

## Entrepreneurial Orientation and its Relation to Knowledge Management Process among First Line Mangers

Manal Mohamed Bakr<sup>1</sup>, Mervat Abd Elmonem Aref<sup>2</sup> & Fawzia Farouk Kamel<sup>3</sup>

<sup>1</sup>. Assist. Professor, Nursing Administration, Faculty of Nursing, Menoufia University, Egypt

<sup>2</sup>. Lecturer, Nursing Administration, Faculty of Nursing, Damnhour University, Egypt

<sup>3</sup>. Assist. Professor, Nursing Administration, Faculty of Nursing, Benha University, Egypt

### Abstract:

**Background:** Entrepreneurial orientation and knowledge management Knowledge Management process are considered the most common approaches for organizational development and strength in the present competitive environment. **Aim:** The study aimed to assess the association between the entrepreneurial orientation and Knowledge Management process among first line mangers. **Setting:** The study carried out in inpatients units (57) of Benha University Hospital. **Research design:** A descriptive correlational design using self-administered questionnaire was used. **Sample:** All first line nurse managers (80) completed the Perceived Entrepreneurial orientation scale and knowledge management instrument. **Results:** More than two thirds of first line mangers had low level of entrepreneurial orientation also the majority of them had low level of knowledge management. The highest mean score of first line mangers entrepreneurial orientation was relevant to autonomy, while the lowest mean score was linked to aggressive competitiveness. Regarding to knowledge management process, the highest mean score were related to knowledge sharing, while the lowest mean score was related to knowledge storing. **Conclusion:** The majority of first line mangers had low level in both entrepreneurial orientation and knowledge management. There was a significant association between entrepreneurial orientation and knowledge management process. **Recommendations:** Autonomy and competitive disaggressiveness should be supported and promoted to improve first line mangers level of entrepreneurial orientation; hospital managers should be enhance sharing and developing knowledge to improve practice of the work; effective organize the knowledge by using modern informational technologies or traditional means to share and storing the organized knowledge at all managerial levels to overcome challenges.

**Keywords:** *Entrepreneurial orientation, First line mangers, Knowledge & Management Process.*

### Introduction

Today's dynamic competitive environments and global rapid changes, push the organizations to be committed to do entrepreneurial activities in order to survive and gain development. These days, entrepreneurship is thought of as an important tool for development of organization because the entrepreneurial persons can create the grounds of the successfulness (Akgün, et al., 2019). An entrepreneurial organization is ready to change itself with the progressions happening with outside climate and makes its programs compatible with these changes and manage its information ideally. So, the managers must not only be familiar with it, but they have to understand and implement it in the organization. In order to be successful, the organizations should have a vision that promotes and encourages the innovation and risk-taking. Entrepreneurial orientation is a construct that captures organizational entrepreneurship. With the progressions happening with outside climate (Pealeu, 2022).

Entrepreneurial orientation (EO) has become a widespread resources to describe entrepreneurship as a managerial attribute Knowledge-based and the performance of small and medium-sized businesses. The idea of Entrepreneurial Orientation (EO) developed from the works of several management philosophers (Lee et al., 2019 & Lumpkin, et al., 2021). EO declarations to a company's strategic orientation, entrepreneurial decision-making styles, strategies, and applies (McKelvie et al., 2021). KMO is described as the organizational capability to create a learning culture, to facilitate knowledge sharing, and use of information (Farooq & Vij, 2020). Also, entrepreneurial orientation is denotes to the entrepreneurial behaviors of an organization as reflected in organizational activities, strategies, and processes. Entrepreneurial presented through personnel behavior and way of action based on taking risks, innovativeness, and proactiveness autonomy, and competitive aggressiveness (Ha, et al., 2021). Entrepreneurial orientations are definite as multidimensional construct that is proposed to

generate value for organizations. Its contain five dimensions, First dimension is innovativeness which described as entrepreneurial orientation, which expresses organization ability to encourage new ideas and support innovative activities in the process of providing new services. Innovativeness is described as a process of converting an idea into physical product or services that create value for customer and for which the customer is willing to pay. Second dimension is risk taking which is the valuable component of entrepreneurial orientations. According to literature, entrepreneurs have greater risk taking propensity in comparison to other individuals in similar society risk involves the chances of loss at a specific time; defined risk taking as being intended to do vague practices. Risk taking includes doing activities y which involves the chance of loss. It involves making decision to do something which involves the chances of both loss as well as opportunity (Sotery & Munisi, 2022).

Third dimension is proactiveness refer to the ability to predict future needs and demands and developing services in order to fulfill future needs and demands (Lumpkin & Pidduck, 2021). In other words, it can be defined as using opportunities and introducing new services in the market before participants (Lee, et al., 2019). It can be stated as two sides of the coin, at one side proactiveness provide opportunities; on the other side achievement to those opportunities for meeting customer needs (Hanif, et al., 2018).

Generating an EO culture will support health organizations in recognizing and using new possibilities, making new values, and becoming market leaders. Not only that, but EO is seen as a serious driver of a hospital competitiveness and performance, especially in dynamic work environments. And expected to link with knowledge management process. According to Hanif et al. (2016), knowledge management (KM) process includes three fundamental dimensions that contains knowledge acquisition/creation, knowledge transfer/sharing and knowledge utilization/application. Organizations must make assure that they obtain, transfer and exploit knowledge in their operations; to make performance better and provide effective high quality services (Sotery & Munisi, 2022).

Knowledge acquisition has become the vital topic because it is the first step in the knowledge management process. Knowledge is becoming a crucial resource for the enhancement of organizational performance (Du Plessis, 2021). Knowledge can be acquired from within and outside of the organization. In order to survive in competitive environment, organizations are depending more on knowledge acquisition. Effective knowledge

acquisition helps to deliver unique health services in order to create value for customers and gaining sustaining competitive advantage (Hanif & Gul, 2016). Those firms that participate in implementation of knowledge acquisition process can perform financially, operationally and socially better than others. (Hanif, et al., 2018)

Transfer/ sharing Knowledge is the method for expanding the information through spreading. It can be considered as the technique that support dissemination of information and helps the work environment knowledge concentrated. In knowledge intensive environment, knowledgeable nurses get the vital learning from several sources in a way that stimuli elevation performance and completing nurse's task effectively. It is essential for health organizations to possess knowledge management system; that supports employees to share their knowledge in a manner minimize worker turnover. Application Knowledge is concerned with utilizing knowledge in carry out activities which results in unique services; also creation of value for client. It was found that knowledge application is the sum of societal, technical and operational perspective because each one has vital role in knowledge application (Sotery & Munisi, 2022).

Benefits acquired from knowledge management is to increase growing, expansion, communication and information preservation in an organization. The healthcare practices need extensive use of knowledge management (KM). KM achieving excellent organizational performance and used as best organizational management technique throughout all enterprise (Kosklin et al., 2022). Moreover it is advance efficiency and effectiveness of the organization's manpower. Also, explore the tacit and explicit knowledge of individuals, groups, and organizations and to convert this treasure into organizational assets so that, individuals and managers can use it in various levels of decision making. Consequently allows nurse manager to reach fast and self-confident responses and inked with the choices that they need to take (Cletus, 2019). In addition, utilizing KM preventing knowledge loss, gaining extra inexpensive benefit, restructuring official change of mistakes found throughout examinations and reviews, endless learning, synchronization with other organizations, and preventing the isolation of the department, individual or organization from taking place (Afridi et al., 2019). To upgrade development, improvement, correspondence and information preservation in an association. The medical services rehearses require broad utilization of information the board (KM).

EO is also expected to reinforce KM process including knowledge acquisition, conversion,

application, and protection for improving organizational performance. However, similarly significant are the positive mentality to apply such cycles to arrive at the hierarchical objectives. It is known that EO requires organizations to be more innovative, risk-taking, and proactive in their activities to take advantage of new market open doors. These positive attributes may motivate the firms to progress greater KM processes in order to create more innovative services that the competitors will not be able to match. When EO is low, a firm may be uncertain to develop KM processes at a higher level which are often risky and costly (**Farooq and Vij, 2020**). It is important to realize that Entrepreneurial Orientation is a day to day activity, and a part of a firm's entrepreneurial spirit. This requires extensive commitment and motivation from owners, managers, and from employees (**Nasri & Zekovksi, 2014**).

### Significance of the Study

Recently, the issues of corporate entrepreneurial orientation have evoked interest not only from academics, but also from health care practitioners and policy makers. This interest stems from the recognition of the advantage that can be gained from corporate entrepreneurship activities. Entrepreneurship orientation is strategic orientation that an organization uses to adapt to change work environment and have a sustainable competitive in the marketplace (**Pushpasiri & Jayampathi, 2021**). One of the most important factors that facilitate the entrepreneurship in organizations is the knowledge management (KM) that enhance organizational capability and competitiveness. Knowledge management KM include knowledge acquisition, knowledge sharing and knowledge implementation/utilization that play a critical role in achieving high level of productivity, resources efficiency and improving sustainable competitive advantage (**AlQhaiwi & Abukaraki, 2021**). It is hoped that knowledge gaining from this study can help the health organization to adopting entrepreneurial orientation which will reflected on their information management and help it to gain competitive advantages. So, this study conduct to investigate the relation between entrepreneurial orientation and KM process among first line managers.

### Aim of the Study

This study aims to assess the association between the entrepreneurial orientation and knowledge management process among first line managers.

### Research questions:

1. What is the entrepreneurial orientation agreement level among first line managers?

2. What is the knowledge management (KM) process agreement level among first line managers?
3. Is there a relation between first line managers entrepreneurial orientation and knowledge management (KM) process?

### Methods

#### Research Design:

A descriptive correlational design using self-administered questionnaire was used to assess the association between the entrepreneurial orientation and KM process among first line managers, controlling for other characteristics of nurses. The personal characteristics and clinical variables investigated in the current study were: age, gender, marital status, qualifications, and years of experiences.

#### Setting

The current study conducted in inpatient units (57) of Benha University Hospital. It is a large educational hospital, affiliated to a governmental university in Qalyubia Governorate, Egypt. The hospital's capacity is about 786 beds with an annual occupancy rate of 90%. The hospital composed of three separate constructions, namely medical construction consists of (412 beds), surgical construction contained (231 beds) and ophthalmology construction composed of (143).

#### Participants/ sample

All of first line nurse managers (80) were recruited from hospital units who working in the above mention setting.

**Instruments of data collection:** three tools were used to collect the data:

#### Instrument 1: personal characteristics:

It was designed by the researchers based on the review of the related literature. It was included items about age, gender, marital status, qualifications, and years of experiences.

#### Instrument 2: Entrepreneurial orientation scale

The instrument was developed by (**Nasri and Zekovksi, 2014**) to assess first line managers entrepreneurial orientation agreement level. It included 18 items subdivided into 5 main categories; risk taking (3 items), innovativeness (3 items), proactiveness (3 items), competitive aggressiveness (3 items), and autonomy (6 items). The responses were measured by five points Likert Scale ranging from strongly disagree (1) to strongly agree (5). The scoring system calculated as follow :less than 60% consider low level , from 60% to less than 75 is moderate level and from or more than 75 is high level of entrepreneurial orientation.

#### Instrument 3 : Knowledge management process questionnaire:

The instrument was developed by the researchers based on review of literature (**Moffet and Mc Adam, 2009; Mirghafoori, Nejad, Sadeghi, 2010**) to assess

first line managers knowledge management process. It has 24 items distributed under six dimensions: knowledge sharing 4 items, knowledge transfer 4 items, store knowledge 3 items and knowledge creation 4 items, organization learning 6 items and culture 3 items. The responses were measured through 5 point Likert Scale ranging from strongly disagree (1) to strongly agree (5). The scoring calculated as follow :less than 60% is (low level) , from 60% to less than 75 is (moderate level) and from or more than 75 is (high level ) of knowledge management (KM).

#### Validity of the instruments

The instruments were tested for face validity by jury of seven experts members in speciality of nursing administration from different faculties of nursing. Comments were taken into consideration and some items were re-phrased.

#### Reliability of the instruments

Reliability of the instruments were necessary to determine the internal consistency and homogeneity of the used tools by Cronbach's Alpha test. The reliability of entrepreneurial orientation scale was of 0.97 and the reliability of knowledge management instrument was 0.86.

#### Procedure of Data Collection

Approval letters getting from dean of faculty of nursing forward to the top manger of the hospital explaining the aim of the study. The study was carried out from June to July 2019. Distribution of the questionnaires to each firstline manger during work hours after explaining the aim of the study . The researchers organizing and arranging firstline

mangers to facilitate their participation according to their units needs and activities. The time needed for filling entrepreneurial orientation questionnaire was about 15–20 minutes, and about 15-20 minutes to knowledge management questionnaire. The average number of gathering questionnaires were between (5-8 ) of study sample per day.

#### Ethical considerations:

The ethical approval for conducting the current study was obtained from Faculty of Nursing Institutional Research Board (IRB) committee. The ethical approval was also obtained from the selected settings for data collection. Confidentiality was assured to all participants and their information was used for research purpose only. Each participant has the right to withdraw from the study at any time. The purpose of the study and the method of completing questionnaire were clearly explained for firstline managers prior to complete the questionnaire.

#### Statistical design:

For the research purposes, Statistical Package for Social Sciences (SPSS) version 20 was used to generate descriptive and inferential statistics at a significance level of .05. Number, frequency, Mean and standard deviation values were reported to estimate the levels of perceived entrepreneurial orientation agreement level among first line managers and perceived knowledge management (KM) process agreement level among study participants. Pearson correlation coefficients(r) was used to assess the relationship between the study variables.

### Results

**Table (1): Distribution of first line managers according to personal characteristics (N=80).**

Personal characteristics	N	%
<b>Age</b>		
<30 year	13	16.3
30-<35 year	20	25
35-<40 year	17	21.2
≥ 40	30	37.5
<b>Mean ±SD</b>	<b>37.325± 6.668</b>	
<b>Gender</b>		
Female	80	100
<b>Marital status</b>		
Married	74	92.5
Unmarried	6	7.5
<b>Qualifications</b>		
Bachelor degree	54	67.5
Master degree	18	22.5
Doctorate degree	8	10
<b>Years of experience</b>		
<5	10	12.5
5- <10	22	27.5
10-<15	15	18.7
≥ 15	33	41.3
<b>Mean ±SD</b>	<b>12.625±5.129</b>	

**Table (2): Distribution of the first line managers regard to agreements of entrepreneurial orientation.**

Entrepreneurial orientation	Strongly agree		Agree		Not sure		Disagree		Strongly disagree	
	No	%	No	%	No	%	No	%	No	%
<b>Risk Taking</b>										
The term 'risk taker' is considered a positive attribute for nurse managers in hospital.	12	15.0	51	63.8	7	8.8	7	8.8	3	3.8
Nurse managers are encouraged to take calculated risks with new ideas.	6	7.5	4	5.0	60	75.0	6	7.5	4	5.0
The work emphasizes both exploration and experimentation for opportunities.	6	7.5	6	7.5	14	17.5	48	60.0	6	7.5
<b>X±SD</b>	<b>9.27±1.63</b>									
<b>Innovativeness</b>										
Nurse managers are actively introduced improvements and innovations in the work.	10	12.5	56	70.0	9	11.2	3	3.8	2	2.5
The work is creative in its methods of operation.	7	8.8	8	10.0	53	66.2	9	11.2	3	3.8
The work seeks out new ways to do things.	5	6.2	17	21.2	34	42.5	19	23.8	5	6.2
<b>X±SD</b>	<b>9.92±1.68</b>									
<b>Proactiveness</b>										
Nurse managers always try to take the initiative in every situation.	68	85.0	7	8.8	3	3.8	2	2.5	0	0
Nurse managers excel at identifying opportunities.	51	63.8	21	26.2	3	3.8	2	2.5	3	3.8
Nurse managers initiate actions to which other organizations respond	12	15.0	49	61.2	11	13.8	4	5.0	4	5.0
<b>X±SD</b>	<b>12.96±1.70</b>									
<b>Competitive Aggressiveness</b>										
The work is intensely competitive.	0	0	8	10.0	39	48.8	30	37.5	3	3.8
The work takes aggressive approach when competing.	5	6.2	8	10.0	57	71.2	8	10.0	2	2.5
Nurse managers try to undo and out-manuever the competition as best as they can.	0	0	7	8.8	32	40.0	32	40.0	9	11.2
<b>X±SD</b>	<b>8.18±1.55</b>									
<b>Autonomy</b>										
Nurse managers are permitted to act and think without Interference.	5	6.2	10	12.5	3	3.8	54	67.5	8	10.0
Nurse managers perform jobs that allow to make changes in the way of perform the work tasks.	10	12.5	38	47.5	8	10.0	21	26.2	3	3.8
Nurse managers are given freedom and independence to decide doing the work	5	6.2	10	12.5	5	6.2	54	67.5	6	7.5
Nurse managers are given freedom to communicate without Interference.	3	3.8	10	12.5	6	7.5	51	63.8	10	12.5
Nurse managers are given authority and responsibility to act alone .	4	5.0	12	15.0	6	7.5	49	61.2	9	11.2
Nurse managers have access to all vital information	3	3.8	17	21.2	39	48.8	16	20.0	5	6.2
<b>X±SD</b>	<b>15.87±3.89</b>									
<b>Total X±SD</b>	<b>56.22±5.95</b>									



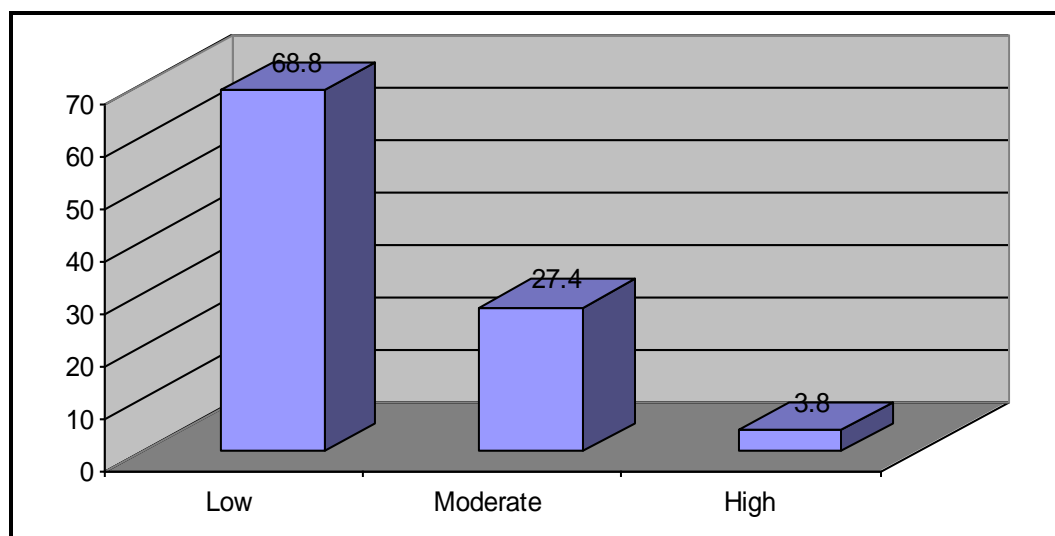


Figure (1): Distribution of first line managers regarding entrepreneurial orientation levels.

Table (3): Distribution of the first line managers regard to agreements of Knowledge management (KM) process.

Knowledge management practices	Strongly agree		Agree		Not sure		Disagree		Strongly disagree	
	No	%	No	%	No	%	No	%	No	%
<b>Knowledge Sharing</b>										
Knowledge can be easily shared and acted upon at the workplace.	17	21.2	52	65.0	8	10.0	3	3.8	0	0
Health team at workplace share their experiences and knowledge willingly.	50	62.5	14	17.5	10	12.5	6	7.5	0	0
There are formal channels for knowledge sharing (like meeting, courses, tours and similar activities) at the workplace	6	7.5	19	23.8	39	48.8	8	10.0	8	10.0
We are Provided incentives for knowledge sharing.	8	10.0	17	21.2	34	42.5	12	15.0	9	11.2
<b>Mean <math>\pm</math>SD</b>	<b>14.95<math>\pm</math>2.21</b>									
<b>Knowledge Transfer</b>										
There are well defined processes for creation, capture, and acquisition of knowledge at the workplace.	6	7.5	9	11.2	48	60.0	14	17.5	3	3.8
Much time is taken by the nurse managers to get the relevant knowledge.	5	6.2	10	12.5	44	55.0	17	21.2	4	5.0
Trust, give & take and openness are key elements for knowledge transfer.	14	17.5	47	58.8	9	11.2	8	10.0	2	2.5
I am sure it is feasible that we can learn from each other's knowledge.	12	15.0	50	62.5	14	17.5	4	5.0	0	0
<b>Mean <math>\pm</math>SD</b>	<b>13.61<math>\pm</math>1.74</b>									
<b>Knowledge storing</b>										
Documented procedures centrally stored for ease of access across the hospital.	7	8.8	9	11.2	42	52.5	13	16.2	9	11.2
In hospital stored knowledge is quite important, relevant and latest.	9	11.2	21	26.2	28	35.0	14	17.5	8	10.0
In hospital there is a system that all formal / informal discussion or meeting should being recorded.	9	11.2	13	16.2	32	40.0	16	20.0	10	12.5
<b>Mean <math>\pm</math>SD</b>	<b>8.95<math>\pm</math>2.66</b>									

Knowledge management practices	Strongly agree		Agree		Not sure		Disagree		Strongly disagree	
	No	%	No	%	No	%	No	%	No	%
<b>Knowledge creation</b>										
Knowledge creation is the job of Research & Development department only.	6	7.5	11	13.5	43	53.8	17	21.2	3	3.8
Knowledge creation is views as everyone's job and everybody contributes to it.	43	53.8	18	22.5	12	15.0	7	8.8	0	0
Top management takes active interest in knowledge creation and supports it continuously.	6	7.5	19	23.8	17	21.2	32	40.0	6	7.5
Knowledge creation is a part of organizational philosophy & culture.	6	7.5	16	20.0	34	42.5	19	23.8	5	6.2
<b>Mean <math>\pm</math>SD</b>	<b>13.43<math>\pm</math>2.07</b>									
<b>Organization Learning</b>										
Hardware and software technologies are available to support our learning.	5	6.2	15	18.8	39	48.8	14	17.5	7	8.8
Learning is valued and considers priority in our hospital at workplace.	6	7.5	16	20.0	30	37.5	17	21.2	11	13.8
We are encouraged to understand and manage our ideological work.	13	16.2	33	41.2	17	21.2	17	21.2	0	0
We are encouraged to participate in variety of informal learning opportunities.	6	7.5	13	15.5	42	52.5	11	13.8	8	10.0
Hospital Established clear operational guidelines and formal policy statement to help our learning	8	10.0	12	15.0	37	46.2	15	18.8	8	10.0
Hospital climate encourage good communication, teamwork, innovation and lifelong learning.	9	11.2	15	18.8	21	26.2	25	31.2	10	12.5
<b>Mean <math>\pm</math>SD</b>	<b>18.23<math>\pm</math>4.19</b>									
<b>Culture</b>										
Corporate culture affects staff retention	3	3.8	18	22.5	28	35.0	24	30.0	7	8.8
Knowledge sharing and learning are valued in our hospital culture	4	5.0	38	47.5	17	21.2	14	17.5	7	8.8
There is a virtual platform where we can contact each other.	8	10.0	16	20.0	31	38.8	19	23.8	6	7.5
<b>Mean <math>\pm</math>SD</b>	<b>9.06<math>\pm</math>2.54</b>									
<b>Total mean <math>\pm</math>SD</b>	<b>78.25<math>\pm</math>11.18</b>									

