# Learning Organization, Strategy Adoption and Knowledge Transfer as Factors for Improving Performance of Higher Education Institutions: A Literature Review

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#### **Abstract**

Learning organization plays an important role in improving organizational performance. It is well-known from various sectors that this variable plays a significant role in enhancing the performance of various organizations and is used for promoting effective competitive advantage. Although there are many studies in this area of management, very few studies are available on Higher Education Institutions (HEIs). The objective of this study is to review the literature on learning organization and its relationship with organizational performance. In addition, the study reviews the literature on strategy adoption and knowledge transfer as they are also ascribed to the improvement of organizational performance. Hence, there are relationships between strategy adoption and knowledge transfer and organizational performance. Finally, the study makes a conclusion based on previous studies on the relationship among the variables and recommends that empirical studies use moderating and mediating variables between learning organization and organizational performance improvement in the HEI setting.

*Keywords*: Learning organization, strategy adoption, knowledge transfer, organizational performance, HEIs.

#### 1.0 Introduction

Learning organization is a concept developed long time ago to assist organizations in creating and sharing knowledge among employees in an effort to improve organizational performance. The need for individuals to create, share and disseminate knowledge within an organization makes learning organization more important for the development of the organizations and is also a viable tool for creating competitive advantage (Garvin, Edmondson, & Gino, 2008). The capabilities required of employees to face competitive challenges and improve performance are highly attributed to the organizational culture in creating and disseminating knowledge through an efficient and effective process of learning.

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Creating, sharing and disseminating of knowledge among the employees is crucial for them and their organizations to survive in a volatile environment and for enhancing the performance of the organization (Pedler, Burgoyna, & Boydell, 1997). Delfmann and Koster (2012) contended that creating, sharing, disseminating and transferring knowledge among the employees of the same organization is widely recognized in management literature as an indispensable component in a knowledge-driven economy and for performance improvement.

Efforts for enhancing employees' capabilities cannot be realized without a favourable environment for creating, sharing and disseminating knowledge, which in turn, can lead to performance improvement and sustainability in a highly volatile and competitive environment (Alipour & Karimi, 2011). On this note, Paulin and Suneson (2012) stated that knowledge that is required to achieve competitive advantage to improve individual capabilities and bring positive advancement in an organization can be achieved through an effective learning organization. From the literature of management, learning organization can be achieved using different factors and variables such as knowledge transfer and strategy adoption.

Knowledge transfer and strategy adoption (Argote & Ingram, 2000; Eliufoo, 2005; Porter, 1996; Seedee, 2012) are among the organizational variables highlighted in the literature that can best suit the process of creating a learning organization and facilitating organizational performance. Argote and Ingram (2000) described knowledge transfer in organizations as the major mechanism for creating sustainable competitive advantage for organizations that operate in a volatile environment. Eliufoo (2005) expressed that knowledge transfer is the most substantial determinant for increasing what the organization knows and is willing to share and disseminate among its employees to attain competitive advantage.

Conversely, Porter (1996) describe strategy as a method for performing a dissimilar set of actions to those performed by competitors or performing the same actions in dissimilar ways, to create a unique and treasured position for the organization. Strategy adoption would enable adopting organizations to best harness, utilize and outperform their respective competitors and grab opportunities in the environment in which they operate and beyond (Seedee, 2012).

On one side, Higher Education Institutions (HEIs) are among the organizations that operate in a highly competitive environment, which requires new strategies and knowledge transfer to increase the quality of their services to their clients, improve performance and sustain competitive advantage. Generally, HEIs are moving away from being public service organizations to market-driven organizations, in which they are required to revise their management practices, enhance service quality and improve performance (Noruzy, Dalfard, Azhdari, Nazari-Shirkouhi, & Rezazadeh, 2013). Improving HEIs' performance require many actors and factors to work in tandem

which ultimately can lead to the improvement of performance. Strategy adoption and knowledge transfer through a learning organization can serve as a basis for achieving improved performance in HEIs (Noruzy et al., 2013; Salleh, 2014).

