

## Organizational Learning and Organizational Performance: A Correlation Study in the Kingdom of Saudi Arabia

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### Abstract

*Organizational Learning (OL) has emerged as one of the most promising constructs in management and organizational literature. OL works as a catalyst to enhance Organizational Performance (OP). OL is considered to be one of the most important issues in modern managerial literature. Therefore, this study aims at exploring OL as one of the most important organizational factors that can direct the behavior and attitudes of the employees to improve OP. There are two constructs relevant to OL, namely, Adaptive Organizational Learning (AOL) and Generative Organizational Learning (GOL). This research is practical, according to its purpose, and descriptive, according to its data collection method. Out of the 312 questionnaires that were distributed, 250 usable questionnaires were returned, a response rate of 80%. The findings reveal that the aspects of OL (AOL and GOL) have a significantly direct effect on OP. Accordingly, the study provides a set of recommendations including the necessity to pay more attention to AOL, in general, and GOL, in particular, at healthcare organizations in Al-Taif Governorate, KSA. This will achieve its success currently and in the future, besides attaining a competitive advantage.*

### 1. Introduction

The researches have long acknowledged the importance of OL to overall OP. An organization with a strong OL is not simply a collector or storehouse of knowledge but a processor of it. Feedback from customers, channels, and competitors must be used to develop core competence. The strategic literature suggests that good strategy will allow businesses to earn long-run supernormal profits (Liao & Wu, 2009).

Jones (2000) emphasizes the importance of OL for OP defining it as a process through which managers try to increase organizational members' capabilities in order to understand better and manage an organization and its environment to accept decisions that increase OP on a continuous basis.

Research conducted by Škerlavaj & Dimovski (2006) demonstrated the statistically significant positive impact of OL on OP. Also, Škerlavaj et al (2007) established a statistically significant link between OL culture on OP.

Many authors relate OL with improvements in performance (Argyris & Schön, 1978; Fiol & Lyles, 1985; Dodgson, 1993; Bohn, 1994) or a behavior change that leads to improved OP (Senge, 1990; Garvin, 1993; Sinkula, 1994). Accordingly, performance measures are imperative for effective management of an organization (Griffis et al., 2007; Savaneviciene & Stankeviciute, 2010).

Learning is a major component in any effort to improve OP and to achieve competitive advantages. In other words, OL allows the firm to increase the quality and quantity of its performance and to achieve competitive advantage (Kogut & Zander, 1996).

OL is positively related to OP; higher emphasis on OL equates to higher performance in the organization (Ramírez, et al., 2011).

To improve the performance, the organizations need to focus on continuous learning and use of knowledge, which can serve as a critical key to success for facilitating individual, team, and OL leading to continuous improvement and innovation in business operations (Watkins & Marsick, 1996; Weldy, 2009; Harrim, 2010).

In developing countries, organizations are striving to be a part of the global economy by being more competitive. By adopting certain strategies such as OL, the organizations may have a better chance at becoming more sustainable and competitive. Consequently, this study attempts to evaluate the influence of OL on OP.

There is still a need to improve our understanding of how OL takes place in organizations and how we can enhance it (Chiva et al., 2010).

Thus, the current study seeks to inform officials about the importance of OL and its role in improving the OP. Despite the progress in the theoretical aspect of OL, there is still a need for further study and investigation and analysis to enrich the theoretical and applied research.

In the Arab environment, this issue is still in its infancy, and there are not enough theoretical writings on the subject. It has not received its share of attention in application. This reveals the importance of the present study theoretically and practically for determining the pivotal role played by OL to improve the OP.

This paper is concerned with how OL affects the OP. Some studies have been conducted on the relationship between OL and OP. However, no study had been conducted in KSA. This study aims at identifying the relationship between OL and OP. It will illustrate the impact of OL on OP or how OL influences the OP of healthcare organizations in Al-Taif Governorate, KSA.

## **2. Literature Review**

### **2.1. Organizational Learning**

The concept of OL can be traced back even earlier, to Lev Semenovich Vygotsky's studies about child education in the 1920s (Franco & Haase, 2009). OL is one of the strategic means of achieving long-term organizational success. OL has become an increasingly important area recently (Liao & Wu, 2009).

OL has become an important concept for organizational survival in this competitive environment. The notion of OL has been over-emphasized in the literature, because of the complexity involved in the collective learning processes; it has been perceived as spiritual in nature (Yeo, 2007).

OL is considered to be one of the most promising concepts in modern organizational and leadership literature. The concept of OL has grown dramatically, generating a great deal of debate and research (Smith et al., 2000; Bapuji & Crossan, 2004).

OL is a process of acquiring information, interpreting information, and using information to guide decisions (De Geus, 1988). OL is a continuous testing of experience and its transformation into knowledge available to whole organizations and relevant to their mission (Senge, 1990). OL is a combination of information acquisition, information distribution, information interpretation and organizational memory (Huber, 1991).

OL is a process of information acquisition, information interpretation and resulting behavioural and cognitive changes, which should in turn have an impact on OP (Dimovski, 1994).

Some researchers defined OL as all systems, mechanisms and processes used to improve the potentials of individuals continuously so as to achieve specific goals relating to individuals and the organization. There are four levels for OL (1) learning facts, knowledge processes and procedures so as to confront simple change cases, (2) learning skills needed for new businesses so as to adapt with changes in the environment, (3) learning for adaptation, this applies to dynamic cases that need new solutions. It is related to the need for experimentation and inferring lessons from previous successes and failures, and (4) it is learning for learning, this level requires creativity and innovation. It is interested in designing, not adapting with the future (Farago & Skyrme, 1995).

