

## Entrepreneurial Leadership and its Relation to Decision Making Effectiveness and Knowledge Sharing Behavior

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### Abstract:

Head nurses are challenged to make decisions effectively in addition to lead in this dynamic and uncertain nature of health care condition. Entrepreneurship is an active method of vision, alteration, as well as production that affecting head nurses decisions making and sharing their knowledge. **Aim:** investigate entrepreneurial leadership and its relation to decision making effectiveness and knowledge sharing behavior among head nurses at Specialized Medical Hospital. **Design:** Descriptive correlational design was utilized and the study was carried out on 90 head nurses working at all inpatients units at Specialized Medical Hospital. **Tools:** Three tools were utilized to collect data; Entrepreneurial leadership questionnaire, decision making effectiveness scale and knowledge sharing behavior scale. **Results:** The highest percent of head nurses showed high level of entrepreneurial leadership, decision-making effectiveness, and knowledge sharing behavior (71.1, 63.3 and 71.1) respectively. There was highly statistically significant positive correlation between entrepreneurial leadership with both head nurses' decision-making effectiveness and knowledge sharing behavior. **Conclusion:** Based on the findings of the present study, there was highly statistically significant positive correlation between entrepreneurial leadership with both decision-making effectiveness, and knowledge sharing behavior. **Recommendations:** Providing head nurses with environment that enhances their creative abilities to make effective decision and sharing their knowledge. Developing training programs that help head nurses' to recognize existing market opportunities and learn accurate strategies for effective decision-making.

**Keywords:** *Decision-making effectiveness, Entrepreneurial leadership & Knowledge sharing behavior.*

### Introduction

In a competitive and technological advancements, entrepreneurial leadership is becoming a global necessity in the health care sector. Entrepreneurship plays a significant role in recent nursing duties as well as accountabilities. Entrepreneurial leadership is a leadership style which directs as well as motivates team members in order to achieve their highest levels of performance and organizational goals by identifying and exploiting entrepreneurial opportunities, thereby increasing nurses participation in creative activities. It is built on a chance of exploitation as well as exploration actions through leaders and their staffs (Elewa, & El Bana., 2022).

Entrepreneurial leadership present at the connection of entrepreneurship as well as leadership. Entrepreneurship is the method in which head nurses recognize as well as follow chances, place useful thoughts into action in addition to utilize their innovative capabilities in order to obtain benefits. Such these roles require strength of mind, creativity, as well as readiness to take hazards. Entrepreneurs have a robust feeling of self-incentive, and self-reliant. Leadership in general includes guiding arranged group's activities to accomplish objectives (Malibari, & Bajab., 2022).

Entrepreneurial leaders have unusual features, as being character models through representing entrepreneurial actions which necessitate chance manipulation as well as examination, can adjust in addition to overwhelmed the active nature of the association, creative as well as agile in adapting to change, encourage as well as guide subordinates toward attaining organizational objectives. Entrepreneurial leaders focus on employees' entrepreneurial passion, stimulate them in order to strongly accomplish innovative actions, motivating and encouraging them to pursue entrepreneurial behaviors (Karnsomdee, & Phongkaew, 2023).

Being an entrepreneur in nursing needs participating regularly in the progress of a proficient environment fixated on entrepreneurial behaviors, especially in the parts of information, abilities, as well as skills. It needs development and execution of potency, novel thoughts as well as innovative explanations. Entrepreneurial leaders perform a double role, involving motivating their subordinates to being extremely creative as well as acting as role models for them. Entrepreneurship is an active method of alteration, vision, as well as production that may affecting head nurses decisions making (Hensellek, et al., 2023).

Making decisions is a process of a massive accountability for head nurses not only for the association itself, but also against their followers as well as extra shareholders. Decision-making is a difficult matter, and it is progressively challenging. A decision is a commitment to action (**Zaid, et al., 2022**). Decision-making is the method of recognizing as well as selecting the best choices amongst available different options of act in a way suitable to the requirements of the situation. In order to select the best alternate, it needs cautious identification as well as thoughtful evaluation of wholly additional choices through gathering information, and assessing alternative resolutions (**Tazebew, et al., 2023**).

Effective decision-making needs specific as well as correct approaches that would create extreme success and desired results at all times. Failure or success of an organization rests, to a great degree on the reliability in addition to effectiveness of decision making (**Sivakumar, et al., 2022**). Experienced and entrepreneurial head nurses identify hindlers to efficient decision-making as well as modify approaches in order to overcome them. Effective decision-making is continually the outcome of extraordinary meaning, truthful exertion, intellectual guidance, creative abilities as well as clever implementation to gain advantages (**Kristina., 2020**).

On everyday base, head nurses are continually taking different decisions in controlling, guiding, managing, in addition to generating a peaceable atmosphere for both the health group as well as patients. These decisions including the discussion of data, facts examination, formation of novel thoughts, estimation of other options of act as well as implementation of guidelines concerning care of client (**Yassien & Darawsha, 2022**). Decision making by head nurses is a chief feature of their entrepreneurial leadership and includes executing a series of activities after seeing choices. Thus, entrepreneurial head nurses, in any road or other, may affect their decisions-making effectiveness (**Fetouh, et al., 2023**).

Entrepreneurial leaders creating work conditions wherever nurses sense permitted to clarify their thoughts and sharing their knowledge. Knowledge is a source or ability that permits employees as well as associations to improve education in addition to decision-making via management of knowledge. Knowledge sharing behavior is the transmission, spreading, as well as interchange of ideas, skills, experience, in addition to valued data from a head nurse to another in the organization (**Zhao, et al., 2020**). Knowledge sharing in health care setting is the explanation as well as distribution of latest health data to workers, decision-makers, besides additional shareholders through shared communication boards. It is an interaction and communication activity

between head nurses in organization that is mutually useful to one another through interchanging opinions, ideas, or facts that is possessed (**Pu, et al., 2022**).

Knowledge sharing behavior is necessary and one of the best ways to develop knowledge management practices in the organizations. Management of knowledge is the method of producing, allocating, expending, in addition to handling the knowledge and data of an association. Knowledge sharing can be simply understood as a managing behavior in the association that intents to disseminate information and knowledge. Typically this occur in different shapes as conversation, demonstrations, teaching, in addition to several others (**Raudeliuniene & Matar., 2022**).

Knowledge is classified into two types; explicit and tacit. Explicit knowledge; it is well organized and easier to access and used at any time through accessing external sources such as databases or libraries. Tacit knowledge is hard to be transferred, since it is secreted in the mind, thus, it is hard for nurses to transfer it easily, nurses need to be included in the everyday work and to have the intentional readiness to share it (**Chua, et al., 2023**).

Knowledge sharing behavior improves the societal wealth, which is the distribution of knowledge among head nurses, this creates a respectable impression on the organization in addition to its repute. It helps to create a maintainable competitive benefit to the association where no competitor can replicate (**Mehmood, et al., 2022**). This is apparent in well relative and communication among the consumers, providers as well as the association that finally forms a fruitful working manner that will rise the swapping charge of shareholders to leave the association. Sharing the knowledge amongst dissimilar teams inside the association is observed as an essential portion of an effective knowledge management approach that improve head nurses operational issues and their decision making effectiveness (**Watkins, 2020**).

#### **Significance of the study:**

Head nurses are challenged to make decisions effectively in addition to lead in this dynamic and uncertain nature of health care condition. Improving decision-making effectiveness is a main aspect of every organization; also leadership style is one of the greatest significant properties that donate to its success as well as effectiveness. In reality, decision-making is the main role of an effective leader. Effective decisions permit leaders to meet altering marketplace circumstances, dangers, in addition to chances, to achieve the better achievement of their organization. Importance of entrepreneurial leadership has been growing in recent years and becoming more essential for head nurses in particular,

because it assists them in dealing with health care difficulties, affecting their knowledge sharing behavior that is a main portion of knowledge management constructions that help the active use of obtainable knowledge assets (Pertiwiwati, & Martono, 2020).

Innovative and competitive organizations often require entrepreneurial leaders who develop knowledge sharing behavior, can effectively analyze data, create choices, in addition to properly implement effective decisions in order to identify their patients' difficulties and needs in the environment of a multispecialty group. Some studies have been conducted in USA to increase understanding about entrepreneurial leadership, decision making effectiveness and knowledge sharing behavior as entrepreneurship in public organizations: The role of leadership behavior (Demircioglu, & Chowdhury, 2021). Entrepreneurial leadership: A conceptual framework (Nidhan, & Singh, 2022). The effectiveness of administrative decision making in crises among academic leaders in Jordanian Universities (Yassien & Darawsha, 2022). And, creative leadership, innovation climate and innovation behaviour: the moderating role of knowledge sharing in management (Pinghao, & Liqiong, 2022).

The studies done in Egypt focus on enhancing employees' creativity through entrepreneurial leadership: can knowledge sharing and creative self-efficacy matter? (Islam, & Asad, 2021). Work design, entrepreneurial leadership, and innovative work behavior as perceived by staff nurses (Elewa, & El Bana 2022). No attempts were done to investigate entrepreneurial leadership and its relation to decision making effectiveness and knowledge sharing behavior at Specialized Medical Hospital. So, this study aims to investigate entrepreneurial leadership and its relation to decision making effectiveness and knowledge sharing behavior at Specialized Medical Hospital.

#### **Aim of the study:**

This study aims to investigate entrepreneurial leadership and its relation to decision making effectiveness and knowledge sharing behavior among head nurses at Specialized Medical Hospital.

#### **Research questions:**

- Q1.** What is the level of entrepreneurial leadership among head nurses?
- Q2.** What is the level of decision making effectiveness among head nurses?
- Q3.** What is the level of knowledge sharing behavior among head nurses?
- Q4.** Is there a relationship between entrepreneurial leadership, decision making effectiveness and knowledge sharing behavior among head nurses?

#### **Methods:**

**Design:** Descriptive correlational design was utilized.

#### **Setting:**

This study was carried out at all inpatients units at Specialized Medical Hospital, that affiliated to Mansoura University and occupied with (194) beds.

#### **Subjects:**

A convenience sample of all available head nurses who are presented at the time of data gathering at Specialized Medical Hospital and meet the requests of having at least one year of experience. Their whole numbers were 90 head nurses.

#### **Data collection tools:**

Three tools were used for data gathering in the present study, namely; Entrepreneurial Leadership Questionnaire, Decision Making Effectiveness Scale and Knowledge Sharing Behavior Scale.

**Tool I: Entrepreneurial Leadership Questionnaire (ELQ):** This tool was developed by Bagheri, & Harrison, (2020). It was utilized to measure head nurses' perception of entrepreneurial leadership. It consists of two parts:

#### **The first part:**

Includes head nurses' personal characteristics such as age, as well as years of experience.

#### **The second part:**

It involves (42) items which cover 8 domains as follow: Framing challenges (4 items), absorbing uncertainty (4 items), underwriting (5 items), building commitment (6 items), defining gravity (5 items), opportunity identification and exploitation (10 items), orientation towards learning (5 items), and finally, creative collective self-efficacy (3 items).

#### **Scoring system:**

Head nurses' reactions were be rated on a five points likert scale ranging from (1) strongly disagree to (5) strongly agree. 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, & 5= strongly agree. (<33.3%) low level of entrepreneurial leadership, (33.3 – 66.6) moderate level and (>66.6) high level of entrepreneurial leadership based on cut of point.

**Tool II: Decision Making Effectiveness Scale:** This tool was developed by Abo Gad & El-Demerdash., (2014): It was used to gather data related to head nurses decision- making effectiveness, and it comprises of 39 items divided into four subscales which are: Factors affecting administrative decision making in health care organizations (10 items), the best ways to make administrative decisions in health organizations (10 items), the problems that affecting administrative decision making in health care organizations (10 items), and finally, effective decision-making (9 items).

#### **Scoring system:**

The participant's answers were in five points likert scale extending from (5-1), 5 = always, 4 = often, 3 =

sometimes, 2= rarely, & 1 = never. (<33.3%) low level of decision- making effectiveness, (33.3 – 66.6) moderate level and (>66.6) high level of decision-making effectiveness based on cut of point.

**Tool III: Knowledge Sharing Behavior Scale (KSBS):** It was developed by Yi., (2009). It was utilized to measure head nurses knowledge sharing behavior within organization, and it contains 28 items classified under four dimensions which are; Written contribution (5items), organizational communications (8 items), personal interactions (8 items), and finally, communities of practice (7 items).

#### Scoring system:

Head nurses' answers were be rated on a five- points Likert scale ranging from (1) strongly disagree to (5) strongly agree. 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, & 5= strongly agree. (<33.3%) low level of knowledge sharing behavior, (33.3 – 66.6) moderate level and (>66.6) high level of knowledge sharing behavior based on cut of point.

#### Validity and reliability

Tools of data collection were translated by the researchers into Arabic, as well as investigated for its content validity in addition to applicability via a (5) jury in nursing administration from faculties of nursing, then the required modifications were completed. Tools' reliability were carried out by cronbach's alpha test. It was (0.93) for entrepreneurial leadership, (0.89) for decision- making effectiveness, and (0.91) for knowledge sharing behavior.

#### Pilot study

A pilot study was conducted on (10%) of head nurses (9 head nurses) from different units at Specialized Medical Hospital. They were randomly selected and excluded from the total sample. It was done to test the clarity, feasibility of the questions and to determine the time needed to fill out the study tools.

#### Ethical consideration:

Before beginning the study, ethical approval was attained from the Research Ethical Committee of

Faculty of Nursing- Mansoura University. Involvement in the study was voluntary. Written informed agreement to participate in the study was obtained from the all study sample. Privacy of the gathered data was preserved. Confidentiality of the study sample was appreciated, as well as the findings was utilized in order to guide forthcoming research, education in addition to publications. Official agreement to accomplish this study was obtained from the hospital administrator after explanation of its aim. Every participant had the freedom to finish implementation the study at any time without any consequences.

#### Data collection:

The real field work started from the beginning of August to the end of October 2023. The researchers met the subjects to explain the study purpose and ask for their participation and then met the respondents either individually or groups during morning and afternoon shifts to distribute the data collection sheets to the respondents in their work units and present during filling to clarify any ambiguity and answer any questions. Data was collected three days per week. The researchers checked each filling questionnaire and ensuring its completeness, it took 20:30 minute to be completed.

#### Data analysis:

The collected data were organized, tabulated and statistically analyzed using SPSS software (Statistical Package for the Social Sciences, version 25, SPSS Inc. Chicago, IL, USA). The normality assumption was accepted. Therefore, categorical variables were represented as frequency and percentage. Continuous variables were represented as mean, and standard deviation. Independent t-test was used to test the difference between two means of continuous variables. Pearson correlation coefficient test was conducted to test the association between two continuous variables. Statistically significant was considered as (p-value  $\leq$  0.05 & 0.01).

## Results:

**Table (1): Personal characteristics of the studied head nurses (n = 90)**

Variables	No.	%
<b>Age</b>		
<30	37	41.1
$\geq$ 30	53	58.9
Mean $\pm$ SD.	30.90 $\pm$ 5.79	
<b>Years of experience</b>		
<10	33	36.7
10-<20	43	47.8
$\geq$ 20	14	15.6
Mean $\pm$ SD.	12.16 $\pm$ 6.25	

**Table (2): Mean scores of entrepreneurial leadership as reported by the studied head nurses (n = 90)**

Entrepreneurial leadership domains	Max. score	Studied head nurses	
		Mean $\pm$ SD	% *
- Framing challenges	20	15.64 $\pm$ 4.30	78.2
- Absorbing uncertainty	20	15.19 $\pm$ 4.38	76.0
- Underwriting	25	19.29 $\pm$ 5.61	77.2
- Building commitment	30	23.03 $\pm$ 6.40	76.8
- Defining gravity	25	19.0 $\pm$ 5.30	76.0
- Opportunity identification and exploitation	50	38.67 $\pm$ 10.84	77.3
- Orientation towards learning	25	21.77 $\pm$ 3.82	87.1
- Creative collective self-efficacy	15	11.33 $\pm$ 3.50	75.5
<b>Total entrepreneurial leadership</b>	<b>210</b>	<b>163.92 <math>\pm</math> 42.96</b>	<b>78.1</b>

\* Percentages are calculated relative to maximum score

**Table (3): Mean scores of decision-making effectiveness as perceived by the studied head nurses (n = 90)**

Decision-making effectiveness subscales	Max. score	Studied head nurses	
		Mean $\pm$ SD	% *
- Factors affecting administrative decision-making in health organizations	35	27.0 $\pm$ 7.46	77.1
- The best ways to make administrative decisions in health organizations	50	36.80 $\pm$ 8.75	73.6
- The problems affecting administrative decision-making in health organizations	45	32.14 $\pm$ 7.32	71.4
- Effective decision-making	45	35.60 $\pm$ 5.77	79.1
<b>Total decision-making effectiveness</b>	<b>175</b>	<b>131.54 <math>\pm</math> 28.31</b>	<b>75.2</b>

\* Percentages are calculated relative to maximum score

**Table (4): Mean scores of knowledge sharing behavior as perceived by the studied head nurses (n = 90)**

Knowledge sharing behavior dimensions	Max. score	Studied head nurses	
		Mean $\pm$ SD	% *
- Written contributions	25	19.11 $\pm$ 5.06	76.4
- Organizational communications	35	27.01 $\pm$ 7.76	77.2
- Personal interaction	40	34.73 $\pm$ 6.25	86.8
- Communities of practice	35	26.29 $\pm$ 7.56	75.1
<b>Total knowledge sharing behavior</b>	<b>135</b>	<b>107.14 <math>\pm</math> 25.39</b>	<b>79.4</b>

\* Percentages are calculated relative to maximum score

**Table (5): Levels of entrepreneurial leadership, decision-making effectiveness, and knowledge sharing behavior among the studied head nurses (n = 90)**

Variables	Levels					
	Low (<33.3%)		Moderate (33.3 –66.6)		High ( $\geq$ 66.6)	
	No.	%	No.	%	No.	%
Entrepreneurial leadership	10	11.1	16	17.8	64	71.1
Decision-making effectiveness	8	8.9	25	27.8	57	63.3
Knowledge sharing behavior	8	8.9	18	20.0	64	71.1

Table (6): Correlation between entrepreneurial leadership with decision-making effectiveness and knowledge sharing behavior as perceived by the studied head nurses (n = 90)

			Entrepreneurial leadership domains									
			Framing challenges	Absorbing uncertainty	Underwriting	Building commitment	Defining gravity	Opportunity identification and exploitation	Orientation towards learning	Creative collective self-efficacy	Total	
Head nurses' effectiveness	decision-making	Factors affecting administrative decision-making in health organizations	R	0.958*	0.917*	0.938*	0.972*	0.976*	0.972*	0.858*	0.953*	0.976*
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
	The best ways to make administrative decisions in health organizations	R	0.930*	0.890*	0.906*	0.950*	0.958*	0.956*	0.889*	0.936*	0.958*	
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	
	The problems affecting administrative decision-making in health organizations	R	0.918*	0.893*	0.902*	0.942*	0.927*	0.928*	0.859*	0.919*	0.941*	
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	
	Effective decision-making	R	0.861*	0.852*	0.852*	0.879*	0.893*	0.873*	0.934*	0.858*	0.899*	
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	
	Total	R	0.953*	0.921*	0.934*	0.972*	0.975*	0.970*	0.913*	0.953*	0.980*	
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	
	Knowledge sharing behavior	Written contributions	R	0.961*	0.925*	0.935*	0.966*	0.964*	0.976*	0.876*	0.925*	0.975*
			P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*
Organizational communications		R	0.946*	0.887*	0.912*	0.965*	0.966*	0.971*	0.866*	0.945*	0.966*	
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	
Personal interaction		R	0.812*	0.816*	0.823*	0.800*	0.799*	0.830*	0.870*	0.802*	0.842*	
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	
Communities of practice		R	0.949*	0.936*	0.965*	0.954*	0.946*	0.963*	0.833*	0.939*	0.969*	
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	
Total		R	0.963*	0.936*	0.955*	0.969*	0.966*	0.983*	0.902*	0.950*	0.985*	
		P	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	

r: Pearson coefficient

\*: Statistically significant at  $p \leq 0.05$

Table (7): Correlation between total entrepreneurial leadership with total decision-making effectiveness and total knowledge sharing behaviors

Variable	Decision-making effectiveness		Knowledge sharing behavior	
	r	P	R	P
Entrepreneurial leadership	0.980*	<0.001*	0.985*	<0.001*

r: Pearson coefficient

\*: Statistically significant at  $p \leq 0.05$

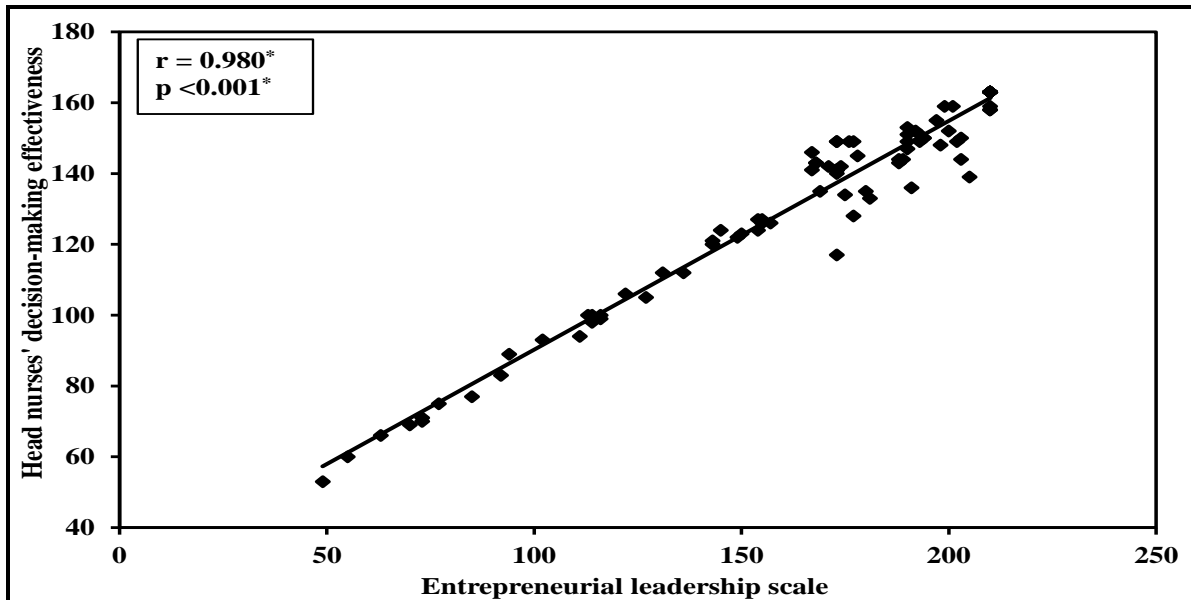


Figure (1): Correlation between entrepreneurial leadership and decision-making effectiveness among the studied head nurses (n= 90)

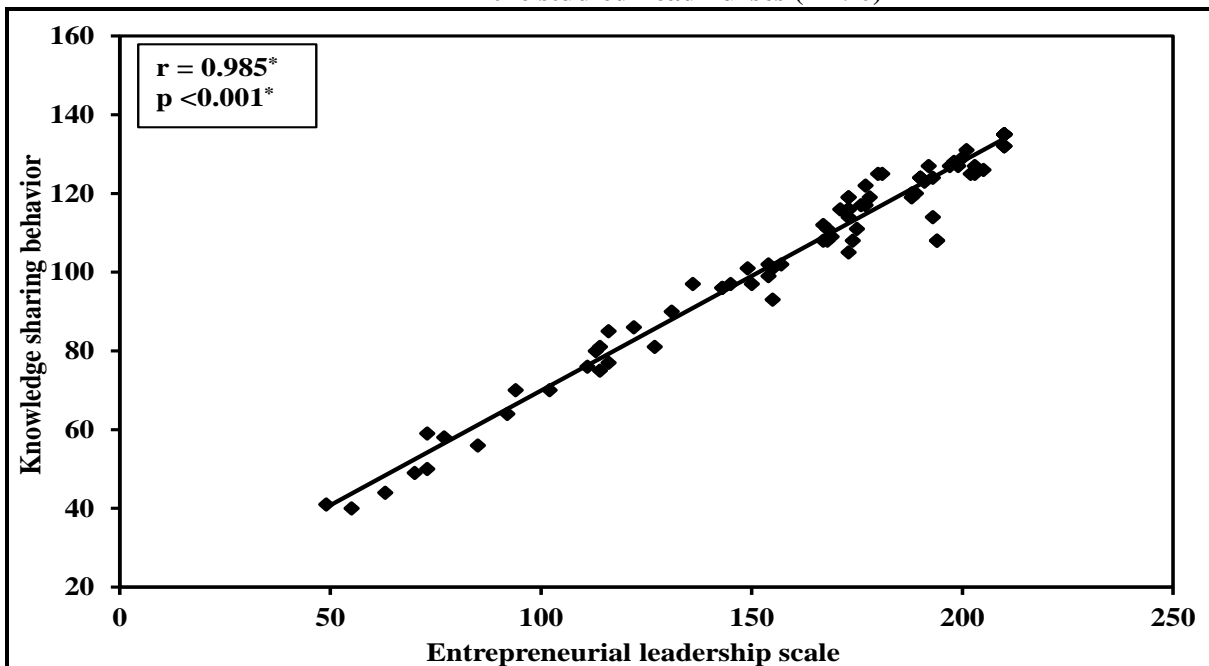


Figure (2): Correlation between total entrepreneurial leadership and total knowledge sharing behavior among the studied head nurses (n= 90)

**Table (1):** Explained personal characteristics of studied head nurses at Specialized Medical Hospital. Concerning to age more than half of head nurses were  $\geq 30$  years. As well, regarding to years of experience, nearly half of them had 10-<20 years of experience.

**Table (2):** Showed mean scores of head nurses' entrepreneurial leadership. Mean score of total entrepreneurial leadership was  $(163.92 \pm 42.96)$  among head nurses working at Specialized Medical Hospital. The highest mean percentage was orientation towards learning as a domain of entrepreneurial leadership (87.1%). While, creative collective self-efficacy as a domain of entrepreneurial leadership was the lowest mean percentage (75.5%)

**Table (3):** Demonstrated mean scores of head nurses' decision-making effectiveness. Mean score of total decision-making effectiveness was  $(131.54 \pm 28.31)$  among head nurses working at Specialized Medical Hospital. Also, the highest mean percentage was effective decision-making as a subscale of decision-making effectiveness (79.1%). While, The problems affecting administrative decision-making in health organizations was the lowest mean percentage as a subscale of decision-making effectiveness (71.4%).

**Table (4):** Showed mean scores of head nurses' knowledge sharing behavior. Mean score of total knowledge sharing behavior was  $(107.14 \pm 25.39)$  amongst head nurses working at Specialized Medical Hospital. Personal interaction as a dimension of Knowledge sharing behavior was the highest mean percentage (86.8%). While, the lowest mean percentage was communities of practice (75.1%).

**Table (5):** Showed levels of entrepreneurial leadership, decision-making effectiveness, and knowledge sharing behavior among the studied head nurses. