



The Impact of Organizational Creativity on Organizational Performance: The Moderating Role of Knowledge Sharing: Empirical Study in Pharmaceutical Jordanian Companies

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Abstract—Business organizations are constantly working to achieve their objectives and maintain their survival and development. This always drives them to achieve the process of development, innovation and creativity in their work. By doing so, this drives production and increases its flow with the use of advanced technology and systems. It also leads to achieve profits and market competition. As a result, this leads to raise the performance level and achieve an outstanding organizational performance.

Recently, there has been frequently talk about knowledge and its management and the importance of this in developing inputs and outputs in all fields and sectors of production and services, including Jordanian pharmaceutical companies, which manifest its concern in the creation and innovation of everything that is new in the world of pharmaceutical industry.

Keywords— Organizational Creativity, Organizational Performance, Knowledge Sharing.

I. INTRODUCTION

A. Problem of the Study

Many public and private institutions have drawn attention to the importance of development process, due to the rapid and renewed change in highly competitive environments or in those that have important roles in countries and societies' life, in order to achieve survival and stability in their different areas of work. For this reason, the organizations, especially the Jordanian pharmaceutical companies, are striving to achieve creativity in their work and to adopt modern methods through the use of technology and its developments in order to realize an effective and outstanding organizational performance.

The problem of the study has crystalized in the attempt to test the impact of organizational creativity on the organizational performance in the presence of the moderating role for knowledge sharing in the Jordanian pharmaceutical companies.

The problem of the study can be further illustrated by asking the following questions and trying to answer them:

- 1) What is the level of organizational creativity that characterizes Jordanian pharmaceutical companies?
- 2) What is the level of organizational performance in Jordanian pharmaceutical companies?
- 3) What is the level of knowledge sharing in Jordanian pharmaceutical companies?
- 4) Does organizational creativity in Jordanian pharmaceutical companies affect high organizational performance?
- 5) Does knowledge sharing moderate the impact of organizational creativity on the performance of Jordanian pharmaceutical companies?

B. Aim of the Study

The main objective of this study is to focus on the impact of organizational creativity on organizational performance, and to identify the role knowledge sharing can play, and the limits of this impact on the level of surveyed Jordanian pharmaceutical companies. This objective has a number of objectives, as follows:

- 1) Stating various literatures relevant to the organizational creativity, organizational performance and knowledge sharing to serve as a guide for the management of surveyed companies and similar companies in order to create awareness and raise the interest of the workers on the nature of these subjects.
- 2) Determining the level of organizational creativity in the Jordanian pharmaceutical companies.
- 3) Describing the level of organizational performance for workers in the Jordanian pharmaceutical companies.
- 4) Demonstrating the reality of knowledge sharing in Jordanian pharmaceutical companies and shedding light on their contribution to the performance of both the workers and the organization.
- 5) Exploring the impact of organizational creativity on organizational performance through the role played by knowledge sharing in the surveyed companies.
- 6) Providing some recommendations that can be utilized in the field of implementing organizational creativity in the organizational performance and knowledge sharing in

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Jordanian pharmaceutical companies in light of the results obtained.

Study Model

In this context, the relationship between the present study axes ranges from the substantive-normative dimensions and the self-descriptive dimensions. The methodological treatment of the study problem in the light of its theoretical framework and field implications requires the design of the study model

(Figure (1)), which refers to the logical relationships between the variables of the study to reflect the temporary solutions suggested by the researchers to answer the research questions raised in the problem of the study.

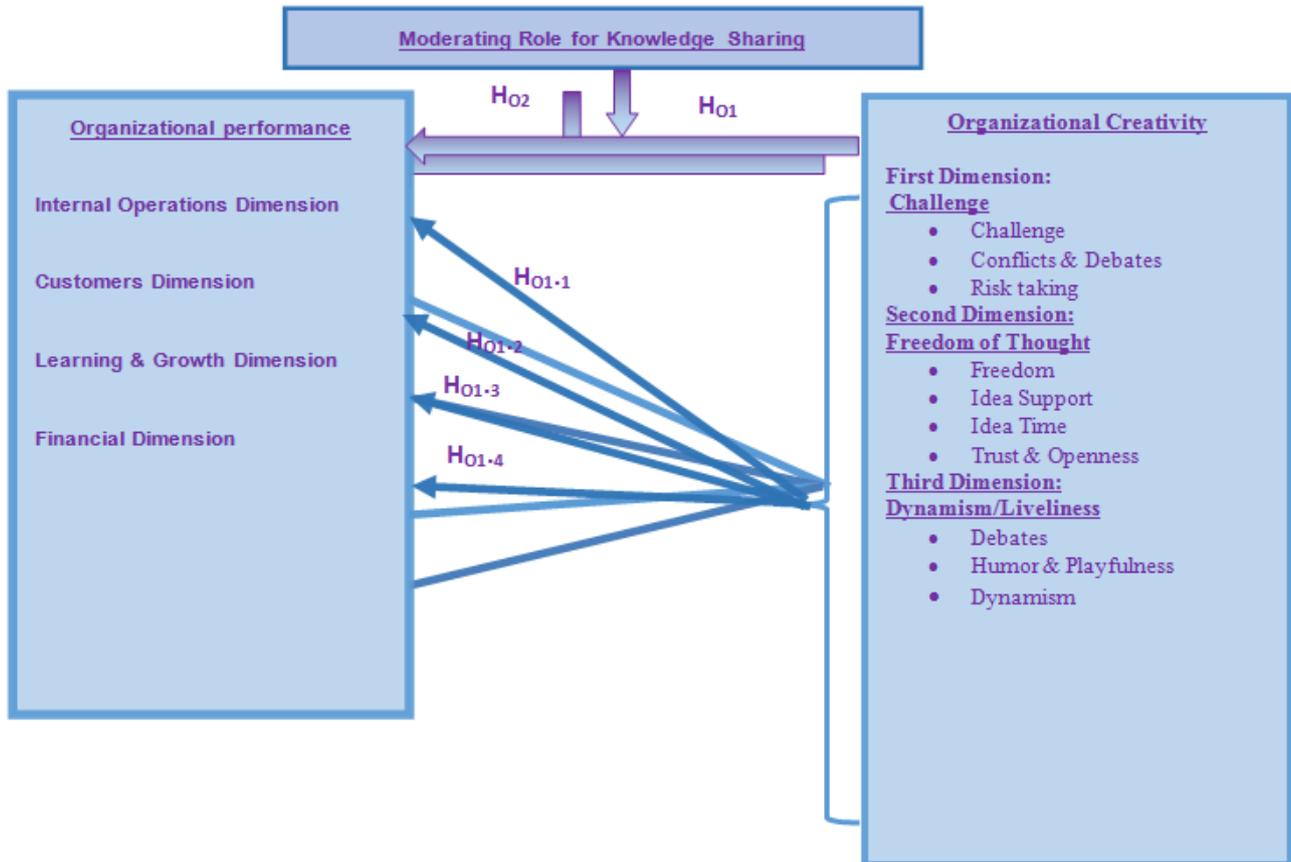


Figure (1): Source: The researchers
Study variables based on scientific references in research (Annika, et al, 2015) & (Harden & Upton, 2016)

Figure 1. Figure.1: Source: The Researchers Study Variables based on Scientific References in Research

C. Hypotheses of the Study

In accordance with the study objectives and in order to test its model, the study adopted the following main hypotheses:

First: The first main hypothesis (H₀₁): There is no statistically significant impact ($\alpha \leq 0.05$) of organizational creativity with its dimensions (challenge, freedom of thought, and dynamism/liveliness) on the organizational performance of Jordanian pharmaceutical companies. Four sub-hypotheses emerge from it.

Second: The second main hypothesis (H₀₂): There is no statistically significant impact ($\alpha \leq 0.05$) of organizational creativity with its dimensions (challenge, freedom of thought, and dynamism/liveliness) on the organizational performance

in the presence of knowledge sharing as a variable in the Jordanian pharmaceutical companies. Four sub-hypotheses emerge from it.

II. THEORETICAL FRAMEWORK

A. Organizational Creativity

“Organizational Creativity” was defined as “the capability to generate new and useful ideas that concern products, services, processes, managerial practices as well as competitive strategies. It is treated as a main vehicle of organizational development and the basis for staying in the market and innovative success” (Olszak & Kisielnicki 2016, p.104) [12].

(Derecskei 2014, P.4) [4] pointed out that organizational creativity is “a new and valuable (useful) idea. It is the result of a joint effort, which has been achieved with regard to emerging

problems at work, taking into account the factors influencing it”.

Organizational creativity was defined by (Beheshtifar, Kamani-Fard 2013, p.102) [3] as “the creation of a new product, service, idea, procedure, or process that is of valuable value to individuals working together in a complex social system”.

Based on the aforementioned, the researchers argue that organizational creativity is the process of creating ideas or developing existing ideas to find or obtain a new idea that leads to a specific work or a new work that has never been created either on the product or service. This thinking or development may be at the level of the individual or community within the organization. It is based on knowledge and skill, and experience may sometimes be involved.