OL is a mechanism by which the organization transforms the individual knowledge of employees into social knowledge (Grant, 1996; Spender, 1996). OL is an activity and process via which the organization may attain learning (Finger & Brand, 1999).

OL may take place due to the continuous interaction among individuals through learning. This helps them acquire experiences (Hodgkinson, 2000).

OL may reflect the process of learning in an organization among all employees and at all levels. It is the product of organizational members' involvement in the interaction and sharing of experiences and knowledge. Thus, it is imperative for organizations to promote a "bottom-up" philosophy where suggestions for change start at the bottom of the organization and work their way up to the top. This shared form of knowledge implies that individual learning is a necessity, but not a sufficient condition for OL to occur. The information distributed through the organization's members is shared and interpreted in a systematic way. OL is one of the tools that may be used to accomplish the competitive edge of the organization (Ghosh, 2004).

OL is the product of organizational members' involvement in the interaction and sharing of experiences and knowledge. Many organizations focus much of their resources on peak performance management also known as productivity levels or efficiency levels relating to job performance (Curado, 2006).

OL is dynamic as it involves basic elements of organizational development and growth. Organizations can grow in the traditional sense of increased capital or revenues. From a learning perspective, however, organizations grow when there is an increase in shared understanding involving the organization, its environment and the relationship between the two (Holland & Salama, 2010).

OL includes enhanced knowledge and decision making on how to meet performance objectives, improved internal communication and exchange, engagement and cooperation, as well as motivation and commitment to the OP (Caemmerer & Wilson, 2010).

OL represents a complex interrelationship among people, their actions, symbols, and processes within the organization. It aims to generate, disseminate, and apply knowledge in an organization. It consists of five learning cycles. They are individual, individual/group, group, group/organizational, organizational (Kok, 2010).

OL works as a catalyst to guide the organization in a progressive way. OL leads to enhanced productivity and performance measured through financial and non-financial variables (Imran, et al., 2011).

The true development of the concept of OL was achieved by Senge (1990) as he presented the ideas of AOL and GOL.

1. AOL is related to rationality, defensive relationships, low freedom of choice, and discouragement of inquiry (Argyris et al., 1985). AOL can be described as coping and dealing with the current environment in new and better ways (Senge, 1992). It is related to little change at the primary stage of learning (Malhotra, 1996). AOL focuses on evolutionary changes to counteract changes at the environment of the organization besides what it needs for survival. AOL does not achieve the competitive advantage of the organization, but it is necessary for its survival (Pemberton & Stonehouse, 2000). AOL refers to learning by correcting errors through feedback of the process of learning and continuous improvement (Stewart, 2001). AOL refers to the capacity to be able to cope with changes in the environment, whether internal or external in origin (Voci & Young, 2001). AOL focuses on evolutionary change in agreement with what occurs in the organization's environment. This helps it survive and saves costs and time (Sun & Scott, 2003). AOL involves any improvement of the explicate order through a process of self-organization. It is a self-organizational process that might happen when individuals and groups within organizations exercise logic or deductive reasoning, concentrate, discuss, and focus on improving any mental model, knowledge, process (Chiva et al., 2010).

2. GOL refers to learning via the cognitive aspect of the individual or organization. This requires the developing of systems and rules that help determine the proper behavior, which leads to using new methods for carrying out business. GOL focuses on creating new capabilities or opportunities as the present system is useless and must be changed (Altman & Illes, 1998). GOL is the realization of high-specialization learning that may be generalized in all organizations (Pemberton & Stonehouse, 2000). GOL is very costly (Wijnhoven, 2001). GOL associated with radical innovations would dramatically improve firm performance and is becoming essential in our organizations (Kang et al., 2007). GOL is a process that involves searching for order, which is a holistic understanding of anything. GOL is a self-transcendence process that might take place when individuals and groups within organizations mainly use intuition, attention; dialogue and aim to question any explicate order or knowledge (Chiva et al., 2010).

## **2.2. Organizational Performance**

In English, the term "performance" is derived from "to perform" which means "doing work, achieving a mission or realizing a given activity. It is a reflection of the organization's ability and aptitude to realize its goals (Eccles, 1991).

OP is the ability of the organization to achieve its long-term goals (Robins & Wiersema, 1995).

OP is that which exceeds the normal average performance, besides being a part of a series of excellent performance (Privett, 1983).

The performance of an organization is a determinant of its very existence. Systematic or abrupt decline in performance level may lead to organizational death or mortality (Baum & Singh, 1994), a situation that occurs when “an organization fails, closes down its operations, and disbands its constituent elements (Carroll & Delacroix, 1982).

Despite the large corpus of research and studies on performance, no agreement on the concept of performance is found. In spite of this difference, most researchers express their performance through the success achieved by the organization in achieving its objectives. Performance is a reflection of the organization's ability to achieve its goals, or in other words, the organization's ability to achieve long-term goals (Miller & Broamiley, 1990).

Performance is a combination of resources, capabilities of the organization that are being used efficiently and effectively in order to achieve its objectives (Collis & Montgomery, 1995).

Performance is the level of the outputs of the organization after conducting operations on its inputs. Performance is the output of the activities that occur within the organization (Wit & Meyer, 1998).

Hence, after a thorough review of the different concepts of performance, it can be argued that performance in its simplest form is the desired results which the organization seeks to achieve efficiently and effectively.

Darroch (2003) maintains that the dimensions of OP are in two basic dimensions of performance. They can be explained as follows:

1. Comparative Performance refers to the understanding of the different categories of employees to the level of profitability of the organization where they work, the market share, and the level and speed of growth of the organization compared to organizations working in the same area.
2. Internal Performance refers to the understanding of the different categories of employees to the level of the OP to which they belong in the short term and long-term, and also the possibility of achieving the performance targets set for the organization, both in the short term and long term.