HEIs, like other sectors, must adopt creative and innovative managerial solutions to improve their performance and to become learning organizations (Akhtar, Arif, Rubi, & Naveed, 2011; Ali, 2012; Habtoor, Arshad, & Hassan, 2017; Hussein, Omar, Noordin, & Ishak, 2016; Kumar & Idris, 2006; Ponnuswamy & Manohar, 2014; Salleh, 2014; Karen Watkins, 2005), which include knowledge transfer (Salleh, 2014); and strategy adoption (Kufaine, 2014; Mathooko & Ogutu, 2014). These two variables have been recommended by many scholars, researchers and experts as the appropriate techniques to counter challenges in the modern era. In this regard, the objective of this review is to highlight the importance of the learning organization in improving organizational performance through strategy adoption and knowledge transfer. Prior studies in this area have mostly used a direct relationship and some with a moderating variable to study the influence of the learning organization in improving organizational performance (Akhtar et al., 2011; Hussein et al., 2016; Kumar & Idris, 2006). This study aims to review the literature and suggest the methods used from the perspective of HEIs, particularly in Arab countries, where there is a dearth of studies on the subject, in spite of the high demand for performance improvement in HEIs (Supreme Council for Educational Planning SCEP, 2014).

For instance, the educational system in Yemen is more dependent on the government, where the government is the major funder of public HEIs, despite the country's poor economic and social infrastructures (Muthanna & Karaman, 2014). In addition, the country is currently in political turmoil and facing educational decadence with a high number of prospective students who cannot get enrolled in the HEIs due to lack of capabilities of the institutions to accommodate and satisfy the needs of the stakeholders (SCEP, 2014). This has long been crippling efforts to improve the educational system and performance of the country (World Bank, 2010). Too many actors and insufficient facilities, lack of graduate quality to compete with their counterparts, weak teaching methodology and failure to employ educational technology, are some of the major challenges and problems. Other problems are dilapidated building structures, inadequate laboratory equipment, weak administration and management, inadequate library facilities and poor quality or lack of access to internet resources (Muthanna & Karaman, 2014; Shiryan, 2009).

Therefore, the application of learning organization to improve performance of HEIs have been emphasized in past studies (Hussein et al., 2016; Salleh, 2014). However, information and studies on HEIs' performance improvement are very scarce (Hussein et al., 2016), especially in developing countries. For this reason, this study was motivated to review the literature by focusing on Yemen as a country where the problem is pronounced. The paper is presented in four sections: section one is the introduction;

section two examines the literature on the learning organization and its dimensions; section three reviews strategy adoption; section four is on knowledge transfer; and section five presents a brief but precise conclusion and recommendations.

### 2.0 Learning Organization

From the literature, learning organization is viewed as a multifaceted concept that has been defined from different perspectives to suit researchers' perceptions. Marquardt (1996) defined the concept of learning organization as "an organization which learns powerfully and collectively and is continuously transforming itself to better collect, manage and use knowledge for corporate success". To Dixon (1994), learning organization refers to the capability of organizations to properly utilize the mental ability of their employees efficiently to improve performance. The ability of the organization to provide an enabling environment for utilizing employees' capabilities is vested in the learning organization to create, acquire, share and disseminate knowledge that can improve performance.

## 2.1 Overview of Learning Organization

Leaning organization in the literature on management is drawing considerable attention and interest of many researchers (Egan et al., 2004; Lien et al., 2006; Marquardt, 1996, 2002; Wang, Yang, & McLean, 2007) because of the importance of the concept in driving competitive advantage. Previous researchers (see, Garvin et al., 2008; Karash, 1994; Pedler et al., 1997) have carried out different studies in an attempt to understand the significance of the concept in enhancing organizational performance. These studies include practical examination of working environments to understand the construct of the learning organization's effect in promoting organizational performance (Egan et al., 2004; Ellinger, Ellinger, Yang, & Howton, 2002; Kumar & Idris, 2006; Ratna, Khanna, Jogishwar, Khattar, & Agarwal, 2014; Theriou, Theriou, & Chatzoglou, 2007).

The term, learning organization, has different measurements in the literature. This confirms its multifaceted view from the scholars' perspective and its importance to organizational performance (Watkins & O'Neil, 2013). Among the most popular models of learning organization in the literature that provides its measurements is Watkins and Marsick (1993, 1996, 1997). Their models in these studies have provided a crucial dimension of the learning organization. There are seven dimensions (Watkins & Marsick, , 1993, 1996, 1999; Watkins & O'Neil, 2013) of the learning organization that serve as a basis for measuring the learning organization in relation to organizational performance. Yang, Watkins, and Marsick (2004) stated that these dimensions have distinct characteristics and are interrelated.

The seven dimensions of the learning organization, according to the literature, are further grouped into four levels of the organization, namely: individual level, team

or group level, organizational level and societal or global level. In a submission by Marquardt (2002), he posited that learning at a particular level among the four levels can influence the performance of the remaining three levels in one way or the other. This is a clear indication of the inter-relativity of the level and connectivity of the measures in influencing change in performance at one level which can exert influence on the other. The dimensions according to each level are thus as follows: two dimensions for individual level which are: creating opportunities for continuously learning; and promoting a principle of inquiry and dialogue. Group/team level has only one dimension, which is: encouraging collaboration and team learning. The organizational level has two dimensions: establishing and embedding systems to create and share learning; and empowering people towards a collective and shared vision. Finally, the societal or global level has two dimensions: providing strategic leadership that supports learning; and connecting the organization to its environment.

These are the four basic levels and seven dimensions for measuring the learning organization in relation to organizational performance. Very few studies have used these seven dimensions to measure the learning organization in relation to performance of HEIs (Habtoor et al., 2017). However, a few empirical studies have used these dimensions to generally assess the influence of the learning organization in enhancing organizational performance (Akhtar et al., 2011; Ali, 2012; Awasthy & Gupta, 2012; Davis & Daley, 2008; Hussein et al., 2016; Kumar & Idris, 2006; Lien et al., 2006; McHargue, 1999; Ponnuswamy & Manohar, 2014; Qawasmeh & Al-Omari, 2013; Ratna et al., 2014; Salleh, 2014; Weldy & Gillis, 2010). The studies cut across different sectors that include HEIs and service, not-for-profit, public and private organizations as well as organizations in other sectors.

# 2.2 Learning Organization and HEIs in Yemen

Studies on HEIs and learning organization are few and far between in the literature (Akhtar et al., 2011; Ali, 2012; Hussein et al., 2016; Kumar & Idris, 2006; Ponnuswamy & Manohar, 2014; Salleh, 2014). To the best of our knowledge and based on the available literature, studies in this area are scarce generally. Specifically, in the Arab world, and Yemen, in particular. Yemen was left behind by several decades due to lack of educational developments and infrastructure in addition to poor economic performance (World Bank, 2010).

According to the SCEP (2014), HEIs in Yemen are affected by high turbulance and a volatile environment, which has led to the presence of too many actors in the educational sector, and in turn, has caused low performance and ineffective outcomes of the HEIs in the country. Therefore, it is high time to investigate learning organization in relation to organizational performance in HEIs using the parameters in the literature to test the four levels of the learning organization in HEIs of Yemen in a single study. Accomplishing this would provide new knowledge from the perspective of Yemeni

HEIs that would add to the literature on the learning organization, and at the same time, offer solutions to improve the organizational performance of HEIs in the country.

### 3.0 Strategy Adoption

Strategy adoption is a vital factor that can facilitate the learning organization in improving organizational performance. Ansoff and McDonnell (1990) defined strategy as a set of rules that can guide actions and decision-making of the organization. Pearce and Robinson (2005) viewed strategy as a plan for achieving organizational objectives in a predefined period using available resources. These definitions best describe strategy as an action plan designed to guide and lead organizations to success in accomplishing objectives and decisions that can provide positive competitive advantage. It has become obvious that effective organizational strategy will provide competitive advantage to organizations, which includes configuring organizational resources by realigning and restructuring capabilities to meet the stakeholders' expectations (Johnson, Scholes, & Whittington, 2008). It is further stated that business strategies can be adopted in any kind of organization to achieve the benefits of the adoption and prosperity for the organization (Gupta, Gollakota and Scrinivasan, 2007).