B. Creative Climate

Many scientists and researchers believe that organizational creativity can be measured by studying creative climate. The researchers relied on measuring the impact of organizational creativity on studies that measured organizational creativity through studying the creative climate. Göran Ekvall created the scale of organizational creativity through 9 scales and then these scales were developed to 10 scales.

(Annika , et al. ,2015, pp. 72, 73) [2] found that creative climate is “the product of organizational culture, the character of the organization”, and that it is “a set of conducts, feelings and behaviors that characterize organizational life”, but there is no consensus by authors that creative climate is the product of organizational culture. Creative climate can be seen as a more realistic and concrete way of measuring the elements of culture in terms of specific behaviors and characteristics. By reviewing research, we notice an overlap between the dimensions that make up diverse concepts, such as organizational creativity, creative climate, organizational climate and organizational culture. Based on the terms used by Ekvall, creative climate consists of ten dimensions: challenge, freedom of thought, idea support, trust /openness, dynamism / liveliness, playfulness humor, debate, conflict, risk taking and idea time.

Creative climate has been found to be associated with higher organizational performance, such as market share, sales volume, improved ability to implement complicated work designs, research and development, and manufacturing, as well as different settings. If the job also requires creativity and innovation, for example in the research and development organization, the strength of the relationship between climate measures and creative achievement increases. These ten dimensions have been proved to be important for creative climate, as follows (Annika, et al., 2015, pp. 72, 73) [2]:

1) Challenge: The amount of energy and emotional involvement in tasks. When the percentage of this dimension is high, much energy is invested and employees feel that their tasks are exciting and meaningful. On the contrary, when people feel alienated and lack of interest in tasks, the percentage of this dimension is low.

2) Freedom of thought: What is the space needed for independence in the workplace? Realizing this dimension to

high scores means the ability of people to make new contacts and that information is transferred and disseminated within the organization. Low scores indicate that people remain within fixed frames and they are negative and confined by rules.

3) Idea Support: This dimension corresponds to how new ideas are treated in a very supportive environment, where new ideas are received in an attentive and supportive way, either from bosses or workmates. The high creative climate allows and encourages testing ideas. If idea support is low, the new ideas will be met with uncertainty, finding errors, reflexive behavior and counter arguments.

4) Trust / Openness: The emotional safety in relationships. The high scores of this dimension indicate that people can put forward their ideas and opinions and communicate, as it is a clear and open atmosphere. Low scores indicate a suspicious climate against others, fear of failure and its consequences and fear of looting good ideas.

5) Dynamism / Liveliness: The eventfulness of the life of the organization, whether social or work related. When this dimension achieves a high score, workplaces are characterized by full speed and constant and sustained movement, while workplaces are described as slow and routine when the score is low.

6) Playfulness/Humor: The apparent ease and kind of atmosphere like relaxation with jokes and laughter achieves high scores in this dimension, while low scores indicate that there is no joke and there are many qualities of seriousness and severity.

7) Debates: Encounters in ideas and clashes resulting from it, and exchanges of ideas by people. The scores of this dimension are high when many voices are heard and people are keen about putting their ideas forward. If the scores are low, people tend to follow patterns without having a tendency for curiosity.

8) Conflicts: The presence of personal and emotional tensions in the workplace. When there is a high level of conflict, groups and individuals dislike or hate each other. On the other hand, the low level of conflicts does not necessarily mean that people like each other. However, people tend to control their feelings in a more professional way.

9) Risk Taking: How organization addresses uncertainty. When the organization makes decisions and takes action quickly, people dare to put their pioneering ideas forward. On the other hand, this kind of risk can be avoided by the organization by slowing down operations. Before new decisions are taken, risks can be reduced or eliminated by other factors.

10) Idea Time: The amount of time employees can use for elaborating and analyzing new ideas. An organization with high scores in this dimension allows its employees to test and talk about their ideas. If scores are low, employees do not have time to provide new ideas when they are exhausted by their normal tasks.

Together, these dimensions constitute a creative climate, as the creative climate is of great benefit to the Organization in

many aspects. Based on the literature review related to the study of organizational creativity, the researchers found that most studies examined and measured organizational creativity by studying the creative climate through its ten dimensions. These ten dimensions were confirmed by scientists and researchers in their studies, as these dimensions were all measured without missing anyone of them. Accordingly, the researchers relied on their study to measure the impact of organizational creativity on organizational performance and the moderating role of knowledge sharing on measuring the aforementioned ten creative climate dimensions. However, a number of dimensions were integrated with each other, as the idea of these ten dimensions is similar. These ten dimensions are as follows:

- First dimension: Challenge: It includes challenge, conflicts, debates and risk taking.
- Second dimension: Freedom of thought: It includes freedom, idea support, idea time, trust and openness.
- Third dimension: Dynamism/Liveliness: It includes dynamism, debates, humor and playfulness.

