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## Article

# The mediation role of the organizational memory in the relationship between knowledge capturing and learning organization

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## OPERATIONS, INFORMATION & TECHNOLOGY | RESEARCH ARTICLE

# The mediation role of the organizational memory in the relationship between knowledge capturing and learning organization

Al-Hashem Adel Odeh<sup>1\*</sup>, Almasri Ammar<sup>1</sup> and Abu Orabi Tareq<sup>2</sup>

**Abstract:** Learning organization became an imperative issue to be flexible and adaptable for meeting ever-changing needs in today's turbulent business environment. This study's major purpose is to explore the impact of knowledge capturing on learning organization and the mediation role of organizational memory in the relationship between knowledge capturing process and learning organization in the Jordanian private universities. The population of this study is composed of all employees at different managerial levels. A total of (648) questionnaires were valid for analysis out of (750) questionnaires were distributed randomly in (10) universities. The PLS-SEM via Smart-PLS 3.2.7 and SPSS v23 were used for data analysis. The study revealed that there is a significantly positive impact of knowledge capturing on organizational memory and learning organization. There is a significantly positive impact of the organizational memory on learning organization, and the organizational memory has a significantly impact in the relationship between knowledge capturing and learning organization. The results also showed that



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### PUBLIC INTEREST STATEMENT

Nowadays, most organizations face strong competition and changes in the external environment, especially learning sector, in the past years the private universities in Jordan adopted several strategies to quickly respond to these changes. The global advancement in the different domains including information technologies reinforces organizations to exploit it in knowledge capturing and building organizational memory to achieve the learning organization. Based on this investigation there is an essential role of knowledge capturing process on enhancing organizational memory and learning organization. Therefore, organizational success depends on adopting new ways and strategies such as knowledge capturing strategy using information and telecommunication technology to reach a better level of learning in universities in developing countries, especially in Jordan. Hence, the study agrees and confirms with previous studies that indicated the impotence of managing knowledge within an organization.

universities did not take into consideration the following matters with high importance such as converting employees and expert's knowledge into knowledge base, information about external environment, collaboration among their employees, and sharing with their employees how implementing strategy vision. The study recommended that the Jordanian private universities should incorporate all units in the learning system and the learning organization building requires adopting various efforts concerning capturing the knowledge from several sources and maintain it as a memory that initiates the learning organization.

**Subjects: Algorithms & Complexity; Management of IT; Information Technology**

**Keywords: Knowledge capturing; Organizational memory; Learning organization**

## 1. Introduction

Universities in Jordan have been confronted in many ways; meanwhile, the environment has become complex. Learning organization is one of the significant strategies for sustainable

competitive advantage in universities. Thus, the increasing global competitiveness and growth of the dramatic changes in the knowledge-based economy era created many challenges for universities around the world (Al-Hashem, 2020). Knowledge capturing enables the learning processes and empowers the employees to appropriately sense and respond to the dramatic changes in the external environment, according to Dangol (2020), mentioned that work environment, work learning and skills development are essential factors to enhance the productivity of the business. The changes in the technological issues and the global advancements in the different domains reinforced organizations to adopt knowledge capturing mechanisms and technologies to store and remain the knowledge from internal and external resources in the organizational memory, knowledge considered the most strategic and valuable asset for the competitors (Almasri, 2014, Moon & Lee, 2014). The transformation and moving to learning organization requires a comprehensive change by an organization toward knowledge era to establish continuous developments on how to retrieve and capture the explicit knowledge and tacit knowledge within an organization. This viewpoint focuses on nurturing knowledge capturing initiatives to build an open learning organization system (Chinowsky & Carrillo, 2007). According to Moron-Garcia (2002), numerous universities adopted several technological tools to create a learning environment. Thus, all of these tools were used extensively in learning and education processes to capture paper-based content; therefore, the universities have to concentrate on expanding the knowledge sharing and knowledge capturing among the functional area within an organization (Zammit et al., 2018). Therefore, this study tries to explore the level of using knowledge capturing mechanisms and tools and its impact on organizational memory and learning organization from the employees' perspective in the functional area at private universities in Jordan, besides, the mediation impact of organizational memory between knowledge capturing process and the learning organization. Thus, this study aims to test the study hypotheses proposed in the literature and hypotheses development section(2) and answer the following question: what are the levels of knowledge capturing, organizational memory, and learning organization in the Jordanian private universities. The next sections of this study will provide a full understanding of the study constructs, instrument and hypotheses development, research methodology, data analysis, result discussion, and conclusion.