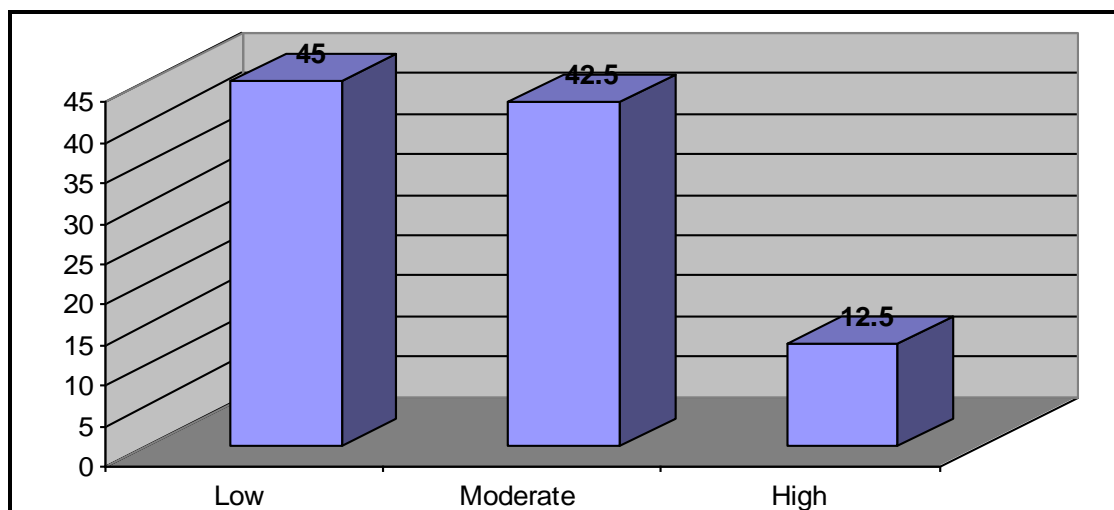


Figure (2): Distribution of the first line managers regarding Knowledge management levels.

**Table (4): Correlation between entrepreneurial orientation and knowledge management (K M) of first line managers in the study.**

Entrepreneurial orientation	Knowledge management process (KM)	
Risk taking	r	0.186
	p	0.098
Innovativeness	r	0.243
	p	0.030*
Proactiveness	r	0.141
	p	0.211
Competitive Aggressiveness	r	0.137
	p	0.225
Autonomy	r	0.254
	p	0.023*
Total	r	0.363
	p	.001**

**Table (1):** The current study aimed to assess the association between the entrepreneurial orientation and KM process among first line managers. showed percentage distribution of first line managers according to their personal characteristics. Regarding to age more than one third (37.5%) of first line managers were in the age group ranged from 40 and more with mean  $\pm$ SD (37.325 $\pm$  6.668). All of them (100%) were female and majority of them (92.5%) were married. Regarding to years of experiences, less than half of them (41.3 %) had more than 15 years of experiences with mean  $\pm$ SD (12.625 $\pm$ 5.129).

**Table (2):** Illustrates distribution of the first line managers regard to agreements of entrepreneurial orientation. Regard to risk taking item, the table showed that nearly two third of first line managers (63.8%) agree to the term of 'risk taker' is considered a positive attribute for first line managers in hospital. Also, less than two third of first line managers (60%) were disagree on the work emphasizes both exploration and experimentation for opportunities. In relation to innovativeness item, the table showed that nearly to three quarter of first line managers (70.0%) agree that first line managers are actively introduced improvements and innovations in the work. Concerning to proactiveness item, the table showed that the majority of first line managers agreement (85%) was related to always try to take the initiative in every situation. Also the table revealed that less than two third of first line managers agreements (61.2%) was related to, the first line managers initiate actions to which other organizations respond. Regarding to competitive aggressiveness, the table showed that

less than three quarter of first line managers (71.2%) were not sure that work takes aggressive approach when competing. Regard to autonomy, the table showed that around two third of first line managers (67.5%, and 61.2) were disagree that they are given freedom and independence to decide doing the work or they are given authority and responsibility to act respectively. Also the table showed that the highest mean score of first line managers entrepreneurial orientation was related to autonomy item (15.87 $\pm$ 3.89), whereas the lowest mean score was relevant to competitive aggressiveness (8.18 $\pm$ 1.55).

**Figure (1):** Revealed that, more than two thirds of first line managers (66.8%) had low level of entrepreneurial orientation.

**Table (3):** Showed distribution of the first line managers regard to agreements of knowledge management (KM) process. Regarding to knowledge sharing category, the table showed that the two third of first line managers strongly agree (65.0%) on knowledge can be easily shared and acted upon at the workplace. Also nearly to two third of first line managers agreement (62.5%) was related to health team at workplace share their experiences and knowledge willingly. Concerning to Knowledge transfer category, the table showed that sixty percent of first line managers (60.0%) were not sure from well-defined processes for creation, capture, and acquisition of knowledge at the workplace. Also, nearly to two third of first line managers were agree (62.5%) on feasibility to learn knowledge from each other's. Regard knowledge storing category, the table showed that more than half of first line managers (52.5%) were not sure that documented procedures centrally stored for ease



of access across the hospital. Concerning Knowledge creation, the table clarify that more than fifty percent of first line managers were strongly agree (53.8%) on knowledge creation contributes by everyone's and everybody at job. In relation to organization learning category, the table illustrated that more than fifty percent of first line managers (52.5%) did not assured from their encouragement to participate in a variety of informal learning opportunities. Also less than fifty percent of first line managers (46.2%) were not sure from hospital established clear operational guidelines and formal policy statement to help their learning. Regard to culture, the table showed that less than fifty percent of first line managers agreements (47.5%) were related to knowledge sharing and learning are valued in our hospital culture. Also the table Clarify that, the highest mean score ( $14.95 \pm 2.21$ ,  $13.61 \pm 1.74$ ) were related to knowledge sharing and knowledge transfer categories respectively. Whereas the lowest mean score was associated to knowledge storing category ( $8.95 \pm 2.66$ ).

**Figure (2):** Illustrated that the majority of first line manager (45%) had low level of KM.

**Table (4):** Showed a significant association between first line manager's entrepreneurial orientation and KM process. The innovativeness and autonomy of entrepreneurial orientation were significantly associated with KM process.

## Discussion

Entrepreneurial orientation and KM are viewed as the most well-known normal strategies for organizational progress and strength in the present competitive environment (**Ben & Ladib, 2015**). Entrepreneurial orientation is a set of behaviors that have the qualities of risk-taking, innovativeness, proactiveness, autonomy, and competitive aggressiveness. It is also, defined as a strategic orientation that an organization uses to adapt to changing environment and have a sustainable competitive edge over rivals in the marketplace (**AlQhaiwi & Abukaraki, 2021**).

KM is one of the main requirements of today's organizations. However, it is a challenging process, because managers should extract knowledge from staff mind and organizational processes and share it among other staff. Also, it is a strategy for acquiring right knowledge from right staff at right time as well as sharing and using such knowledge toward improving performance of the organization (**Bibi, et al., 2021**).

The study covers three main areas; first, agreements of the first line managers regard entrepreneurial orientation. Second, agreements of the first line managers regard KM process and correlation

between their entrepreneurial orientation and KM process.

### Part I: Agreements of the first line managers regard entrepreneurial orientation.

Regard to risk taking, the result of current study presented that, nearly two third of first line managers agreement to the term of 'risk taker' is considered a positive attribute for head nurses in hospital. This result is consistent with **Dehaghi, & Dehnavi, (2015)** who stated that risk taking and competing to be the best are common attributes between head nurses.

In this respect **McMurray, et al. (2021)** pointed that risk-taking is often used to describe the uncertainty that follows from behaving entrepreneurially. Also, he stated that, the value of the risk-taking dimension is to orient the organization towards the absorption of uncertainty as opposed to a paralyzing fear of it. Also, the present study results revealed that, less than two third of first line managers were disagreed about the work emphasizes both exploration and experimentation for opportunities. This reflects what was emphasized by **El Desoky, et al., (2021)** conducted study about "Organizational Culture, Individual Innovation and their relation to Nursing Staff's Work Engagement ". They discovered that nearly half of studied sample normally known opportunities to make a positive change in work, department, and hospital or with client.

**In relation to innovativeness**, the result of existing study displayed that nearly to three quarter of first line managers agree to actively introduce the improvements and innovations in the work. This may be due to the first line managers giving support to novelty, creative processes at the clinical setting. This result were consistent with the results of **Berisha, et al., (2020)** who found that organizational support for innovation is a noticeable organizational factor that provides important related information for innovative judgments.

On the other hand **Al-Rawadiah, (2022)** point that, the entrepreneurial orientation dimension of **innovativeness** is about pursuing and giving support to novelty, creative processes and the development of new ideas through experimentation.

**Regard to proactiveness**, the result of present study showed that the majority of first line managers agreed that managers always try to take the initiative in every situation. Also more than sixty agree that managers initiate actions to which other organizations respond. This may be due to proactiveness seeking new opportunities which may or may not be related to the present line of operations and introduction of new method of care to eliminate unnecessary procedure.

In the same line **Cho, et al., (2022)** conduct study about " The relationship between entrepreneurial orientation and organizational effectiveness: an analysis of how entrepreneurial orientation is manifested in the nonprofit context". He reported that there are three specific behavioral characteristics of the entrepreneurial leader: innovativeness, proactiveness, and the ability to accept risk.

**Concerning to competitive aggressiveness**, the result of current study highlighted that less than three quarter of first line managers were not sure from the work is creative in its methods of operation. This may be due to the work is routine and repetitive every day.

This result was in agreement with **Cho, et al., (2022)** who pointed to competitive aggressiveness is a commitment to monitoring industry trends and best practices. Also **Akgün, et al., (2019)** conducted study about " Organizational wisdom practices and firm product innovation" referred that the entrepreneurial stance reflects partly on the tendency to aggressively compete with the competitors in the sector in which the firm operates, and also see as a willingness and competitive aggressiveness as a management trend in order to dominate their opponents' competitive aggressiveness to show its competitors.

Regards to **autonomy**, the results of present study revealed that, nearly to third of first line managers were disagree that the first line managers are given freedom and independence to decide doing the work and they are given authority and responsibility to act.

In this context **Cho et al. (2022)** illustrated that, the employee autonomy achieved through encouraging employees to be creatively, self-directed and independent. Also, **Dehaghi, et al., (2015)** conduct study about " first line manager's work life quality and their participation in knowledge management" revealed that more than one third of head nurses have been encouraged to participate in decision making.

Concerning mean scores of entrepreneurial orientation, the result of present study revealed that, the highest mean score of first line manager's entrepreneurial orientation was related to autonomy while the lowest mean score was related to aggressive competitiveness. In the same respect **Wardan, et al. (2020)** found that, nurses high scores were related to average level of autonomy and low competitive aggressiveness.

Also, the result presented that, more than two thirds of first line managers had low level of entrepreneurial orientation. This may be due to the qualities of risk-taking, innovativeness, proactiveness, autonomy,

and competitive aggressiveness don't present in most of the first line managers.

Upon researcher knowledge most of governmental hospitals depend on centralized decision making, low shared governance, and doesn't provide chance for first line managers to build autonomy which may result on low growth of their personal qualities as risk-taking, innovativeness, proactiveness, and competitive aggressiveness.

## **Part II. Agreements of first line managers regards to knowledge management (KM) process.**

Regard to knowledge sharing, the result of existing study indicated that more than sixty of first line managers strongly agreement to knowledge can be easily shared and acted upon at the workplace. Also, more than sixty of first line managers agreement to health team at workplace share their experiences and knowledge willingly. This might be due to the knowledge is exchanged between personal and organizational. Knowledge was conveyed from physician to nursing personnel, or from one organization to other organization during the day to day practice to provide quality of patient care.

The result of present study was in consistent with **Motaghi, et al., (2012)** who stated that knowledge sharing helps the nursing personnel to understand and acquire the appropriate knowledge that influences the quality of healthcare services.

Also, **Kucharska, (2021)** reported that, with rapid development of KM information system, knowledge sharing was more visible and feasible. Knowledge sharing can be occurred both at individual level and organizational level.

In relation to knowledge transfer, as indicated in current study, more than sixty of first line managers were not sure of well-defined processes for creation, capture, and acquisition of knowledge at the workplace. Also, more than sixty of first line managers agreed that it is feasible to learn knowledge from each other's. This may be due to knowledge transfer encompass the process of acquiring and learning appropriate knowledge from various internal and external resources, such as experiences, experts, relevant documents, plans and so forth. Interviewing, laddering, observing, educating and training are the most familiar techniques for knowledge acquisition

In the same line **Mukuria, et al., (2021)** stated that, KM processes can help an organization acquire, store and use knowledge for tasks such as problem-solving, dynamic learning, and decision-making.

Concerning knowledge storing, the result illustrated that, more than half of first line managers agreed to document procedures centrally stored for ease of access across the hospital. This may be due to the knowledge storage involves both the soft or hard

Also, **Dehaghi, et al., (2015)** reported that the strongest correlations were found between the total score of KM and participation of first line manager in decision making.

On the other hand **Al-Rawadiah, (2022)** conducted a study about " Investigating the Effect of Entrepreneurial Orientation of Jordanian Higher Education Institutions on Customer Orientation ". They stated that, the autonomy is an important dimension of entrepreneurial orientation and it has no relation with innovation, risk taking and proactiveness.

### Conclusion

The current study concluded that more than two thirds of first line managers had low level of entrepreneurial orientation and the majority of them had low level of KM process too. The highest mean score of entrepreneurial orientation was noticed in autonomy while the lowest mean score was found in aggressive competitiveness dimension. The highest mean score of knowledge management (KM) was found in both knowledge sharing and knowledge transfer while the lowest mean score was in knowledge storing and there was a significant association between entrepreneurial orientation and KM process.

### Recommendations

Autonomy and competitive disaggressiveness should be supported and promoted to improve first line managers level of entrepreneurial orientation. Hospital managers should enhance sharing and developing knowledge to improve practice of the work. Effective organize the knowledge by using modern informational technologies or traditional means to share and storing the organized knowledge at all managerial levels to overcome challenges. Further research studies are advised to test the influence of KM process on staff nurse's performance.

### Acknowledgments

The authors would like to thank the University of Benha University Hospital for encouraging and supporting the study and for giving them consent to conduct the study and providing access to the health facilities and staff. The authors thank every one of the individuals who contributed in the study.

### References

- **Akgün A., Keskin, H. & Kırçovalı, S. (2019):** Organizational wisdom practices and firm product innovation, *Review of Managerial Science*, 13(1), 57-91.
- **Pelealu D. (2022):** The Effect of Knowledge Management System and Knowledge Sharing on Employee Performance and Loyalty. *Indonesian Interdisciplinary, Journal of Sharia Economics (IIJSE)*, 5(1): 371-389.
- **Lee Y., Zhuang, Y., Joo, M., & Bae, T. (2019):** Replication and extension of the relationship between entrepreneurial orientation and firm performance, *Journal of Business Venturing Insights*, 12.
- **Lumpkin G. & Pidduck R. (2021):** Global entrepreneurial orientation (GEO): An updated, multidimensional view of EO. In *Entrepreneurial Orientation: Epistemological, Theoretical, and Empirical Perspectives*. Emerald Publishing Limited.
- **McKelvie A., Brattström A. & Dennis W. (2021):** What do they think and feel about growth? Examining small business managers' attitudes towards growth in the United States, *Journal of Business*.
- **Farooq R. & Vij S. (2020):** The Relationship between Entrepreneurial Orientation and Knowledge Management Orientation, *IUP Journal of Knowledge Management*, 18(3).
- **Ha S., Lo, M., Suaidi M., Mohamad A., & Razak Z. (2021):** Knowledge Management Process, Entrepreneurial Orientation, and Performance in SMEs: Evidence from an Emerging Economy. *Sustainability*, 13 (17).
- **Sotery P. & Munisi H. (2022):** Examining the Effect of Knowledge Management on Performance of Small Firms in Dar Es Salaam: A Case Study of Garage Workshops in Temeke District, Dar Es Salaam, Tanzania. *East African, Journal of Business and Economics*, 5(1), 48-61
- **Hanif M., Malik, F., & Hamid, A. (2018):** The effect of knowledge management and entrepreneurial orientation on organization performance, *Journal of Entrepreneurship Education*, 21(4), 1-12.
- **Hanif D. & Gul, M. (2016):** The links between management capabilities, innovation and firm performance: evidence from pharmaceutical sector of Pakistan. *South Asian Journal of Banking and Social Sciences*, 2(01), 2410-2067.
- **Du Plessis E. (2021):** Assessing for Learning: Teacher Training in Practice Involving 14 Postgraduate Certificate in Education (PGCE) Students, *International Journal of Learning, Teaching and Educational Research*, 20(11).
- **Kosklin R., Lammintakanen J. & Kivinen T. (2022):** Knowledge management effects and performance in health care: a systematic literature review. *Knowledge Management Research & Practice*, 1-11.
- **Cletus H. (2019):** Evaluation of the Conceptual Theories, Elements, and Processes of Knowledge Management in Modern Day Organizations. *Holistic, Journal of Business and Public Administration*, 10(1), 37-54



- **Afridi O., Gul, S., & Naeem M. (2019):** The Role of Management Practices of Higher Education Institutions in Knowledge Storage and Knowledge Accessibility, *Journal of Management and Research*, 6 (1), 1-29.
- **Nasri Z. & Zekovski A. (2014):** Entrepreneurial Orientation, Business Performance and the Moderating Role of Firm Life Cycles. Master thesis. Centre for Business Studies Kristianstad University, Sweden, 10-17.
- **Pushpasiri G. & Jayampathi, E. (2021):** Mediating Effect of Innovation on the Relationship between Entrepreneurial Orientation and Organizational Performance of SMEs in Southern Province, Sri Lanka. *Wayamba, Journal of Management*, 12(2).
- **AlQhaiwi L., & Abukaraki R. (2021):** The impact of entrepreneurial orientation on supporting creative behavior of managers (An empirical study on medium sized enterprise in study on medium sized in Amman city-Jordan, *International Journal of Entrepreneurship*, 25: 1-23.
- **Moffet S. & Mc Adam R (2009):** Knowledge management: a factor analysis of sector effects, *Journal of knowledge management*, 13(3):44-59 tool
- **Mirghafoori Sh., & Nejad F. and Sadeghi Z. (2010):** Performance evaluation of Yazd's Health sector on applying KM process, *Journal of health administration*, 13(39): 79-88
- **Ben N., & Ladib R. (2015):** Effects of Capacity KM and Entrepreneurial Orientation on organizational effectiveness in the Best Tunisian Companies: Moderating Role of Social Capital, *Journal of KM Economics and Information Technology*, 1(1):1-34.
- **Bibi G., Padhi M., & Dash S. (2021):** Theoretical necessity for rethinking knowledge in knowledge management literature, *Knowledge management research & practice*, 19 (3): 396-407.
- **Dehaghi Z. Sheikhtaheri A. & Dehnavi F. (2015):** Head nurses work life quality and their participation in knowledge management: a correlational study, *Iran Red Crescent Medical Journal*. 17(1): 18204.
- **McMurray A., Waal G., Scott D. & Donovan J. (2021):** The relationship between corporate entrepreneurship climate and innovativeness: A national study. In *The Palgrave Handbook of Workplace Innovation*, Pp 101-121.
- **El Desoky E., El Said N., & El-Shaer, A. (2021):** Organizational Culture, Individual Innovation and their relation to Nursing Staff's Work Engagement, *Mansoura Nursing Journal*, 8(3): 39-59
- **Berisha, B., Ramadani, V., Gërguri-Rashiti, S., & Palalić, R. (2020):** The impact of innovative working behaviour on employees' working performance. In *Intrapreneurship and Sustainable Human Capital*, Pp 37-49.
- **Al-Rawadiah W. (2022):** Investigating the Effect of Entrepreneurial Orientation of Jordanian Higher Education Institutions on Customer Orientation, *Jordan Journal of Business Administration*, 18(2).
- **Cho C., Kim, B., & Oh, S. (2022):** Effects of the Entrepreneurial Strategic Orientation of Social Enterprises on Organizational Effectiveness: Case of South Korea, *Administrative Sciences*, 12(1), 19.
- **Wardan S., Ghandour S., & Mohamed Elghabbour G. (2020):** Entrepreneurship and Work Innovation among Nurse Managers at Port Said Governmental Hospitals, *Port Said Scientific Journal of Nursing*, 7(3): 201-217.
- **Motaghi M, Nejad A, Delgoshaei B, & Panahi, M. (2012).** Relationship of Quality of Working Life in Kashan Teaching and Non-Teaching Hospitals with KM according to the Top and Middle Manager's Point of View, *Basic Applied Science*.
- **Kucharska W. (2021):** Do mistakes acceptance foster innovation? Polish and US cross-country study of tacit knowledge sharing in IT, *Journal of Knowledge Management*.
- **Mukuria J., Awino Z., Ogollah K. & Njihia J. (2021):** Effect of knowledge management on performance of retail pharmaceutical firms in Nairobi city county, *Kenea*.
- **Talaei A., Pier D., Iyer A., Ahiduzzaman M. & Kumar A. (2019):** Assessment of long-term energy efficiency improvement and greenhouse gas emissions mitigation options for the cement industry. *Energy*: 1051-1066.
- **Mazhar S. & Akhtar M. (2018).** Relationship between Knowledge Management and Creativity among Teachers of Public and Private Sector Universities at Lahore, *Bulletin of Education and Research*, 40(2): 91-104.
- **Shah H. & Kant R. (2020).** Integrating knowledge management enablers and processes for improved organizational performance, *International Journal of Business Innovation and Research*, 22(1), 126-155
- **Jawed T. & Siddiqui D. (2021).** The impact of knowledge management practice on digital financial innovation in Pakistan: The Role of Managers' Demographics and Leadership Styles.