Porter (1980) argued that strategy adoption simply refers to choosing a range of activities that could enhance organizational operations to create and retain substantial differences in the market within an industry full of competitors. It is therefore agreed that adopting strategy is an ingredient required for long-term and successful organizational performance irrespective of the sector. The survival of an organization that is operating in a volatile and competitive environment would be determined by its ability to adopt unique and effective strategies that can bring about good decision-making and accomplishment of objectives (Hashim, 2015; Seedee, 2012).

Prior literature on strategic management has provided three major levels of organizational strategies in organizations. These three levels are: functional level, corporate level and business level (O'Regan, Kling, Ghobadian, & Perren, 2012). Each level has its own unique characteristics. The business level focuses on how the organization can compete in selecting the right strategies whereas at the functional level, the organization's strategies are derived from the business and are concerned with improving the organization's productivity. The main focus at corporate level is the organization's selection of a sector or domain in which it strategically competes with rivals. However, most of the studies have paid more attention to the business level and neglected the other two levels. The reason for this selection is that the business level reflects the organization's performance more and is used to determine market orientation of the organization (O'Regan et al., 2012).

Porter (1980) provided three strategy adoption dimensions than can best measure the relevant generic strategies that organizations can use to compete and achieve superior

performance. The three dimensions of strategy adoption are: differentiation approach, cost leadership approach and focus approach. Porter (1985) stated that the generic strategies are the centre of any strategy that an organization needs to choose against its competitors to achieve the competitive advantage that it desires to attain.

## 3.1 Empirical Reviews on Strategy Adoption and Organizational Performance

Various empirical studies have shown that there is a relationship between strategy adoption and organizational performance (Hashim, 2000; Kufaine, 2014; Mathooko & Ogutu, 2014; Nandakumar, Ghobadian, & O'Regan, 2011; Pulaj, Kume, & Cipi, 2015; Zakaria & Hashim, 2016). Other studies have indicated that there are some relevant practices of learning organizations that are related to strategy adoption and organizational performance improvement (Bavarsad, Rahimi, & Seyfi, 2014; Gilaninia, Ganjinia, & Karimi, 2013; Kazemi, Moghadam, Dehghan, & Ghorbanian, 2014; Kharabsheh, Jarrar, & Simenonva, 2015; Santos-Vijande, López-Sánchez, & Trespalacios, 2012).

Besides, some other studies have used strategy adoption as a moderator between various organizational practices and organizational performance (Barrick, Thurgood, Smith, & Courtright, 2014; Mcalister, Srinivasan, Jindal, & Cannella, 2016; Mellat-Parast, Golmohammadi, McFadden, & Miller, 2015; Oltra & Flor, 2010; Seedee, 2012). These are among the empirical literature that was documented in relation to strategy adoption and organizational performance. On the other side, prior research by Akhtar et al. (2011) Lalitsasivimol (2014) found that some dimensions of a learning organization have insignificant relations to performance. The contradictions in the results of previous studies with regard to the relationship between learning organization and organizational performance calls for strategy adoption in this study as moderating in the relationship.

As a result, strategy adoption is required in any organization, whether it is a profit or not-for-profit, private or public, service organization, etc. to achieve its objectives especially in a rapidly changing environment like the higher education environment. Suryadi (2007) suggested that HEIs should develop and adopt strategies to quickly respond to the changing environment so as to have competitive advantage. Strategy adoption will help to place HEIs in a successful and sustainable position to face the forces that determine market competitiveness (Hashim, 2015; Porter, 1980) and raise organizational outcomes. In educational organizations, study of Kettunen (2002) supported strategy adoption in HEIs and applying various competitive strategies. He also indicated that competitive strategies, like cost leadership, differentiation and focus, provide a good basis for strategic management and gaining the best outcomes. This clearly indicate the importance for HEIs to adopt appropriate strategies that meet the vision and objectives of the institution.