## 2. Literature review and hypotheses development

### 2.1. Knowledge capturing

The growth of global competition among many organizations encourages exploiting knowledge rescors by using specific mechanisms and technologies to capture knowledge to solve problems and provide valued products and services. In general, knowledge management is a strategy to

enhance organizational performance by using the best ways to discover, capture, share, and apply knowledge (Fernandez et al., 2004). The knowledge capturing process refers to retrieving and storing valuable knowledge in the organization repository so that the employees can access it when needed (Allameh et al., 2011). Knowledge capturing may be referred to as the process of retrieving explicit knowledge and tacit knowledge. Explicit knowledge can be easily captured and stored in the organization repository, in contrast, the tacit knowledge. It's difficult to be articulated and shared and captured 100% because of this knowledge embedded in the human mind. Knowledge capturing can be achieved by using the internalization sub-process to convert explicit knowledge to tacit knowledge and externalization sub-process to convert tacit knowledge to explicit knowledge. The two types of knowledge have to be adequately captured from internal and external resources and stored in repositories in a structured way for use later by the workers when needed (Ursic & Mulej, 2005). However, organizational knowledge is found in different sources such as organizational processes, organization culture, procedures, databases, and the human mind (Bhatt, 2001; Choi et al., 2008). Various technologies and mechanisms should enable knowledge capturing for retrieving information and enhancing the process of knowledge capturing from organizational employees or other external resources and storing that knowledge in organization repositories (Lawton, 2001). This knowledge can be used to formalize the organizational memory for both explicit and tacit knowledge that add value to the products and services (Lawton, 2001). According to (Fernandez et al., 2004), the externalization sub-process can be supported by several technologies such as expert systems, chat groups, best practices, and the lesson learned databases. In contracts, the internalization sub-process is supported by computer-based communications, computer-based simulations, artificial intelligence-based knowledge acquisition. Thus, information technology supports the process of retrieving and storing capabilities to initiate organizational memory for future use in the decision-making process (Sandoe & Olfman, 1994). Hence, the relationship between knowledge capturing and organizational memory became a key issue to the effectiveness of organizational performance and strategic decision-making (Hatami et al., 2003). Knowledge capturing as the process collects expertise and knowledge to store it in the organizational memory and use it for continued learning and achieving business innovation (Nonaka & Takeuchi, 1995; Salleh et al., 2013). Therefore, Hernandez (2003) mentioned a positive relationship between organizational learning and knowledge capturing process, including the transfer of tacit knowledge to explicit knowledge. Based on the importance of knowledge capturing process in developing organizational memory, the study proposed the following hypotheses:

**H1:** Knowledge capturing has a significantly positive impact on organizational memory.

**H2:** Knowledge capturing has a significantly positive impact on learning organization.

## **2.2. Organizational memory**

Organizational memory has received considerable attention to capture and store data, information, and explicit or tacit knowledge in the organizational repositories (Al-Hashem & Shaqra, 2012). Nowadays, companies seek to exploit the advancements in information technology to create institutional, organizational memory. Capturing explicit or tacit knowledge enables makes decisions effectively and improves intuitional performance (Hatami et al., 2003., Hatten & Rosenthal, 2001). The researchers T.H. Davenport and Prusak (1998) mentioned that organizational memory is a key component of management's knowledge in an organization. This memory depends on the computerized systems and employee's memory that play an essential role in achieving business goals (Girard, 2009). Organizational memory computerized systems are a set of devices for knowledge retention that store and provide access to organization knowledge. These systems contained the best practices of problem solutions and the required knowledge to be exchanged between the employees within an organization (Olivera, 2000).

According to these viewpoints, the knowledge captured in organizational memory must be stored for future use because learning continues over time and accumulated. Thus, organizational memory contained all information and knowledge about problem-solving and decisions were made previously, based on Olivera (2000) defined organizational memory as a means to store knowledge for future use in decision-making. Explicit knowledge can be easily stored and shared in contrast to the tacit knowledge embedded in human memory. Thus, it is difficult to store or share 100%; at the same time this type of knowledge is volatile over time or when employees turnover, and it's possible to lose the knowledge and experience embedded in human memory. An organization must capture employees' knowledge within other storage systems such as expert systems that are believed to enhance an organization's learning process (Argote, 2000; Wilson et al., 2007). These systems eliminate losing individual knowledge through the turnover of employees to another business. Thus, organizational information systems can support the routine decisions when users need it (Kane & Alavi, 2007). Atwood (2002) describes organizational memory as a system consists of knowledge a question and retention, in addition, knowledge retrieval and storage; this definition corresponds with Walsh and Ungson (1991) viewpoint that described organizational memory as the process of acquiring, retrieving the previously stored data to support the decision-making process in an organization. In this context, several studies in literature proposed different viewpoints for organizational memory dimensions, Walsh and Ungson (1991) stated that the information resides in employees mind or in the formal documents and records that they have in their organization, the structure dimension refers to the information about organization activities, culture dimension in which information about the past experiences and success stories, transformation dimension includes information about business processes that used to transform the input to outputs in an organization, and the ecology dimension represent the formulation process of information that embedded in arrangements and workplace setting. According to Barton (1995), organizational memory includes technical memory refers to the organization experience and related technologies, managerial memory, which means the knowledge about the structure of the organization and management methods; cultural memory represents the organization history of shared values and organizational culture as a collective memory embedded in the cultural system in an organization, marketing memory includes the knowledge about customers, suppliers and any part related to the marketing memory (Barton, 1995; Li et al., 2004). In addition, the organizational knowledge can be stored in different types of memory systems such as employee's memory, technology, and structural repositories and artificial systems that can be accessed by another method (Zadayannaya, 2012). Thus. Learning is essential for people, groups, and organizations by using different types of memory systems that enable the organization to perform their works in an innovative manner (Ashforth et al., 2007). Based on the previous debate, we proposed the following:

**H3:** Organizational memory has a significantly positive impact on learning organization.

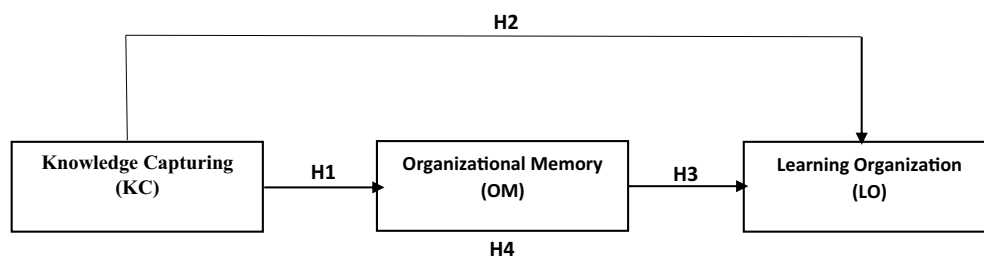
**H4:** Organizational memory mediates the relationship between knowledge capturing and learning organization.

### **2.3. Learning organization**

Learning organization refers to the successful adaptation to the internal and external environment changes through the individual and organizational learning efforts (West, 1994). These efforts are related to the organizational capabilities to manage its knowledge to gain competitive advantage (Bierly et al., 2000; Gerras, 2002). This explanation illustrates that learning organizations can create capture, share knowledge to modify their behavior and acquire new knowledge to improve organizational performance (Yeo, 2006; Garvin, 1993). The ability to respond to environmental change has been related to the ability of the organization to learn continuously to keep abreast with changes and the development in the business environment (Svetlik et al., 2007); therefore, organizations have to adopt the learning processes that support organizational success (Senge,



