollinearity issue.

	Correlation Matrix					Collinearity Statistics	
	LO	CLDS	DS	FS	OP	Tolerance	VIF
Learning Organization (LO)						0.363	2.757
Cost leadership Strategy (CLDS)	0.714					0.487	2.052
Differentiation Strategy (DS)	0.663	0.503				0.494	2.024
Focus Strategy (FS)	0.453	0.363	0.530			0.699	1.430
Organizational Performance (OP)	0.775	0.639	0.681	0.412		-	-

Assessment of Measurement Model

For evaluating the reflective measurement model, the authors followed the recommendations of Hair et al. (2017). The internal consistency reliability and convergent validity were evaluated by examining the following: firstly, all indicator loadings must be 0.70 (Table 2 and Figure 2); secondly, the Composite Reliability (CR) of latent constructs and Cronbach's alpha coefficient must be more than 0.70; and thirdly, the Average Variance Extracted (AVE) of latent constructs must be higher than 0.50, as illustrated in Table 2.

For assessing the discriminant validity, there are several methods to do this, such as using the Heterotrait-Monotrait (HTMT) ratio criterion and cross loading matrix. Table 3 shows the results obtained from the HTMT criterion; according to this criterion, all constructs have acceptable discriminant validity because all values of the constructs are less than the cut-off of 0.85 (Kline, 2011). Further, the indicator loadings of constructs are larger than the cross-loadings on the their other latent constructs (Hair et al., 2017). Thus, this confirms that discriminant validity is sufficiently established. Then, the measurement of the model was established. Figure 2 shows the reliable and valid measurement.

Assessment of the Structural Model

For assessing the structural model, the authors followed the suggestions of Hair et al. (2017) by including the coefficient of determination (R^2) value, effect size (f^2) values, predictive relevance of the model (Q^2) and path coefficient. The value of R^2 indicates the measuring of the predictive accuracy of the model. R^2 with 0.75, 0.50 and 0.25 is deemed as the rule of thumb for endogenous latent variables, which is described as substantial level, moderate level or weak level of predictive power, respectively (Hair et al., 2017). Effect size was also evaluated to determine the size of effect of each construct on the endogenous construct. According to the suggestions of

Cohen (1988), the f^2 value of 0.02 is considered as small effect size, 0.15 as medium effect size and 0.35 as large effect size.

Table 4 and Figure 2 show that the R^2 value of organizational performance is 0.702, indicating that 70.2% of the variances in the construct of organizational performance may be explained by learning organization and competitive strategies and its moderating interaction. Thus, the R^2 value of organizational performance is in the moderate level. Table 4 also shows that the moderating effect size of cost leadership on the association between learning organization and performance of HEIs is small with f^2 value of 0.02. Also, there is a large effect of learning organization on performance of HEIs with f^2 value of 0.392, while there is a small effect of cost leadership and focus with f^2 value of 0.013 and 0.113 respectively.

Table 2
THE RESULTS OF INTERNAL CONSISTENCY RELIABILITY & CONVERGENT VALIDITY

Construct	Dimension	Item	First Order				Second Order			
			Loadings	Alpha	CR	AVE	Loadings	Alpha	CR	AVE
Learning Organization	Continuous Learning	cl_01	0.811	0.756	0.86	0.672	0.631	0.936	0.914	0.604
		cl_02	0.841							
		cl_03	0.807							
	Inquiry and Dialogue	inq_01	0.848	0.756	0.86	0.673	0.773			
		inq_02	0.852							
		inq_03	0.758							
	Team Learning	tl_01	0.865	0.851	0.909	0.77	0.843			
		tl_02	0.883							
		tl_03	0.884							
	Embedded Systems	es_01	0.829	0.796	0.88	0.71	0.791			
		es_02	0.851							
		es_03	0.847							
	Empowerment	emp_01	0.731	0.828	0.9	0.752	0.751			
		emp_02	0.926							
		emp_03	0.929							
	Systems Connection	sc_01	0.738	0.865	0.92	0.796	0.806			
		sc_02	0.958							
		sc_03	0.962							
Strategic Leadership	sl_01	0.842	0.835	0.901	0.752	0.825				
	sl_02	0.888								
	sl_03	0.871								
Organizational Performance	Social Responsibility	op_01	0.968	0.93	0.956	0.878	0.774	0.947	0.917	0.648
		op_02	0.886							
		op_03	0.956							
	Student Quality	op_04	0.969	0.925	0.949	0.826	0.817			
		op_05	0.949							
		op_07	0.96							
		op_08	0.735							
	Faculty Resources	op_10	0.773	0.874	0.925	0.805	0.755			
		op_11	0.958							
		op_12	0.949							
	Teaching Activities	op_13	0.852	0.769	0.867	0.686	0.868			
		op_14	0.756							
		op_15	0.872							
	Development Target & Characteristics	op_16	0.798	0.88	0.928	0.812	0.813			
		op_17	0.945							
op_18		0.951								