### ***3. Research Question and Hypotheses***

In light of the above-mentioned discussion, this research aims at answering the following questions:

- Q1: Are there fundamental differences among the employees at healthcare organizations in Al-Taif Governorate, KSA, towards OL?
- Q2: Are there fundamental differences among the employees at healthcare organizations in Al-Taif Governorate, KSA, towards OP?
- Q3: What is the relationship between OL (AOL) and OP at healthcare organizations in Al-Taif Governorate, KSA?
- Q4: What is the relationship between OL (GOL) and OP at healthcare organizations in Al-Taif Governorate, KSA?

From the above-mentioned research questions, this study attempts to test the following hypotheses:

- H1: There is no significant discrimination among the employees at healthcare organizations in Al-Taif Governorate, KSA, towards OL.
- H2: There is no significant discrimination among the employees at healthcare organizations in Al-Taif Governorate, KSA, towards OP.
- H3: There is no statistically significant relationship between OL (AOL) OP at healthcare organizations in Al-Taif Governorate, KSA.
- H4: There is no statistically significant relationship between OL (GOL) OP at healthcare organizations in Al-Taif Governorate, KSA.

### ***4. Research Method***

#### ***4.1. Population and Sample of Research***

The present paper is interested in investigating OL and OP at healthcare organizations in Al-Taif Governorate, KSA. This is why the population under study involves all employees (physicians, nurses, and administrative staff). Total items of the research population amount to 1666.

The researcher has drawn on the samples method for gathering the primary data needed for the study as it was difficult to have access to all items of the research population, besides time limitations.

The researcher has drawn on the stratified random sample while selecting items from the different categories of employees. Sampling size has been decided according to the following equation (Daniel, 1999).

$$n = \frac{N \times (Z)^2 \times P(1-P)}{d^2(N-1) + (Z)^2 \times P(1-P)}$$

Using the above-mentioned equation, size of the sample is = 312 items of employees at healthcare organizations in Al-Taif Governorate, KSA. Distribution of the sample size is presented in Table (1).

Finally, the items of each sample of the above-mentioned categories have been chosen randomly using the lists of employees at the Staff Affairs Department of healthcare organizations in Al-Taif Governorate, Kingdom of Saudi Arabia.

**Table (1): Distribution of the Sample Size on the Population**

The Name of Healthcare Organizations		Number	Percentage	Size of Sample
Hospitals	Al-Odwaney	278	17%	312 X 17% = 53
	Al-Ameen	248	15%	312 X 15% = 46
	Al-Nahda	168	10%	312 X 10% = 31
	Al-Hasan	95	5%	312 X 5% = 15
Clinics	Ebn-Sena	78	4%	312 X 4% = 13
	Al-Taif	68	4%	312 X 4% = 13
	Al-Osra	64	4%	312 X 4% = 13
	Al-Salam	63	4%	312 X 4% = 13
	Al-Nozha	58	4%	312 X 3% = 13
	Al-Watan	58	4%	312 X 4% = 13
	Al-Mokhtar	58	4%	312 X 4% = 13
	Al-Nasr	53	4%	312 X 4% = 13
	Al-Sadara	48	3%	312 X 3% = 9
	Al-Saudi	48	3%	312 X 3% = 9
	Al-Andalos	48	3%	312 X 3% = 9
	Al-Faisal	48	3%	312 X 3% = 9
	Zahrat Ebn-Sena	43	2%	312 X 2% = 6
	Al-Salama	38	2%	312 X 2% = 6
	Al-Hasan	38	2%	312 X 2% = 6
	Al-Enaya	33	2%	312 X 2% = 6
	Al-Tamauz	24	1%	312 X 1% = 3
	Total		1666	100%

Source: Ministry of Health, Department of Health Licenses, Al-Taif Governorate, KSA, 2013

Concerning the characteristics of the sample units, Table (2) illustrates features of sample units.

**Table (2): Characteristics of items of the Sample**

Variables		Number	Percentage
1- Sex	Male	138	55.2%
	Female	112	44.8%
	Total	250	100%
2-Educational Level	Secondary school	62	24.8%
	University	97	38.8%
	Post-Graduate	91	36.4%
	Total	250	100%
3- Age	Under 30	90	36.0%
	From 30 to 45	102	40.8%
	Above 45	58	23.2%
	Total	250	100%
4- Marital status	Single	71	28.4%
	Married	179	71.6%
	Total	250	100%
5- Job Title	Physicians	103	41.2%
	Nurses	80	32.0%
	Administrative Staff	67	26.8%
	Total	250	100%
6- Period of Experience	Less than 5 years	113	45.2%
	From 5 to 10	71	28.4%
	More than 10	66	26.4%
	Total	250	100%
7- Monthly Salary	Less than 5000 riyals	128	51.2%
	From 5000 to 15000	72	28.8%
	More than 15000	50	20.0%
	Total	250	100%

#### 4.2. Method of Data Collection

The present study has drawn on the questionnaire method for collecting primary data necessary for the study. The questionnaire list is interested in recognizing OL and OP.

The questionnaire used in the questions list included four pages, besides the introductory page addressing informants. It aims at introducing them to the nature and aims of the study, besides gaining their cooperation for answering the questions in the list. The other pages include guided and direct questions for all categories of employees at healthcare organizations in the same wording and order. This reduces the probabilities of bias in data collection necessary for the problem of the study.

The questionnaire has been piloted by a limited group of employees (25 items only). This necessitated some amendments in the questionnaire; some phrases were reworded while others were omitted. The researcher handed each informant a list of questions and gave them enough time to answer the questions at a suitable time and place for them.