C. Organizational Performance

The performance concept is considered one of the important concepts in economics and management. It has received considerable attention from researchers and thinkers. The performance concept is associated with the organization strength, which strives to improve its performance through knowledge, creativity and development of information technology. By doing so, this helps the organization to achieve self-realization and success in its operations and activities continuously, in order to build an outstanding strategic and competitive position that ensures its survival and performance improvement in the environment in which it operates, as well as to realize its competitive advantage.

(Maktabi & Khazaei 2014, p. 570) [8] defined “Organizational Performance” as “the indicator that measures the organization's success in achieving its objectives. The organization can assess organizational performance in accordance with the efficiency and effectiveness of achieving the goal. Organizational performance includes the current production or the results of an organization, such as the studied outputs versus the actual outputs.”

(AL-Hakim & Hassan 2012, p.38) [1] defined organizational performance as the comparison made between the expected results with results achieved, investigating deviations of prepared plans and evaluating the individual performance, and examining progress achieved in meeting organizational objectives, in order to help managers evaluate organizational activities and maintain competitive position or superiority over competitors.

From the researchers' viewpoint, organizational performance means the full achievement or performance of the employee to his work. When the employee performs his work, he is satisfied and achieves his goals, as he accomplishes his work and a wage is paid to him accordingly. In this sense, the interest is achieved in a two-way trend, where the first trend is

the performance of the organization's work and the second one is for the individual in terms of getting paid.

In their study, the researchers relied on measuring the organizational performance on the balanced scorecard with its four dimensions, namely the financial dimension, the dimension of internal operations, learning and growth dimension, and the customers' dimension. The reason behind this is that the balanced scorecard measures the organizational performance according to modern methods. It does not rely on one perspective or dimension, as in financial indicators or other indicators, but it measures performance in multiple dimensions to improve the organizational performance and its continuity. As well, the balanced scorecard translates the organization's objectives into its strategies, motivates employees to work, and seeks to improve the organization's traditional systems.

Flores & Munoz (2017) [5] defined the “Balanced Scorecard” as “a model for measuring performance in an integrated way, by linking its four dimensions of organizational performance with the organization's strategy.”

The four dimensions of the balanced scorecard are as follows: the financial dimension, the customers' dimension, learning and growth dimension and the dimension of internal operations

The internal operations mean all internal actions and activities that distinguish the organization from other organizations through which customers' needs and requirements are met and the satisfaction level is achieved from dealing with the organization and the objectives of the shareholders. Hence, the benchmarks associated with internal operations of the balanced scorecard are supposed to emanate from operations that have an impact on customer satisfaction and its required techniques through creativity in identifying and developing a production plan, the quality and equipment required, the operations of producing and delivering the goods and services needed by customers as well as the after-sales service, in order to continuously improve the organizational performance of organizations (Narayanamma & Lalitha, 2016) [9].

D. Customers' Dimension

Nowadays, many organizations have a message focused on customers. Most organizations today rely on developing the customers' requirements and needs at the heart of their strategies, because this aspect is of great importance reflecting the organization success in competition, survival and continuity of its activity in the competition market, which is achieved through the organization's capability to deliver products (goods or services) of high quality and reasonable prices. This dimension includes several scales, including customer satisfaction, customers' retention, and acquisition of new customers (Natarajan & Vijayalakshmi, 2016, p. 36) [10].

E. Learning and Growth Dimension

This dimension identifies the capabilities in which the organization must grow in order to achieve high-level internal operations, which create a value for customers and shareholders. This aspect concentrates on measuring the

capabilities of all staff, their level of skills and satisfaction with work. It also measures the capabilities of information system and finally measures the system of rewards and incentives. This can be achieved through staff development, education, training, professional knowledge, providing an opportunity for employees to promotion and development, and qualified staff retention. Training expenses is one of the most important measures used in this dimension. The balanced scorecard can use measures that will help improving the staff performance in the areas required for the success of the organization constantly (Harden & Upton, 2016) [7].