	Curriculum Planning	op_19	0.876	0.861	0.915	0.782	0.799			
		op_20	0.913							
		op_22	0.864							
Cost Leadership		sa_01	0.819	0.761	0.863	0.678	0.819	0.761	0.863	0.678
		sa_02	0.877							
		sa_04	0.771							
Differentiation		sa_05	0.849	0.73	0.846	0.648	0.849	0.73	0.846	0.648
		sa_06	0.837							
		sa_07	0.723							
Focus		sa_09	0.891	0.841	0.903	0.756	0.891	0.841	0.903	0.756
		sa_10	0.889							
		sa_11	0.827							

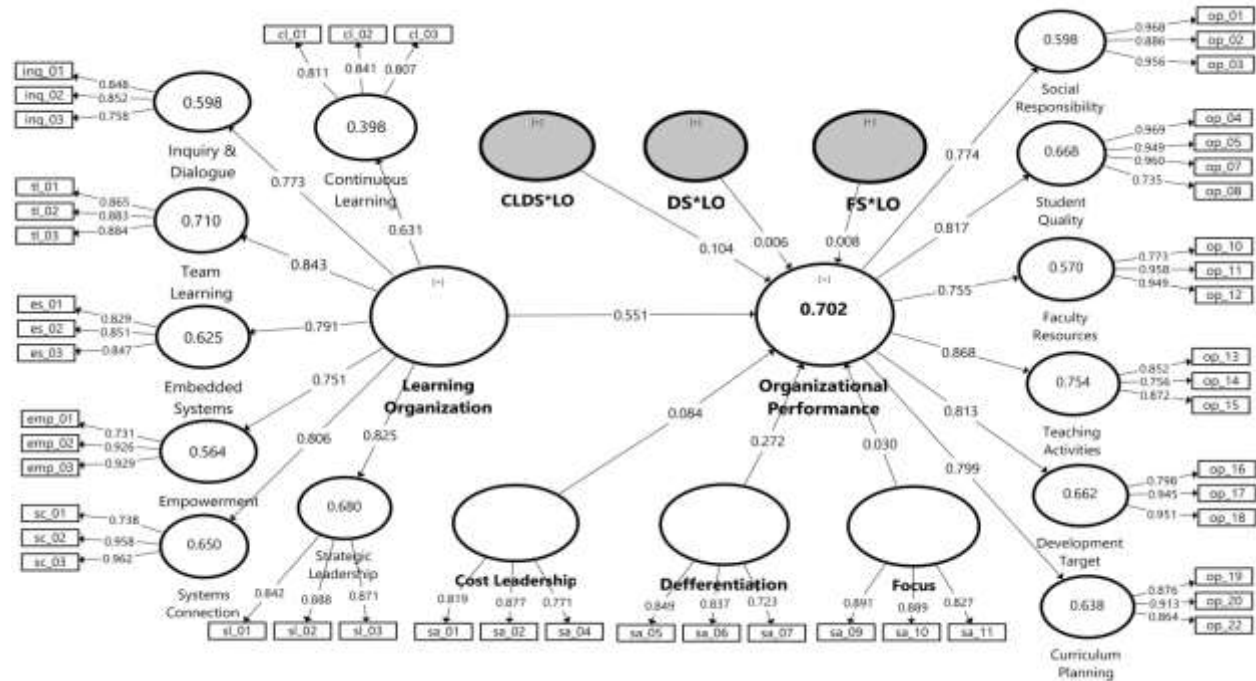


FIGURE 2
THE PLS ALGORITHM RESULTS-THE FINAL RELIABLE AND VALID MODEL

Construct	LO	CLDS	DS	FS	OP
Learning Organization (LO)					
Cost leadership Strategy (CLDS)	0.749				
Differentiation Strategy (DS)	0.824	0.730			
Focus Strategy (FS)	0.465	0.378	0.530		
Organizational Performance (OP)	0.846	0.692	0.831	0.456	

Construct	f²	R²
Learning Organization → Organizational Performance	0.392	0.702
Cost Leadership → Organizational Performance	0.013	
Differentiation → Organizational Performance	0.113	
Focus → Organizational Performance	0.002	
Cost Leadership*Learning Organization → Organizational Performance	0.020	
Differentiation*Learning Organization → Organizational Performance	0.001	
Focus*Learning Organization → Organizational Performance	0.001	

Furthermore, as recommended by Hair et al. (2017), the model will have predictive relevance when the cross-redundancy (Q^2) values are found to be higher than zero. In this study, the result shows that the Q^2 for organizational performance is 0.329, which means that this model has a sufficient predictive relevance.

The last step in assessing the model was to examine the proposed relationships by using bootstrapping resampling estimation procedure. As shown in Table 5, H_1 is supported ($p < 0.01$), which means that there is a significantly positive effect of the learning organization on performance of HEIs. In addition, H_2 regarding the moderating effect of cost-leadership strategy on the relationship of learning organization with performance of HEIs is supported ($p < 0.05$), this means that cost leadership strategy has a moderating effect in strengthening the relationship of learning organization with performance of HEIs. Table 5 also shows that differentiation strategy and focus strategy have no moderating effect on this proposed relationship; therefore, H_3 and H_4 are not supported ($p > 0.05$).