**Figure 1. Conceptual framework.**



1990). There are several models presented to describe the learning organization. Senge (1990) stated five principles of learning, such as “mental models, personal mastery, system thinking, shared vision, and team learning”. Based on Marquardt (1996) presented different characteristics of learning, such as transformation to managing knowledge better than others, employee empowerment, and using information technology in the learning process to adapt to the turbulent environment. When knowledge is shared and captured among organizational employees can be combined into the organization repository and can be accessed by others when the employee leaves the work for another company (Argote, 2011). Thus, the learning process considered a transformational change includes the individual learning level, group learning level, and organization learning level. The knowledge creation and utilization take place and operates collectively based on the behavioral, cultural and cognitive aspects (Takahashi, 2007). Marsick and Watkins (1997) presented Seven Dimensions of the learning organization that enable a learning organization’s dynamic process to continuously integrate business structure and people to enhance the learning process continues and always support business change (Yang et al., 2004). The seven dimensions of learning organization that proposed as an integrated model includes the continuous learning dimension which reflects constant learning and growth by employees learning in their jobs, Inquiry and dialogue dimension refers to the organizational culture that encourages the experimentation, questioning and feedback to enable the employees acquire reasoning skills, so the team learning dimension in order to reach and access several modes of collaboration and thinking for working and learning together, embedded system dimension is a key system for share learning and access technology-based systems, empowerment dimension means that the employees have a shared responsibility in setting and implementing the organization vision, system connection dimension refers to close relationship between the organization and its employees to use the information systems in their jobs, and the strategic leadership dimension was used for learning strategically to enable the learning process (Marsick and Watkins, 1997., Song et al., 2009).

### 3. Figure 1. Conceptual framework

Figure 1 shows a simple mediator model, whereby (KC→LO), (KC→OM, and (OM →LO) are the direct effects in the proposed model, (KC→OM→LO) is the indirect effect of KC on LO. These constructs were designed based on the prior studies, as shown in Table (1),(2), and (3).

### 4. Methodology

This study uses descriptive analytical approach to answer the research question and to test the research hypotheses. The population of this study composed of all employees at different managerial levels in the Jordanian private universities; a simple random sample was used for this purpose, a total of (648) questionnaires were valid for analysis out of (750) distributed in (10) universities, this represents (86.4%) of the returned questionnaires. A five-point Likert scale was used to answer the study questions. This study has deployed the Partial Least Squares-Structural Equation Modelling (PLS-SEM) via Smart-PLS 3.2.7 to assess our model and SPSS v23 to conclude the descriptive analysis.

**Table 1. Knowledge capturing construct items**

Author	Question	Item No	Construct
(Fernandez et al., 2004), Zamir (2019).	I can use the knowledge embedded in the organization repository in my job.	KC1	Knowledge Capturing
	The university supports job training to help employees capture new knowledge.	KC2	
	The university depends on technology to capture and store its knowledge.	KC3	
	The university encourages dialogue among the participants .	KC4	
	The university convert employees' knowledge to explicit one.	KC5	
	The university captures the experts' knowledge in its knowledge base.	KC6	

**Table 2. Organizational memory construct items**

ItemsConstruct	Item No	Question	Author
Organizational Memory. (OM)	OM1	The university uses a series of memory based on information technology.	Barton (1995)., Li et al. (2004).
	OM2	The university depends on information systems to retain its knowledge.	
	OM3	The university supports knowledge acquisition efforts to add new knowledge to its knowledge base.	
	OM4	In my university, human resources are the key memory for success.	
	OM5	The employees have shred value to work together.	
	OM6	The employees have the same way to think and communicate together.	
	OM7	The university obtains information about the external environment and forecast demands for the future.	
	OM8	The university protects client information that resides in its repositories.	



**Table 3. Learning organization construct items**

Construct	Item No	Question	Author
Learning Organization. (LO)	LO1	My university helps the employee to learn from each other.	Marsick and Watkins, (1997), song et al. (2009).
	LO2	My job provides open feedback to know what others think.	
	LO3	In my university, we work and learn together using several modes of collaboration	
	LO4	The university provides access to the information systems for share learning.	
	LO5	The university support employee sharing in setting and implementing strategic vision.	
	LO6	In my university, I have a connection to the external information for doing my job.	
	LO7	The top management provides the employee opportunity to learn.	