Improving the performance of HEIs is a substantial concern for many countries globally. Yemen is among the Arab countries that are in dire need for improving HEI performance

(World Bank, 2010). We suggest that a study to examine the role of strategy adoption in moderating the relationship between learning organization and organizational performance in Yemeni HEIs using different dimensions of learning organization and strategy adoption should be undertaken.

## 4.0 Knowledge Transfer

Knowledge transfer is a concept that deals with sharing and disseminating ideas, experiences and lessons among the employees of the organization in order to improve its overall performance. Many definitions have been offered by scholars regarding the concept and what it encompasses. Within the realm of management literature, Argote and Ingram (2000) stated this about knowledge transfer: "The process through which one unit (be it group, department or division) is affected by the experience of another" (p.151). In addition, they argued that transfer of knowledge is the right platform for establishing competitive advantage in an organization steeped in challenges and operating in a volatile and turbulent environment (Argote & Ingram, 2000).

Awad and Ghaziri (2004) explained that knowledge transfer is knowledge diffusion through sharing experience, delivering lessons and committing to practicing the transmitted knowledge (transmission and absorption). Salleh et al. (2012) disclosed that the main goal of knowledge transfer is to enhance sharing, learning and collaborating knowledge among the organizational employees, with the goal of improving overall organizational performance. They further stated that to actualize this objective, knowledge needs to be transferred from responsible sources, through electronic or face-to-face approaches; and transferred in an agreed format to the recipient before sharing. In addition, the knowledge should be received, understood and used properly as much as possible.

## 4.1 Overview of Knowledge Transfer

Globally, scholars have indicated that knowledge transfer is the most essential asset in present day organizations and is used to determine the capabilities for improving organizational performance (Genç & İyigün, 2011; Marquardt, 2002). Alipour et al. (2011) and Marsick and Watkins (2003) added that well-organized, shared and managed knowledge in an organization will enhance the capabilities of the learning organization and this situation would lead to improvement of organizational performance. This indicates that organizations that adhere to knowledge transfer would achieve learning organization objectives and improve performance compared to organizations that lack the knowledge transfer capabilities.

Albino and Gorgoglione (2004) suggested that knowledge transfer should include, but be not limited to, face-to-face communication between individuals instead of just

being facilitated by technology. Even if machines can handle data, knowledge transfer must include human cognition and lead to the organization's competitive advantage. This emphasizes the need for knowledge transfer to be compatible by having both electronic and human efforts for it to be effective and assist in improving performance. Today, knowledge transfer within and among organizations is seen as one of the most important components for improving what organizations know and assist in transforming it towards enhanced organizational performance and greater competitive advantage (Alipour, Idris, & Karimi, 2011; Eliufoo, 2005).

From the theoretical and practical outlook, knowledge transfer is receiving growing interest among academicians and practitioners. All of them consider it as vital approach for improving organizational performance and achieving competitive advantage (Alipour, Idris, Ismail, Uli, & Karimi, 2011; Argote & Ingram, 2000; Eliufoo, 2005; Marquardt, 2002; Palacios-Marqués, Peris-Ortiz, & Merigó, 2013; Salleh, 2014). In line with Watkins and Marsick (1993), the learning organization has many dimensions; it is therefore important to use knowledge transfer and accelerate its usage to improve organizational performance. This can be achieved by acquiring, capturing, sharing and disseminating knowledge within the organization to improve its performance (Alipour & Karimi, 2011; Jiang & Li, 2008).

According to Guzman and Wilson (2005) there are two perspectives of the knowledge transfer process in the literature, namely: the organizational perspective and the individual perspective. For the organizational perspective, knowledge transfer focuses on acquisition, assimilation and exploitation of knowledge, supported by processes and capabilities of the organization. On the other hand, from the individual perspective, knowledge transfer can be achieved by focusing on social and cognitive processes among the individuals. Conversely, Nonaka (1994) argued that knowledge that is generated and transferred by assimilation and conversion of implicit or tacit knowledge or explicit knowledge is accumulated from individuals of the organization. Implicit knowledge is the "knowledge that has a personal quality, which makes it hard to formalize and communicate" (Nonaka, 1994, p. 16). This form of knowledge is embedded in actions that are not easy to replicate and other individuals find it very hard to understand and grasp (Nonaka & Takeuchi, 1995). Conversely, explicit knowledge is knowledge that is codified and which is transferrable in a formal and systematic manner (Nonaka, 1994). This form of knowledge can be communicated, replicated, understood and transferred from one individual to another.