Hypotheses	Beta	SE	t-value	Decision
H_1 : LO → OP	0.551	0.071	7.799	Supported**
H_2 : LO*CLDS → OP	0.104	0.061	1.706	Supported*
H_3 : LO*DS → OP	0.006	0.054	0.103	Not supported
H_4 : LO*FS → OP	0.008	0.050	0.161	Not supported

Notes: Significance level at ** $p < 0.01$ and * $p < 0.05$.

DISCUSSION

Basically, the objectives of the research are to examine the impact of learning organization on performance of HEIs and to evaluate the moderating effect of competitive strategies in the relationship between learning organization and performance of HEIs. The results of testing the hypotheses indicate that there is a significantly positive effect of the learning organization on performance of HEIs. Therefore, the findings of this research confirm prior research that have concluded the correlation of learning organization construct to organizational performance (Hussein et al., 2016; Marsick & Watkins, 2003). This means that the level of performance improvement depends on the level of learning organization characteristics present in a HEI.

Besides, the findings also show that cost leadership has a positive and statistically significant influence on the relationship between learning organization and performance of HEIs, which means that the cost leadership strategy plays a crucial role in strengthening the relationship of the learning organization to organizational performance of HEIs. This result

seems to be consistent with strategic management literature that claims that a competitive strategy, such as cost-leadership strategy, can strengthen the organization's competitive position, its ability to gain competitive advantage and improve performance by offering services with least cost compared to competitors. In this regard, Porter (1985) considered that for the control of learning, it is necessary to manage the learning curve as one of the important drivers of the cost leadership strategy.

On the contrary, the differentiation strategy and focus strategy do not have a significant role in strengthening this correlation. As results, the non-significant findings of the differentiation strategy may be attributed to the fact that Arab HEIs including Yemen, do not employ modern technological methods that can distinguish their educational programs and services, and they do not have enough budget for research and scientific innovation (Muqdad et al., 2012). Focus strategy also shows an insignificant result as a moderator. This may be due to the fact that the majority of educational institutions seek to target a large segment of students, customers and a large sector of the market and not focus on specific sectors of the market.

This study has some implications for the HEI's top management, deans, departments' heads, academics and other staff, in terms of the importance of promoting the principles of learning to reinforce higher performance and to attain competitive advantage.

The research recommends that there is a critical need to inculcate the learning organization practices and strategy adoption concepts among staff and academics for enhancing their inputs to organizational performance individually and collectively. The research also highly suggests that it is necessary to mobilize resources and make efforts to instill learning and strategic thinking not only among top management but also among staff and academics within the institution.

The modest contributions of this research are of varied importance. Firstly, since this domain of research is considered as new in the HEI context, it is a critical to bridge the gaps on the topic, especially in the Middle East. Secondly, from a theoretical perspective, this research has a unique model and contains a set of variables, which supports and expands the literature review in managerial development and strategic management. More clearly, this research highlights vital and unprecedented insights on learning organization and competitive strategy as predictors of organizational outcomes, in terms of organizational performance, especially performance of HEIs. Theoretical insights that cost-leadership plays prominent role in moderating the link between learning organization and performance were confirmed empirically, underpinned by the RBV and dynamic capabilities theories to ensure exceptional performance. In addition, this study relies on data from the population as a whole by surveying all subjects in public and private institutions, which gives strength to the results and reduces bias and sampling errors (Zikmund et al., 2010).

CONCLUSION

In conclusion, this research assessed the moderating effect of competitive strategies on the relationship of learning organization to performance of HEIs. This study also assessed the direct the influence of the learning organization on performance of HEIs, and to find out how cost leadership strategy moderates this relationship. This was done due to the existing gap in knowledge on how the competitive strategy affects the relationship of learning organization to organizational performance in the Yemeni HEIs' context. The data in this research were collected by adopting a cross-sectional survey using a census approach. Smart-PLS 3.2.7 application was employed to evaluate the model on the five constructs, namely learning

organization, cost leadership, differentiation, focus and organizational performance. The study established that there is empirical evidence for the hypothesis that the relationship of learning organization to organizational performance is moderated by cost leadership strategy. In brief, this implies that organizations, especially HEIs, have to ensure that learning organization practices should be in line with the competitive strategies as cost leadership, that they adopt in order to gain and maintain a competitive advantage and to be able to outperform their competitors.

LIMITATIONS AND RECOMMENDATIONS

Although the results of the current research provide a considerable contribution to the significance of the learning organization and competitive strategies simultaneously in optimizing organizational performance, future research should use objective and financial measurements to measure performance and should include various sectors. Besides that, as the practices of learning organization require some time to be instilled in the organizations, and ultimately have an effect on performance, therefore, future research could use a longitudinal design to detect precisely how these variables interact with each other in the long-term.

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