## 5. Data analysis strategy and results discussion

### 5.1. Instrument development

A designed questionnaire was developed to explore the level of study constructs and the relationship between the independent construct knowledge capturing (KC) and the dependent constructs organizational memory (OM) and learning organization (LO). In addition, the mediation impact of the organizational memory as a mediator between knowledge capturing and learning organization. The questionnaire is composed of three constructs based on the previous studies as referenced in Table Table (1),(2), and (3) in the literature review. The reliability and validity tests have been used for study constructs. Cronbach  $\alpha$  was used to confirm internal consistency (Almasri, 2016). Both exploratory and confirmatory factor analyses have been conducted to prove that the instrument validity. The findings of reliability and validity tests are shown in Table 4. For the scales using Cronbach's alpha, the reliability test is done. Cronbach's alpha coefficient of robustness usually varies between 0 and 1. The results of Cronbach's alpha show that KC (0.906), OM (0.871), and LO (0.893) variables. Thus, all values have a good scale greater than 0.80; these indicators fulfilled the requirements. Composite reliability (CR) is used to test convergent validity, another complement to Cronbach's alpha to measure convergent validity. The values of the Composite reliability ranges between 0 and 1. The composite reliability results show that the values of KC (0.930), OM (0.947), and LO (0.923) variables indicated that all reflective constructs are reliable to each variable (all values great than 0.80). The average variance extracted (AVE) describes in a reflective model the average commonality for each variable. The results of AVE show that KC (0.688), OM (0.640), and LO (0.633) variables. Thus, all values have a good scale that was greater than 0.50; these indicators fulfilled the requirements.

**Table 4. The measurement model of latent variables**

Construct	Item No	Outer Loading	Item Mean	Mean	AVE	Composite Reliability	Cronbach's alpha	R square
<b>Knowledge Capturing (KC)</b>	KC1	0.850	4.25	3.54	0.688	0.930	0.906	
	KC2	0.840	4.33					
	KC3	0.838	4.15					
	KC4	0.852	3.96					
	KC5	0.821	2.23					
	KC6	0.773	2.33					
<b>Organizational Memory (OM)</b>	OM1	0.780	3.95	3.7	0.640	0.947	0.871	<b>0.466</b>
	OM2	0.820	4.01					
	OM3	0.721	3.88					
	OM4	0.755	4.02					
	OM5	0.855	4.25					
	OM6	0.778	3.78					
	OM7	0.854	2.08					
	OM8	0.824	3.97					
<b>Learning Organization (LO)</b>	LO1	0.792	3.87	3.62	0.633	0.923	0.893	<b>0.697</b>
	LO2	0.814	4.25					
	LO3	0.835	1.98					
	LO4	0.720	4.55					
	LO5	0.820	2.45					
	LO6	0.766	4.35					
	LO7	0.816	3.89					

Note: <sup>a</sup>AVE: it refers to average variance extracted

**Table 5. Path coefficients for hypotheses testing (direct effects)**

Hypothesis	Path	$\beta$	Confidence interval	Confidence interval		p-value <0.5	Decision
				2.5%	97.5%		
H1	KC→OM	0.683	4.73	0.59	0.77	Yes	Supported
H2	KC→LO	0.485	5.54	0.30	0.60	Yes	Supported
H3	OM→LO	0.425	4.88	0.24	0.60	Yes	Supported

The structural models of informative constructs are explored in Figures, in which R square refers to the value for any independent (IV) and predicts or dependent variable (DV). R square is 0.466 for OM. It means that the independent variable KC explains 47% of the variance in OM. Also, R square is 0.697 for LO. It means that the independent variables KC and OM explain 70 % of the variance in LO.

Descriptive statistics are used for analyzing the data by using the mean score. The data collected was analyzed using the Statistical Package for the Social Sciences (SPSS) version 23. In this study, the three variables in the questionnaire are based on the 5-Likert scale. The mean scores for knowledge capturing variable range from 2.23 (for KC5) to 4.33 (for KC2), but the variable overall mean scores is 3.54. For the organizational memory variable, the mean scores range from 2.08 (for OM7) to 4.25 (for OM5), but the variable overall mean score is 3.70. In terms of the learning organization, the mean values range between 1.98 (for LO3) and 4.55 (for LO4), but then again, the variable overall mean score is 3.62. The results showed that all variables have a mean score greater than the center point (mean = 2.5).

### 5.2. Hypotheses testing

The Bootstrapping option for research hypotheses was used to assess the statistical importance of the path coefficient and the t-values. Table 5 contains all the tested values. The simple model consists of three types of variables, namely, Knowledge Capturing (Independent variable), organizational memory (mediator variable), and Learning Organization (dependent variable). Based on Table 5, hypothesis H1: ( $\beta = 0.683$ ,  $t = 4.73$ ) was accepted, and the results indicated that the independent variable (Knowledge Capturing) has a positive impact on the dependent variable (organizational memory). Hypothesis H2: ( $\beta = 0.485$ ,  $t = 5.54$ ) was also accepted, and the results showed that the independent variable (Knowledge Capturing) has a positive impact on the dependent variable (Learning Organization). The relationship between the organizational memory and Learning Organization showed that organizational memory has a statistically positive impact on Learning Organization H3: ( $\beta = 0.425$ ,  $t = 4.88$ ). All hypotheses (H1, H2, and H3) were accepted were denoted a two-tailed significance of  $p < 0.05$ .