Interestingly, Nonaka (1994) and Nonaka and Takeuchi (1995) further suggested four ways to determine the interface between explicit and implicit knowledge by the use of knowledge transfer: *externalization*, *socialization*, *combination* and *internalization* (ESCI). *socialization* and *externalization* both stem from tacit knowledge to tacit knowledge or explicit knowledge, respectively; while *combination* and *internalization* are both transferred from explicit knowledge to explicit or implicit knowledge

respectively (Nonaka, 1994). This confirms the diversity of the knowledge transfer concept. Each of these four ways has its peculiar interface with others which can determine how it contributes to the accomplishment of the other.

As discussed earlier, Nonaka (1994) clarified that knowledge transfer is either through an implicit or explicit way. In the previous literature, several measures of knowledge transfer have been provided, which largely depend on the objectives of the study and the views of the researchers. For instance, Salleh (2014) measured knowledge transfer of implicit knowledge processes in the public sector; while Hernandez (2003) assessed implicit knowledge transfer in organizations within the industrial sector. Additionally, Musasizi (2010) measured knowledge transfer from technological and managerial aspects whereas Rhodes, Hung, et al. (2008) employed both implicit and explicit knowledge to assess knowledge transfer.

Alternatively, knowledge transfer can be evaluated by measuring changes in knowledge in an organization. Implicit knowledge which is acquired cannot be easily captured or articulated through verbal reports. In an organization, knowledge is embedded in numerous sources that include: tangible structures in the organization, organizational culture, procedures and members of the organization. Therefore, any changes in these sources need to be captured in order to effectively measure knowledge transfer (Argote & Ingram, 2000).

# 4.2 Empirical Review on Knowledge Transfer and Organizational Performance

Several empirical studies have shown the existence of a relationship between knowledge transfer and organizational performance improvement (Dhanaraj, Lyles, Steensma, & Tihanyi, 2004; Palacios-Marqués et al., 2013; Rhodes et al., 2008); between knowledge transfer as one of the knowledge management practices and organizational performance (Kasim, 2008); and between knowledge transfer and competitive advantage (Liao & Hu, 2007) accordingly. Furthermore, many empirical studies have shown the association between the several learning-linked factors and transfer of knowledge (Islam, Hasan, & Rahman, 2015; Salleh et al., 2012; Simonin, 2004). Moreover, the study of Bates and Khasawneh (2005) concludes that there is a correlation between learning organization and knowledge transfer climate while the study of Egan et al. (2004) finds that the learning organization has a significantly positive impact on motivation to transfer learning.

In the view of Muizer (2003), HEIs is one of the most important sources of knowledge creation, and their interest in transferring organizational knowledge is rapidly increasing within their own organization. Therefore, it is high time for HEIs to embed knowledge transfer processes to achieve academic excellence and compete effectively in a volatile environment, such as in the Middle East region, and particularly, in Yemen. By such

doing, knowledge would be accessible to the HEI members and this would improve organizational performance and lead to attaining competitive advantage.

Following the literature reviewed on the concept of knowledge transfer from different perspectives of scholars, we suggest that studies should be undertaken to examine the role of knowledge transfer as a mediating variable between learning organization and organizational performance to determine the impact on HEIs. The reason for mediating role of knowledge transfer is to understand the main causes of the impact the variable has on IV and DV of which it mediates. This kind of study is needed in a country such as Yemen. The study may use specifically, different dimensions of the learning organization and organizational performance, including both the implicit and explicit knowledge transfer within the organization. This kind of study would be very helpful in determining the antecedents and their impact on HEIs in Yemen by further providing solutions for improvement.