F. Financial Dimension

This dimension concentrates on the financial aspects of the organizational performance, i.e. how do we look at our stakeholders? In the private sector in general, long-term financial goals seek to maximize net profit, while success in the public sector is measured by the effectiveness and efficiency of these organizations in meeting the needs of their customers at the lowest possible cost and in the shortest possible time. Financial objectives are also different across the life cycle of the organization (growth, survival and continuity). For example, financial objectives in the growth phase focus on growth in new markets and increase the delivery of production and services to new customers. Financial targets in the continuity (production) phase will focus on cash flow (Obeidat, et al., 2017) [11].

G. Knowledge Sharing Process

The researchers provided diverse definitions for knowledge sharing. One of the most striking differences between researchers was that some considered that the aim of knowledge sharing process is to gain new experiences and knowledge, and thus it is a knowledge transfer process. Others argue that knowledge transfer is only a phase of knowledge sharing, as knowledge sharing also involves acquiring new knowledge through learning process and applying this knowledge by the knowledge recipient.

Knowledge sharing is the process by which individuals' knowledge is transformed into a form that can be understood and used by others, and the use of expertise and information to help others solve problems, elaborate new ideas, or apply new policies and procedures (Gaál et al., 2015, p.187) [6].

Knowledge sharing is one of the most important knowledge management processes, as it covers the differences that cannot be achieved through the remaining knowledge management processes. For this reason, researchers focused more on knowledge sharing as the strategic entry point for success in knowledge management.

The researchers believe that knowledge sharing process is an important process for the following reasons:

- Knowledge sharing process supports creativity through disseminating, transferring and exchanging knowledge among individuals working in the organization.

- Knowledge sharing improves the performance of the organization by expanding knowledge as a collective

organizational knowledge and using available resources effectively.

- Knowledge sharing process promotes the competitive advantage of the organization among the competing organizations.

In addition, the researchers found that knowledge sharing has an individual and collective interaction through explicit and implicit knowledge, skills acquired for individuals as a result of doing different work, training of staff and various courses to improve performance at work. They also found that knowledge sharing forms may occur in formal contacts among staff in the organization. For example, it can be realized via sending official letters and memos or via email, or informal contacts between staff, such as telephone calls or oral discussions. The researchers found that sharing knowledge generates organizational creativity and stimulates it through science and knowledge among employees and the exchange of experiences and skills among individuals, which leads to generate new ideas and activities that did not exist before. Besides, Knowledge sharing involves the promotion, acceptance, transfer, exchange and support of ideas through experience as well as the training and sharing of knowledge with others. This knowledge is developed to realize, encourage, support and accept organizational creativity rather than reject it. In addition, the use of technology helps to share, disseminate and exchange knowledge among others, in order to achieve organizational creativity and raise the staff level to achieve the objectives and development of the organization. If organizational creativity represents an effort made by the organization to create products and services that satisfy customers, this organizational creativity is driven by individual and organized creative capabilities. This means there is an explicit and implicit knowledge base among those employees working in the organization as individuals and groups. It also means that the availability of a real and appropriate knowledge base in the organization enables it to effectively integrate this knowledge with the overall processes of organizational creativity.

Finally, complete content and organizational editing before formatting. Please take note of the following items when proofreading spelling and grammar:

III. PRACTICAL FRAMEWORK OF THE STUDY

A. Study Sample

A random sample was chosen, to come out with results or indicators that could be generalized by the directors. It represents the heads of departments and administrative supervisors from the study community. 350 questionnaires were distributed, from which 276 responses were retrieved, with a rate of (78.8%). 6 questionnaires were excluded, as the respondents' responses were not fully completed. (270) questionnaires have been analyzed.

TABLE I. DESCRIPTION OF THE STUDY SAMPLE CHARACTERISTICS

| N | Category | Frequency | Percentage |
|---|----------------------------------|-----------|------------|
| 1 | Male | 191 | %70.70 |
| 2 | Female | 79 | %29.30 |
| 1 | Less than 25 years | 16 | %5.90 |
| 2 | 25-Less than 35 years | 125 | %46.30 |
| 3 | 35- Less than 45 years | 83 | %30.70 |
| 4 | More than 45 years | 46 | %17.00 |
| 1 | Intermediate diploma or below | 26 | %9.60 |
| 2 | Bachelor | 194 | %71.90 |
| 3 | Master | 42 | %15.60 |
| 4 | Others | 8 | %3.00 |
| 1 | Pharmacy | 77 | %28.50 |
| 2 | Business Administration | 53 | %19.60 |
| 3 | Chemical industries or chemistry | 82 | %30.40 |
| 4 | Others | 58 | %21.50 |
| 1 | Head of department | 143 | %53.00 |
| 2 | Director | 80 | %29.60 |
| 3 | Supervisor | 46 | %17.00 |
| 4 | Others | 1 | %0.40 |

| | | | |
|---|------------------------|-----|--------|
| 1 | Less than 5 years | 36 | %13.30 |
| 2 | 5 – less than 10 years | 113 | %41.90 |
| 3 | 10- less than 15 years | 51 | %18.90 |
| 4 | More than 15 years | 70 | %25.90 |

B. Testing for Normality

The test of normal distribution curve of the collected data was performed to make sure whether the data were under normal distribution. The values of the Skewness coefficient were extracted, which indicate that if the values of the Skewness coefficient are less than (1), this mean the data are normally distributed.