The Hypothesis (H2) represents the direct relation between Knowledge Capturing and Learning Organization (KC→LO) variable, while the relation between Knowledge Capturing and Learning Organization through mediated variable (KC→OM→LO) is the indirect effect that is denoted as H4. To test the hypotheses of whether organizational memory has a mediating effect between the Knowledge Capturing and Learning Organization (H4). A significant relationship was found between the Knowledge Capturing and organizational memory (H1, and organizational memory and Learning Organization (H3). Thus, Table 6 provides an indication supporting a significant and positive mediating effect of organizational memory on the relationship between the Knowledge Capturing and Learning Organization ( $\beta = 0.290$ ,  $t = 4.15$ ). The mediation type represents a partial mediation due to the direct relation between knowledge capturing and Learning Organization was significant as well. Also, the direct effects and indirect effects between the Knowledge Capturing and Learning Organization variables positively impacted that mediation is a competitive one.

**Table 6. Path coefficients for hypothesis testing (indirect effects)**

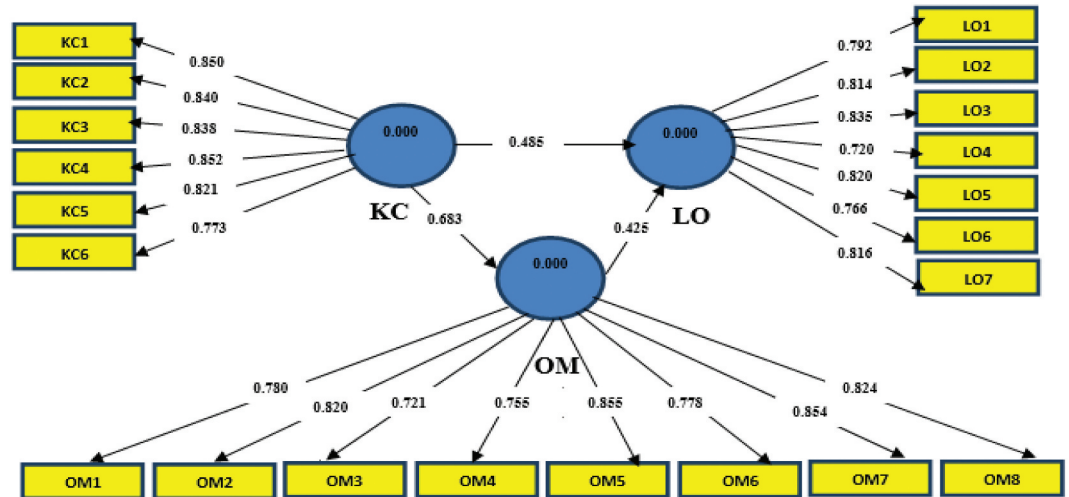
Hypothesis	Path	$\beta$	t-value	Confidence interval		p-value <0.5	Decision
				2.5%	97.5%		
H4	KC→OM→LO	0.290	4.15	0.17	0.43	Yes	supported

**Table 7. Path coefficients for hypotheses testing (total effects)**

Path	$\beta$	t-value	Confidence interval		p-value <0.5	Decision
			2.5%	97.5%		
KC→OM	0.683	4.73	0.59	0.77	Yes	supported
KC→LO	0.775	22.05	0.70	0.85	Yes	supported
OM→LO	0.425	4.88	0.24	0.66	Yes	supported

Figure 2 illustrates a mediator model, whereby KC→LO is the direct effect and (KC→OM→LO) is the indirect effect. The total effect is calculated based on the Path Coefficients of indirect effect and Path Coefficients of direct effect. As shown in Table 7, the relation (KC→LO) 's total effect was  $\beta = 0.775$ , and  $t = 22.05$ .