### 5.0 Conclusion and Recommendation

This study reviews literature and discusses the definitions, concepts and related issues of the learning organization, specifically strategy adoption and knowledge transfer and their relationship with organizational performance. It is obvious that the learning organization is related to organizational performance (Akhtar et al., 2011; Ali, 2012; Awasthy & Gupta, 2012; Davis & Daley, 2008; Hussein et al., 2016; Kumar & Idris, 2006; Lien et al., 2006; McHargue, 1999; Ponnuswamy & Manohar, 2014; Qawasmeh & Al-Omari, 2013; Ratna et al., 2014; Salleh, 2014; Weldy & Gillis, 2010). If a learning organization is effectively achieved, this would definitely improve the performance of the organization. If the performance of the organization is improved in an environment of high volatility and fierce competition, this would open the gate for greater competitive advantage.

With regards to strategy adoption, studies have also confirmed that there is a link between this variable and organizational performance (Hashim, 2000; Kufaine, 2014; Mathooko & Ogutu, 2014; Nandakumar et al., 2011; Pulaj et al., 2015; Zakaria & Hashim, 2016). It is further highlighted that strategy adoption may be an effective factor for enhancing and strengthening the relationship between the learning organization and organizational performance of HEIs. This is attributed to the role of strategy adoption as a moderator in enhancing the relationship between several organizational practices and performance of organizations (Barrick et al., 2014; Mcalister et al., 2016; Mellat-Parast et al., 2015; Oltra & Flor, 2010; Seedee, 2012).

In addition to the relationship between learning organization and performance, previous studies have indicated that strategy adoption is a vital factor for improving organizational performance (Bavarsad et al., 2014; Gilaninia et al., 2013; Kazemi et al., 2014; Kharabsheh et al., 2015; Santos-Vijande et al., 2012). In summary, an

organization that adopts the right strategies would achieve competitive advantage over its competitors. According to Barney (1991), the unique bundle of knowledge combined with organizational practices, such as learning organization practices and appropriate competitive strategies would ensure more clients can be attracted and assist in cementing the organization's market position, which in turn, can help it achieve competitive advantage.

Furthermore, knowledge transfer literature shows that implicit and explicit knowledge transfer are very important factors for enhancing organizational performance (Dhanaraj et al., 2004; Kasim, 2008; Liao & Hu, 2007; Palacios-Marqués et al., 2013; Rhodes et al., 2008). Moreover, there is a relationship between several learning practices and knowledge transfer (Bates & Khasawneh, 2005; Egan et al., 2004; Islam et al., 2015; Salleh et al., 2012; Simonin, 2004). Thus, findings of the prior studies have strongly supported that knowledge transfer can mediate the relationship between learning organization and organizational performance of HEIs, which is an important addition to the body of knowledge. It highlights the role and importance of the learning organization in improving performance through the transfer of knowledge within the organization, which in turn, ensures effective and sustained learning for the organization to effectively apply learning organization practices. This means that the application of learning organization practices will enhance knowledge transfer processes effectively and quickly (Marquardt, 2002). It encourages more learning among the organization members by establishing double-loop learning (Argyris & Schon, 1978), which in turn, creates and consolidates a unique combination of knowledge and capabilities within the organization that ultimately leads to achieving long-term competitive advantage and improved organizational performance (Barney, 1991; Grant, 1991).

In summary, learning organization, strategy adoption and knowledge transfer are the factors that are regarded as important mechanisms for improving organizational performance, depending on the resource-based view and knowledge-based view, that are found to be suitable theories to clarify the interrelationships among these constructs, and how these variables can move in a rational and smooth manner for improving performance and gaining competitive advantage. Nevertheless, improvements cannot be achieved without understanding the operating environment and the capabilities of the organization to be able to take the surrounding factors into account. Therefore, to improve the performance of HEIs in a country like Yemen, there must be environmental scanning and capability assessment of the HEIs before the anticipated results could be obtained. Therefore, we recommend a study to be done in Yemen by using strategy adoption and knowledge transfer as a mediating and moderating variable to study the relationship between learning organization and HEIs' performance in the country. The study should include different dimensions of the variables to observe the impact of each in improving HEIs' performance separately. We hope conducting this kind of study would contribute to improving HEIs' performance in the country and hence add to the literature from the Arab and third world countries' perspective.

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