TABLE II. THE NORMAL DISTRIBUTION OF DATA DEPENDING ON THE SKEWNESS COEFFICIENT

| Variable Type | Variables | Arithmetic Mean | Standard Deviation | Skewness Coefficient |
|---------------|----------------------------|-----------------|--------------------|----------------------|
| Independent | Challenge | 3.852 | 0.5962 | 0.118 |
| | Freedom of Thought | 3.667 | 0.6719 | 0.078 |
| | Dynamism /Liveliness | 3.7 | 0.6352 | 0.045 |
| | Organizational Creativity | 3.732 | 0.5708 | 0.187 |
| Dependent | Internal Operations | 3.83 | 0.6258 | 0.124 |
| | Customers | 3.828 | 0.6352 | 0.021 |
| | Learning and Growth | 3.777 | 0.6657 | 0.15 |
| | Financial | 3.854 | 0.6091 | 0.1 |
| | Organizational Performance | 3.823 | 0.5664 | 0.149 |
| Moderating | Knowledge Sharing | 3.771 | 0.6087 | 0.181 |

IV. TESTING HYPOTHESES

A. The First Hypothesis

The first main hypothesis (H_{01}): There is no statistically significant impact ($\alpha \leq 0.05$) of organizational creativity with its dimensions (challenge, freedom of thought, and dynamism/liveliness) on the organizational performance of Jordanian pharmaceutical companies.

TABLE III. RESULTS OF TESTING THE IMPACT OF ORGANIZATIONAL CREATIVITY IN ITS DIMENSIONS TOGETHER ON ORGANIZATIONAL PERFORMANCE WITH KNOWLEDGE SHARING AS A MODERATING VARIABLE

| | Challenge | | | Freedom of thought | | | Dynamism | | | R ² | F |
|---|-----------|-------|-------|--------------------|-------|-------|----------|-------|-------|----------------|--------|
| | (T-Sig) | T | β | (T-Sig) | T | β | (T-Sig) | T | β | | |
| Results of testing the impact of organizational creativity with its dimensions together on the organizational performance | 0.001 | 3.368 | 0.229 | 0.100 | 1.650 | 0.126 | 0.000 | 6.957 | 0.430 | 0.490 | 85.183 |
| Internal operations | 0.014 | 2.479 | 0.177 | 0.059 | 1.899 | 0.152 | 0.000 | 6.362 | 0.412 | 0.439 | 69.481 |
| Customers | 0.002 | 3.085 | 0.223 | 0.421 | 0.805 | 0.065 | 0.000 | 6.661 | 0.438 | 0.424 | 65.248 |
| Learning & Growth | 0.007 | 2.702 | 0.190 | 0.010 | 2.596 | 0.205 | 0.000 | 5.669 | 0.362 | 0.454 | 73.822 |
| Financial Dimension | 0.005 | 2.861 | 0.235 | 0.875 | 0.158 | 0.015 | 0.000 | 4.295 | 0.320 | 0.259 | 30.98 |

The multiple linear regression test was used to test this hypothesis. The testing results of the main hypothesis and the four sub-hypotheses were as shown in the Table no. 3 above, which represents the existence of a set of independent variables (challenge, freedom of thought and dynamism/liveliness) and one dependent variable representing the (organizational performance). Table no.3 indicates that there is a statistically significant impact of organizational creativity on organizational performance in Jordanian pharmaceutical companies. The F value amounted to (0.00), as it was indicated by the calculated F value which amounted to (85.183). This means it is greater than its table value amounting to (2.60) at the level of ($\alpha \leq 0.05$), which also represents the significance of this model. The value of (R²) accounting for (0.490) indicates that organizational creativity accounted for 49.0% of the change in the organizational performance of Jordanian pharmaceutical companies. The relation between the variables is considered strongly positive, since the value of R = 70%.

The results of the partial analysis of this hypothesis show that the dimensions of (dynamism /liveliness, challenge) have realized a linear contribution to the impact within the group on the organizational performance. This is shown by the values of

β (0.430), (0.229) and (T) (6.957), (3.368) respectively at ($\alpha \leq 0.05$) level. As for the dimension (freedom of thought), it did not realize a contribution to the influence within the group on the organizational performance, which is shown by the value of (β) and (T) at the level ($\alpha \leq 0.05$), as shown in Table no. 5. Based on the aforementioned, we reject the null hypothesis (HO.1) and accept the alternative hypothesis (Ha.1), in which a statistically significant impact was found at the significance level ($\alpha \leq 0.05$) for the organizational creativity on the organizational performance in Jordanian pharmaceutical companies.

B. The Second Hypothesis

The second main hypothesis (Ho2): There is no statistically significant impact ($\alpha \geq 0.05$) of organizational creativity with its dimensions (challenge, freedom of thought, and dynamism/liveliness) on the organizational performance in the presence of sharing of knowledge as a variable in the Jordanian pharmaceutical companies.

The multiple linear regression test was used to test this hypothesis. The hypothesis testing results were as shown in the following Table (Table no. 4) .

TABLE IV. RESULTS OF TESTING THE IMPACT OF ORGANIZATIONAL CREATIVITY IN ITS DIMENSIONS TOGETHER ON ORGANIZATIONAL PERFORMANCE WITH KNOWLEDGE SHARING AS A MODERATING VARIABLE

| | Model 1 | | | | | | Model 2 | | | | | |
|---|---------|---------|--------------------|----------------|-------|--------|---------|---------|--------------------|----------------|-------|-------|
| | (Sig) | F | Δ(R ²) | R ² | β | T | (Sig) | F | Δ(R ²) | R ² | β | T |
| Organizational Creativity × Knowledge Sharing | 0.00 | 234.525 | | 0.467 | 0.683 | 15.314 | 0.00 | 200.752 | 0.134 | 0.601 | 0.821 | 9.461 |
| Internal Operations | 0.00 | 193.061 | | 0.419 | 0.647 | 13.895 | 0.00 | 125.178 | 0.066 | 0.484 | 0.573 | 5.807 |
| Customers | 0.00 | 173.933 | | 0.394 | 0.627 | 13.188 | 0.00 | 123.514 | 0.087 | 0.481 | 0.662 | 6.687 |
| Learning & Growth | 0.00 | 213.864 | | 0.444 | 0.666 | 14.624 | 0.00 | 163.650 | 0.107 | 0.551 | 0.734 | 7.971 |
| Financial | 0.00 | 84.564 | | 0.240 | 0.490 | 9.196 | 0.00 | 104.024 | 0.198 | 0.438 | 0.999 | 9.701 |

Table no. 4 indicates that the effect of organizational creativity on organizational performance was examined in the first model. A significant effect of organizational creativity on organizational performance was found by the F value equaling to (234.525), which is significant at ($\alpha \leq 0.05$). This result is supported by the values of (β) (0.683) and (T) value (15.314), which are significant values at the significance level. The model shows that organizational creativity accounts for 46.7% of the change in organizational performance based on the value of R^2 .

In the second model, the interaction between organizational creativity and knowledge sharing was introduced and added. The interaction between organizational creativity and knowledge sharing on organizational performance was found to be significant. The F value of the interaction formula accounted for (200,752), (β) (0.821) and T (9.461), which is significant at the level of significance ($\alpha \leq 0.05$), and the interpretation coefficient change in ($\Delta (R^2)$) increased by (13.4%). Hence, it can be said that the variable of knowledge sharing has contributed to the influence between organizational creativity and organizational performance. This result serves to reject the second main hypothesis. It was found that there is a statistically significant effect ($\alpha \leq 0.05$) of organizational creativity with its dimensions (challenge, freedom of thought, dynamism/liveliness) on the organizational performance in the presence of knowledge sharing as a variable in Jordanian pharmaceutical companies.

As well, Table no. 4 indicates that the effect of organizational creativity on internal operations, customers, learning and growth and financial dimensions was examined in the first model. It was found that there is a significant impact of organizational creativity on internal operations, customers, learning and growth and financial dimensions through the value of F accounting for {(193.061), (173.933), (213.864),(84.564)} which is a significant value at the level of significance. The model shows that organizational creativity accounts for {(41.9%), (39.4%), (44.4%), (24.0%)} of the change in internal operations, customers, learning and growth and financial dimensions depending on the R^2 value.

In the second model, the interaction between organizational creativity and knowledge sharing was introduced and added, and it was found a significant impact of the interaction between organizational creativity and knowledge sharing on internal operations, customers, learning and growth and financial dimensions. The F value of the interaction formula amounted to {(125.178),(123.514),(163.650),(104.024)} and the value of (β) {(0.0573),(0.662),(0.734),(0.999)} and (T) {(5.807), (6.687), (7.971), (9.701)} respectively are significant at the significance level ($\alpha \leq 0.05$).

The interpretation coefficient change in ($\Delta (R^2)$) slightly increased by {(6.6%), (8.7%), (10.7%),(19.8%)}. Hence, it can be said that the knowledge sharing variable has contributed to the influence between organizational creativity and internal operations, customers, learning and growth and financial dimensions. This result serves to reject the first, second, third and four sub-hypotheses. It was found that there is a statistically significant impact ($\alpha \leq 0.05$) of organizational creativity with its dimensions (challenge, freedom of thought,

dynamism/liveliness) on the internal operations, customers, learning and growth and financial dimensions in the presence of knowledge sharing as a variable in Jordanian pharmaceutical companies.

CONCLUSION

- 1) The results showed that all dimensions of organizational creativity achieved high levels of importance, according to the respondents' answers, where the challenge dimension was ranked first, while the freedom of thought was ranked last. This result is consistent with the 2016 study of Olszak, Kisielnicki.
- 2) It was found that Jordanian pharmaceutical companies are involved in achieving the organization's goals by performing their work effectively. It was also found that the organization is encouraged to solve problems and conflicts rather than individual work.
- 3) It was found that the organization provides employees with a high degree of confidence in the work, and encourages and motivates employees to put forward new ideas.
- 4) It was found that the organization provides specific measures for internal operations that enable the management to determine the percentage of achievement, and that the organization relies on information technology among its administrative units to facilitate internal activities.
- 5) The results showed that the customer dimension is one of the dimensions of organizational performance. It also showed that it has achieved a high degree of importance. The reason behind this is that the organization use measures to show the standards of customers, whom their attraction cost is more than the revenue achieved by providing them products. It is also attributed to the fact that the organization takes into account customer complaints.
- 6) It was found that the organization has the capability to develop the main competencies of staff to serve the organization's plans, strategies and culture. This also attributed to the fact that the organization recognizes the importance of learning and sharing knowledge in the performance of employees to achieve its goals.
- 7) It was found that the organization uses financial resources and potentials available to develop its performance.
- 8) The results showed that employees are characterized by a willingness to share knowledge related to their work, and that employee's knowledge sharing leads to learning new knowledge.

RECOMMENDATIONS

In light of the present study's findings, the following recommendations and proposals were presented:

- 1) Managers of Jordanian pharmaceutical companies shall promote the employee desire to work in a risk-taking team in the Jordanian pharmaceutical companies through the use of brainstorming among the teams and train them to do so.
- 2) The Jordanian pharmaceutical companies shall take partial initiatives if the results are not known by giving employees the experience and the opportunity to implement these initiatives.
- 3) Managers in Jordanian pharmaceutical companies shall be encouraged to provide a comfortable and relaxed working atmosphere, and to allow employees to deal with new events flexibly, through discussions and opinions without bias or fear, and friendly meetings between employees and management.
- 4) Managers in Jordanian pharmaceutical companies are invited to design internal operations that are flexible enough to achieve the desired goals, through the use of information technology, the use of programs that achieve this, and employees training and motivating them to perform.
- 5) The Jordanian pharmaceutical companies shall evaluate the strengths, weaknesses and rationalize costs by analyzing their internal operations by investing the comprehensive information on salaries, rewards, optimal performance, training and development programs that support organizational creativity to act as a guide in making and taking decisions by reducing the time and effort of this operation or reducing time of work performance by employees.
- 6) The administrations of Jordanian pharmaceutical companies shall adopt a regulatory environment suitable for creativity and innovation, develop the creative capabilities of employees, motivate creative employees, reward them and develop their skills, and conduct training courses and lectures.
- 7) Managers in Jordanian pharmaceutical companies shall be encouraged to provide suggestions for developing work on a constant basis.
- 8) Managers in Jordanian pharmaceutical companies shall link the incentive system strategy and the employee assessment management system with the strategy of sharing and exchanging knowledge to develop the skills and expertise of employees.

The study recommends companies to exchange and share knowledge and experience of employees to enrich knowledge, achieve organizational creativity and raise the level of organizational performance. This can be reflected by

presenting live lectures that convey a realistic image on the ground.

The researchers hope that this study and its findings will be a starting point to launch other studies that examine organizational creativity and its impact on organizational performance by sharing knowledge as a moderating variable in other sectors, and adding other variables, such as studying the management's objectives in achieving organizational creativity.

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