The questionnaire included three types of questions, in view of problem of the study, its inquiries and purposes of analysis. The first question is related to recognizing OL, the second question detects OP, and the third question is related to the demographic variables of employees at healthcare organizations in Al-Taif Governorate.

Data collection took two months. Replies were 80%, 250 lists out of the 312 distributed. This is due to the high level of interest of employees at healthcare organizations in the subject matter of the questionnaire, and the ease and clarity of questions.

### 4.3. Research Variables and Method of Measuring

#### 4.3.1. Organizational Learning (OL)

The present study has investigated OL as an independent variable. The researcher has drawn on the scale of Senge et al., 1994 for measuring OL (AOL and GOL). Fourteen statements have been modified upon reading a host of studies including (Voci & Young, 2001, Smith & Taylor, 2000, Appeldan & Goramsson 1997, and Osterberg, 2004). Statements 1-7 illustrate AOL while statements 8-14 handle GOL. OL has been measured employing Likert scale of five points which ranges from fully agreement (5) points to fully disagreement (1) point. Informants had to choose the suitable answer.

#### 4.3.2. Organizational Performance (OP)

The present study has handled OP as a dependent variable. The researcher has drawn on the scale presented by Darroch (2003) to measure OP (comparative and internal). Seven statements have been modified upon reading a host of studies including (Pathirage, et al., 2007); Chen & Mohamed, 2007; and Lurdvall & Nielsen, 2007. This measure consists of 7 statements: three statements for comparative performance and four statements for internal performance. OP has been measured employing Likert scale of five points which ranges from full agreement (5) to full disagreement (1). Informants had to choose the suitable answer.

#### 4.3.3. Method of Data Analysis and Testing Hypotheses

For purposes of the statistical analysis and hypotheses testing, the researcher has employed the following methods: (1) the Alpha Correlation Coefficient (ACC), which aims at verifying the degree of reliability in the scale of OL and OP, (2) Multiple Discriminant Analysis (MDA), which aims at discriminating among the employees in regard to OL and OP, (3) Multiple Regression Analysis (MRA), which aims at verifying the relationship between OL and OP, and (4) the statistical testing of hypotheses which includes Wilk's Lambda and chi-square that goes hand in hand with the MDA and F- test and T-test which go hand in hand with the MRA. All these tests accompany analysis means which are to be used. They are found in SPSS.

### 5. Hypotheses Testing

Before testing the hypotheses and research questions, descriptive statistics were performed to find out means and standard deviations of OL and OP.

**Table (3): Shows the Mean and Standard Deviations of OL and OP**

Variables	The Dimension	Mean	Standard Deviation
OL	Adaptive Organizational Learning (AOL)	3.7131	0.90124
	Generative Organizational Learning (GOL)	3.5914	0.89302
	<b>Total Measurement</b>	<b>3.6523</b>	<b>0.88024</b>
OP	Comparative Performance	3.6453	1.00267
	Internal Performance	3.5960	0.81267
	<b>Total Measurement</b>	<b>3.6171</b>	<b>0.87148</b>

Table (3) lists the mean and standard deviation among variables. The mean of each variable is more than 3, and this result indicates that the study subjects have a higher level of OL and OP.

The different facets of OL are examined. Most respondents identified the presence of AOL (M=3.713, SD=0.901). This was followed by GOL (M=3.591, SD=0.893).

The different facets of OP are examined. Most respondents identified the presence of comparative performance (M=3.64, SD=1.002). This was followed by internal performance (M=3.59, SD=0.812).

#### 5.1. Evaluating Reliability Scales

ACC was used as it is the most widely employed method of analyzing reliability to evaluate the degree of internal consistency among the contents of the scale under testing. According to scales testing in social research, it was decided to exclude variables that had a correlation coefficient of less than 0.30 when the acceptable limits of ACC range from 0.60 to 0.80, in accordance with levels of reliability analysis in social sciences (Nunnally & Bernstein, 1994).

ACC was applied on OL scale in total manner for the entire scale and each variable of the scale separately. Results of analyzing reliability revealed that ACC of the scale represented about 0.96, which is an indication of a high degree of reliability.

The extent of internal consistency among contents of OL may be revealed using ACC throughout the Table (4).

**Table (4): Reliability of OL and OP**

Variables	The Dimension	Number of Statement	ACC
OL	Adaptive Organizational Learning (AOL)	7	0.9302
	Generative Organizational Learning (GOL)	7	0.9234
	<b>Total Measurement</b>	<b>14</b>	<b>0.9619</b>
OP	Comparative Performance	3	0.8673
	Internal Performance	4	0.8161
	<b>Total Measurement</b>	<b>7</b>	<b>0.9185</b>

According to the above table, the primary findings of reliability evaluation reflect the fact that the scale under testing is reliable for measuring OL at healthcare organizations in Al-Taif Governorate, KSA.

The 14 items of OL are reliable because the ACC is 0.9619. The 7 items of AOL are reliable due to the fact that the ACC is 0.9302. The GOL, which consists of 7 items, is reliable since the ACC is 0.9234.

The 7 items of OP are reliable due to the fact that the ACC is 0.9185. The comparative performance, which consists of 3 items, is reliable since the ACC is 0.8673 while the 4 items related to internal performance are reliable as the ACC is 0.8161.

According to the above-mentioned results, two scales were defined: the first is for OL (14 variables), where ACC for scales as a whole represented about 0.95, and the second is for OP (7 variables), where ACC for scales as a whole represented 0.84. These scales are reliable in the course of the later stages of analysis in the study.

## 5.2. Organizational Learning OL

The results of statistical analysis for answering the first question of this study on the verification of the extent of differences and discrimination among the employees at healthcare organizations in terms of their evaluative attitudes towards OL in these organizations, and testing the first hypothesis of the study which states:

Hypothesis1: There is no significant discrimination among the employees at healthcare organizations in Al-Taif Governorate towards OL of these organizations.

The three-group discriminant analysis was applied on a model including three groups of employees, representing the types of healthcare organizations, as well as their evaluative attitudes towards OL in these organizations. The discrimination analysis method was applied on three groups enabling us to answer the previous questions as follows:

### A. Discriminant Functions and Matrix on the Basis of OL

**Table (5): Discriminant Functions and Matrix on the Basis of OL**

A- Discriminant Functions							
Function	Eigen Values	The % of Differences	MCC	Wilks Lambada	Ch-Square	Degree of Sign	Level of Sign
1	2.314	69.9	0.836	0.151	461.942	12	0.000
2	0.996	30.1	0.706	0.501	168.979	5	0.000
B- Classification Matrix							
Groups	Number	Predict Member of Groups				Total	
Physicians	103	88 (85.4%)	15 (14.6%)	0 (0.0%)	103		
Nurses	80	3 (3.8%)	77 (96.3%)	0 (0.0%)	80		
Administrative Staff	67	0 (0.00%)	24 (35.8%)	43 (64.2%)	67		
Total	250					250	
<b>The Percentage of the exact division</b>			<b>83.2%</b>				



The functions and matrix at healthcare organizations are represented in table (5). This table reveals the following findings:

1. Eigen values represent 2.314 in the discrimination function among employees and their evaluative attitudes towards OL there.
2. There are differences among attitudes of employees towards OL there (the percentage of differentiation which we could interpret in the model was 69.9% of discrimination analysis function).
3. There is a significant relationship between employees and their attitudes towards OL there (multiple correlation coefficient represents 0.836 in the discrimination analysis function).
4. Wilks Lambda value represents 0.151 in the discrimination analysis function.
5. Results of discrimination analysis of the three groups revealed that the value of chi-square represents 461.942 in the discrimination analysis function.
6. The percentage of the accurate classification of employees according to their evaluative attitudes towards OL is 83%, which implies the differences among employees towards OL there. Also, there are about 17% of the employees who are similar in regard to their evaluative attitudes towards OL at healthcare organizations.

### B. The Relative Importance of OL

Using the discrimination analysis method we could define the relative importance of OL and variables which show more discrimination among employees at healthcare organizations in Al-Taif Governorate. It included six variables relating to OL as shown in Table (6).

**Table (6): Discrimination Coefficients among the Employees on the Basis of OL**

The Factor Discriminating among Employees	Mean			F-Test	Level of Sig
	Group 1	Group 2	Group 3		
1. The organization is ready to learn from other organizations on how to develop methods to work with.	4.50	2.98	3.09	79.89 **	0.50
2. The organization recognizes that training and development are fundamental functions.	4.48	3.75	3.09	34.66 **	0.34
3. If an error occurs in my organization, I expect the assistance and support from others to learn from this error.	4.52	3.89	3.18	29.36 **	0.31
4. The organization is aware that the certificate obtained by the individual is an important part that must be completed through the applied knowledge acquired through his work.	3.57	3.06	3.15	10.16 **	0.17
5. I need to learn new knowledge and techniques so that I can complete my work at the organization.	4.25	3.98	4.43	3.01*	0.15
6. The organization is open to ideas and proposals of employees.	3.28	2.98	3.10	1.69	0.07

It is noted that "the organization is ready to learn from other organizations on how to develop methods to work with" comes at the top of the factors that distinguish among employees at healthcare organizations in Al-Taif Governorate (discrimination coefficients represent 0.50). Then "the organization recognizes that training and development are fundamental functions", which succeeded in distinguishing among employees at healthcare organizations in Al-Taif Governorate (discrimination coefficients represent 0.34).

Then comes one of the variables; "If an error occurs in my organization, I expect the assistance and support from others to learn from this error" that discriminate between the same employees at healthcare organizations in Al-Taif Governorate (discrimination coefficients represent 0.31), (see Table 6).

### C. Comparative Description of Employees on the Basis of OL

Comparing the mean of the attitudes of employees towards OL and variables that have more ability to discriminate among them, we could comparatively describe these types, as in table (6).

As for physicians, the staff tend to agree to a high degree that "if an error occurs in my organization, I expect the assistance and support from others to learn from this error" (with a mean of 4.52), and that "the organization is ready to learn from other organizations on how to develop methods to work with" (with a mean of 4.50).

"The organization recognizes that training and development are fundamental functions" (with a mean of 4.48), and "I need to learn new knowledge and techniques so that I can complete my work at the organization" (with a mean of 4.25).

As for nurses, the staff tend to agree to a high degree that "I need to learn new knowledge and techniques so that I can complete my work at the organization" (with a mean of 3.98) and "If an error occurs in my organization, I expect the assistance and support from others to learn from this error" (with a mean of 3.89), and that "the organization recognizes that training and development are fundamental functions" (with a mean of 3.75). "The organization is aware that the certificate obtained by the individual is an important part that must be completed through the applied knowledge acquired through his work" (with a mean of 3.06).

As for administrative staff, I need to learn new knowledge and techniques so that "I can complete my work at the organization" (with a mean of 4.43), and "If an error occurs in my organization, I expect the assistance and support from others to learn from this error" (with a mean of 3.18), and that "the organization is aware that the certificate obtained by the individual is an important part that must be completed through the applied knowledge acquired through his work" (with a mean of 3.15). "The organization is open to ideas and proposals of employees" (with a mean of 3.10).

Accordingly, it was decided to reject the null hypothesis and accept the alternative hypothesis as a whole. This is because it has been clear that there is statistically significant discrimination among employees at healthcare organizations on the basis of evaluative attitudes of employees towards OL of these organizations. This decision was based on the value of Wilks Lambda in the discrimination analysis, which amounts to 0.15 (see table 5).

Besides, the value of chi-square calculated (461.942) in the free degree of (12) in the same discrimination analysis function exceeds its table counterpart (26.22) at the level of statistical significance of 0.01 (see table 5). On the other hand, it was decided to reject the same null hypothesis of four variables of OL (6 variables) taken individually as there is fundamental discrimination among employees on the basis of each variable at a level of statistical significance of 0.01, according to the test of univariate F. (See table 6).

### 5.3. Organizational Performance (OP)

This section handles results of the statistical analysis for answering the second question of this study on the verification of the extent of differences and discrimination among the employees at healthcare organizations in terms of their evaluative attitudes towards OP in these organizations and testing the second hypothesis of the study which states:

Hypothesis2: There is no significant discrimination among the employees at healthcare organizations in Al-Taif Governorate regarding OP of these organizations.

The three-group discriminant analysis was applied on a model including three groups of employees, along with their evaluative attitudes towards its OP. This technique enabled us to answer the previous question as follows:

#### A. Discriminant Functions and Matrix on the Basis of OP

**Table (7) Discriminant Functions and Matrix on the Basis of OP**

A- Discriminant Functions							
Function	Eigen Values	The % of Differences	MCC	Wilks Lambada	Ch-Square	Degree of Sign	Level of Sign
1	1.33	85.8	0.755	0.352	255.781	10	0.00
2	0.220	14.2	0.424	0.820	48.629	4	0.00
B- Classification Matrix							
Groups	Number	Predict Member of Groups				Total	
Physicians	103	83 (80.6%)	20 (19.4%)	0 (0.00%)	103		
Nurses	80	15 (18.8%)	40 (50.0%)	31.3 (0.0%)	80		
Administrative Staff	67	15 (22.4%)	7 (10.4%)	67.2 (64.2%)	67		
Total	250					250	
<b>The Percentage of the exact division</b>				<b>67.2%</b>			

The functions and matrix at healthcare organizations are represented in table (7). This table reveals the following findings:

1. Eigen values represent 1.33 in the discrimination function among employees and their evaluative attitudes towards OP there.
2. There are differences among attitudes of employees towards OP there (the percentage of differentiation which we could interpret in the model was 85.8% of discrimination analysis function).
3. There is a significant relationship between employees and their attitudes towards OP there (multiple correlation coefficient represents 0.75 in the discrimination analysis function).
4. Wilks Lambda value represents 0.35 in the discrimination analysis function.
5. Results of analysis of discrimination of the three groups revealed that the value of chi-square represents 255.781 in the discrimination analysis function.
6. The percentage of the accurate classification of employees according to their evaluative attitudes towards OP is 67%, which implies the differences among employees towards OP there. Also, there are about 33% of the employees who are similar in regard to their evaluative attitudes towards OP at healthcare organizations.

### B. The Relative Importance of OP

Using the discrimination analysis method, we could define the relative importance of OP and variables which show more discrimination among employees at healthcare organizations. It included two variables relating to OP as shown in Table (8).

It is noted that "the organization has a better performance, generally, than its performance in the last five years" comes in the forefront of the factors that distinguish between healthcare organizations in Al-Taif Governorate (discrimination coefficients represent 0.62). "Compare to other organization in the same field, the organization can achieve profits" (discrimination coefficients represent 0.47). "The organization grows more quickly than other organization in the same field" (discrimination coefficients represent 0.35). "During the last years, the organization achieved its specified goals" (discrimination coefficients represent 0.24). "Generally, the performance of the organization is better than its performance in the last years" (discrimination coefficients represent 0.21). (See Table 8).

**Table (8): Discrimination Coefficients among the Employees on the Basis of OP**

The Factor Discriminating among the Employees	Mean			F-Test	Level Of Sig
	Group 1	Group 2	Group 3		
1. The organization has a better performance, generally, than its performance in the last five years.	4.42	2.98	3.10	63.88**	0.62
2. Compared to other organization in the same field, the organization can achieve profits.	4.44	3.43	3.10	36.79**	0.47
3. The organization grows more quickly than other organization in the same field.	4.14	3.56	3.15	21.99**	0.35
4. During the last years, the organization achieved its specified goals.	3.53	2.98	3.10	10.04**	0.24
5. Generally, the performance of the organization is better than its performance in the last years.	4.14	4.15	4.43	1.82	0.21

### C. Comparative Description of Employees on the Basis of OP

Comparing the mean of the attitudes of employees towards OP and variables that have more ability to discriminate among them, we could comparatively describe these types, as in table (8).

As for physicians, the staff tend to agree to a high degree that "Compare to other organization in the same field, the organization can achieve profits" (with a mean of 4.44), and that "the organization has a better performance, generally, than its performance in the last five years" (with a mean of 4.42). "The organization grows more quickly than other organization in the same field" (with a mean of 4.14), and "the performance of the organization is better than its performance in the last years" (with a mean of 4.14).

As for nurses, the staff tend to agree to a high degree that "the performance of the organization is better than its performance in the last years" (with a mean of 4.15) and "the organization grows more quickly than other organization in the same field" (with a mean of 3.56), and "compared to other organization in the same field, the organization can achieve profits" (with a mean of 3.43). During the last years, the organization achieved its specified goals (with a mean of 2.98).