**Figure 2. Path analysis results for hypotheses testing.**



The organizational memory variable is a mediator variable that, respectively, Knowledge capturing and learning organization, interferes with the other two associated variables. More importantly, a change in the variable of Knowledge capturing induces a change in the organizational memory, which in turn results in a change in the path of the PLS model direction of learning organization. Therefore, the essence of the relationship between Knowledge capturing and an Organizational Memory Component controls learning organization.

**5.3. Discussion**

The knowledge capturing and oraganizational memory play a vital role in improving learning organization through creating, capturing, and sharing the knowledge. Thus, it is necessary to identify the factors that affect the learning organization and then find solutions to improve

them. The study's findings show that knowledge capturing is an important factor that affects the learning organization in the Jordanian private universities. Also, the results indicated that the knowledge capturing has a positive impact on organizational memory. The results are also supported by Hernandez's (2003) study, which found a positive relationship between learning organization and knowledge capturing process. In addition, this result corresponding with the study of Nonaka & Takeuchi (1995), Salleh et al. (2013) that indicated knowledge capturing as the process collects expertise and knowledge to store it in the organizational memory and using it for continued learning and achieving business innovation. That means, organization repository, the job training, technologies and tools to capture and store knowledge, dialogue among the participants, captures the expert's knowledge in their knowledgebase, and convert employees knowledge to explicit are considered important by the university decision-makers and used as the basis for supporting their decisions regards learning organization and organizational memory.

The results indicated that organizational memory has a significantly positive mediating effect in the relationship between the knowledge capturing and Learning organization. Thus, the relationship between knowledge capturing and organizational memory controls the learning organization variable. That means the use of a series of memory and the reliance of universities on information systems, encouragement and support from the university administration to acquire new knowledge, making human resources an essential part of the university's memory, encouraging employees to work together to unify the same way of thinking for communication and taking the universities' information very seriously and uses it to make predictions in the future are considered essential to enhance the learning organization. Therefore, universities have to open a learning center for professionals, employees, and leadership to survive and become competitive in a complex environment. This study's findings encourage campus cultural improvement programs and lifelong learning tools. Knowledge capturing is the process by which knowledge is transferred from tacit to explicit from people either outside or within universities' boundaries. Thus, our recommendation for universities is to use new tools that enable the universities to transform employees' knowledge into explicit knowledge and experts' knowledge and make it available in the knowledge base for all employees. Jordanian universities should emphasize the importance of the external environment and its effect on developing and implementing learning organization. Thus, the information obtains about the external environment, and forecast demands for the future are crucial and should be highly considered by universities in their organizational memory process. This study suggests using Artificial intelligent techniques that deal with external data and use them to build prediction models that would help universities predict their demands, such as using machine learning algorithms. It is not unusual in universities today to see workers working together with their coworkers in small groups and communicating with themselves. Universities need to understand designing a more collaborative and engaging working environment to provide the best ways for workers to collaborate. For this section, our suggestion should help workers improve their social-emotional learning capacities and develop communicative skills that facilitate dialogue among them, engagement, and problem-solving. Also, the university must support the employee's participation in developing and implementing the strategic vision because it has an essential role in increasing the learning organization.

## 6. Conclusion and future work

Learning organization became an imperative concern in today's volatile market world to be agile and adaptable to fulfill the ever-changing needs organizations; organizational success depends on adopting the learning processes using various mechanisms and technologies. This study's main aim is to examine the effect of knowledge capturing on learning organization and the mediation role of organizational memory between knowledge capturing and learning organization in the Jordanian private universities. The study found that information capturing had a dramatically beneficial effect on organizational memory and learning organization. Thus, the variable of knowledge capturing induces an effect on the organizational memory, which results in an effect on the path of the PLS model direction of learning organization. Therefore, the core of the relationship between knowledge capturing and an organizational memory component

wheels impacts learning organization. In this context, the study concluded that the learning organization building requires adopting various efforts concerning capturing the knowledge from several sources and maintain it as the memory that initiates the learning organization. The results recommended universities consider the following matters: deploying artificial tools to convert their employees' and experts' knowledge into tacit knowledge (Almasri et al., 2019, 2020), providing them information about the external environment, encouraging their employees to collaborate by providing them new applications (Almasri et al., 2019; Kumeda et al., 2019), and make them part of implementing a strategic vision. The research's main limitation of our population sample is limited to only private universities in Jordan. Thus, our future work to include all universities in Jordan to generalize research results.

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