As for administrative staff, "the performance of the organization is better than its performance in the last years" (with a mean of 4.43), and "the organization grows more quickly than other organization in the same field" (with a mean of 3.15), and "organization has a better performance, generally, than its performance in the last five years" (with a mean of 3.10). "Compare to other organization in the same field, the organization can achieve profits" (with a mean of 3.10).

Accordingly, it was decided to reject the null hypothesis and accept the alternative hypothesis as a whole. This is because it has been clear that there is statistically significant discrimination among employees at healthcare organizations on the basis of evaluative attitudes of employees towards OP of these organizations. This decision was based on the value of Wilks Lambda in the discrimination analysis function, which amounts to 0.87 (see table 7). Besides the value of chi-square calculated (255.78) in the free degree of (10) in the same discrimination analysis function exceeds its table counterpart (23.21) at the level of statistical significance of 0.01 (see table 7). On the other hand, it was decided to reject the same null hypothesis of two variables of OP (5 variables) taken individually as there is fundamental discrimination among employees on the basis of each variable at a level of statistical significance of 0.01, according to the test of univariate F. (See table 8).

#### 5.4. The Relationship between AOL and OP

This section attempts an answer the third question in this study on the type and degree of the relationship between OL and OP along with testing the third hypothesis of the study, which states that:

Hypothesis3: There is no statistically significant relationship between AOL and OP at healthcare organizations in Al-Taif Governorate, KSA

**Table (9): Correlation between AOL and OP**

Hypothesis	Independent Variables	Dependent Variable	Pearson Correlation	Sig
<i>H3</i>	AOL	Comparative Performance	0.892**	0.000
		Internal Performance	0.900**	0.000
		Total	0.919**	0.000
<b>Note:</b> ** Correlation is significant at 0.01 level.				

According to Table (9), there is significant correlation between AOL and OP. Table (9) presents the relationship between AOL and OP at healthcare organizations in Al-Taif Governorate, KSA.

**Table (10): The Relationship between AOL and OP**

The Variables of AOL	Beta	R	R <sup>2</sup>
1. The healthcare administration recognizes that training and development are fundamental functions.	0.155**	0.813	0.660
2. Healthcare administration is trying to deal with anything that happens in the external environment.	0.011	0.829	0.687
3. The healthcare is ready to learn from other healthcare on how to develop methods to work with.	0.353**	0.868	0.753
4. If an error occurs in my healthcare, I expect the assistance and support from others to learn from this error.	0.048	0.810	0.656
5. The healthcare sets up training programs for workers at all stages of the development of their professional work.	0.001	0.659	0.434
6. The healthcare administration is aware that the certificate obtained by the individual is an important part that must be completed through the applied knowledge acquired through his work.	0.436**	0.840	0.705
7. I need to learn new knowledge and techniques so that I can complete my work at the healthcare .	0.100**	0.629	0.395
<ul style="list-style-type: none"> <li>▪ Multiple Correlation Coefficients (MCC)</li> <li>▪ Determination of Coefficient (DC)</li> <li>▪ The Value of Calculated F</li> <li>▪ Degree of Freedom</li> <li>▪ The Value of Indexed F</li> <li>▪ Level of Significance</li> </ul>	0.944 0.890 280.500 7, 242 2.63 0.01		
** P < .01			

According to the above Table (10), the results show the following:

1. There is a statistically significant relationship between AOL and OP. It represents 94%, according to the multiple correlation coefficients.
2. AOL may interpret about 89% according to the coefficient of determination (R-Square) of the total differentiation in the OP.
3. The results of MRA reveal that the variables of AOL provide more explanation of the difference in the level of OP including the healthcare administration is aware that the certificate obtained by the individual is an important part that must be completed through the applied knowledge acquired through his work (0.43), the healthcare is ready to learn from other healthcare on how to develop methods to work with (0.35), and the healthcare administration recognizes that training and development are fundamental functions views and experiences are recorded and saved in the database (0.15), as shown in Table (10).

In light of the above-mentioned facts, it was decided to reject the null hypothesis which states that there is no significant statistical relationship between AOL as one of the dimensions of OL and OP of healthcare organizations in Al-Taif Governorate. The alternative hypothesis has been accepted because the model of MRA has shown that there was fundamental relationship at the level of statistical significance of 0.01 (according to F-test) between AOL as an independent variable and OP as a dependent variable at the level of statistical significance level of 0.01, according to T-Test (See Table 10).

### 5.5. The Relationship between GOL and OP

This section attempts an answer to the forth question in this study on the type and degree of the relationship between GOL and OP along with testing the forth hypothesis of the study, which states that:

Hypothesis4: There is no statistically significant relationship between GOL and OP at healthcare organizations in Al-Taif Governorate, KSA.

**Table (11): Correlation between GOL and OP**

Hypothesis	Independent Variables	Dependent Variable	Pearson Correlation	Sig
H3	GOL	Comparative Performance	0.882**	0.000
		Internal Performance	0.918**	0.000
		Total	0.924**	0.000
<b>Note:</b> ** Correlation is significant at 0.01 level.				

According to Table (11), there is significant correlation between GOL and OP. Table (12) presents the relationship between OL (GOL) and OP at healthcare organizations in Al-Taif Governorate, KSA.

**Table (12): The Relationship between GOL and OP**

The Variables of GOL	Beta	R	R <sup>2</sup>
1. The healthcare administration is open to ideas and proposals of employees.	0.036	0.633	0.400
2. Healthcare staff is always in a position to encourage reflection on the submission of proposals that would improve its working methods.	0.483**	0.908	0.824
3. Healthcare staff has adequate time to learn from problems rather than solve them.	0.204**	0.798	0.636
4. It is important for healthcare staff to have the opportunity for experimentation and the search for better ways to accomplish the work.	0.071*	0.844	0.712
5. There is openness between healthcare staff regarding the exchange of different viewpoints.	0.018	0.585	0.342
6. The administration of the healthcare continues to exchange views with the staff.	0.392**	0.843	0.710
7. Debate among the healthcare staff focuses on ideas not on persons who say these ideas.	0.025	0.787	0.614
<ul style="list-style-type: none"> <li>▪ Multiple Correlation Coefficients (MCC)</li> <li>▪ Determination of Coefficient (DC)</li> <li>▪ The Value of Calculated F</li> <li>▪ Degree of Freedom</li> <li>▪ The Value of Indexed F</li> <li>▪ Level of Significance</li> </ul>	0.969 0.939 531.299 7, 242 2.63 0.01		
* P < .05      ** P < .01			

According to the above Table (12), the results show the following:

- There is a statistically significant relationship between GOL and OP. It represents 96%, according to the multiple correlation coefficients.
- GOL may interpret about 93% according to the coefficient of determination (R-Square) of the total differentiation in the OP.
- The results of MRA reveal that the variables of GOL provide more explanation of the difference in the level of OP include Healthcare staff is always in a position to encourage reflection on the submission of proposals that would improve its working methods (0.48), the administration of the healthcare continues to exchange views with the staff (0.39), and Healthcare staff has adequate time to learn from problems rather than solve only (0.20), as shown in Table (12).

In light of the above-mentioned facts, it was decided to reject the null hypothesis which states that there is no significant statistical relationship between GOL as one of the dimensions of OL and OP of healthcare organizations in Al-Taif Governorate. The alternative hypothesis has been accepted because the model of MRA has shown that there was fundamental relationship at the level of statistical significance of 0.01 (according to F-test) between GOL as an independent variable and OP as a dependent variable at the level of statistical significance level of 0.01, according to T-Test (See Table 10).

## **6. Discussion of the Findings**

The present study on analyzing the role of OL to improve OP at healthcare organizations in Al-Taif Governorate reveals a set of results which can be summarized as follows:

1. There are differences among the employees at healthcare organizations regarding their evaluative attitudes towards OL. The most important dimensions of OL more capable of distinguishing between healthcare organizations include the organization is ready to learn from other organizations on how to develop methods to work with, the organization recognizes that training and development are fundamental functions, and if an error occurs in my organization, I expect the assistance and support from others to learn from this error.
2. There are differences among the employees in healthcare organizations regarding their evaluative attitudes towards OP. The most important OP dimensions most able to distinguish between healthcare organizations in Al-Taif Governorate include the organization has a better performance, than its performance in the last five years, compare to other organization in the same field, the organization can achieve profits, the organization grows more quickly than other organization in the same field, during the last years, the organization achieved its specified goals, and the performance of the organization is better than its performance in the last years.
3. There is a statistically significant relationship between the dimensions of OL (AOL and GOL) and OP (internal performance, and comparative performance) of healthcare organizations in Al-Taif Governorate.

## **7. Recommendations**

In the light of previous results, the researcher completed a set of recommendations, and can summarize the most important recommendations as follows:

1. It is necessary to pay more attention to OL at healthcare organizations in Al-Taif Governorate, KSA. Its officials should realize and spend lavishly on the important OL (AOL and GOL) at healthcare organizations as a learning organization. This will achieve success currently and in the future, besides attaining the competitive advantage.
2. Reviewing the methods for selecting administrative leaders of healthcare organizations, and the need for attention by choosing individuals with excellent interpersonal skills, out of the importance of leadership in achieving the AOL and GOL.
3. Taking care of management of healthcare organizations, the importance of a OL in general, as it is one of the important elements that can be used to increase OP by rewarding employees in case they work as assigned to them by their managers.
4. The concerned department of healthcare organizations should heed the importance of a management by exception as one of the elements leading to the achievement of OL. This can be achieved through expansion in the granting of authority to employees and encouragement of initiative and innovation in the ways and methods of work, including raising the quality and efficiency of performance.
5. Healthcare organizations should pay more attention to GOL. This may be accomplished through various means, which include (1) searching for experienced persons in modern management, (2) recognizing the desires and needs of employees, and (3) granting employees more authority for urging them to provide new development in their specialization.
6. The researcher hopes and believes that the model developed and tested presents relatively well-balanced relationship between OL and OP in modern business environment, and simplicity of its formulation in the model.
7. Top management at healthcare organizations need to understand and identify what factors contribute to the effectiveness of OP and what factors hinder such processes among the public service managers. In addition, top management need to promote the creation of intelligent organizations where people develop personally and professionally.

8. Developing the skills and capabilities of officials at healthcare organizations in the field of OL, through specialized training programs that focus on OL as one of the methods that can be used to improve OP on the one hand, and to achieve competitive advantage on the other hand.

### **8. Prospective Proposed Research**

The present study is one of the pioneer works on the subject in Kingdom of Saudi Arabia organizational context. The findings of the research help OL researchers as well as practitioners develop a better understanding of the role of OP. The current study may provide necessary guidelines to understand the issues of OL and OP.

Also, the findings of this study provide an initial understanding of the way towards further research in this area. Future research may focus on other important areas of OP (task performance, contextual performance, and assignment specific performance) and OL process attributes (AOL and GOL).

Further prospective studies on OL and its impact on some variables such as job performance, organizational innovation, strategic performance, and effectiveness of managers in different organizations can be applied to other communities such as private universities, school districts, as well as public and private hospitals.

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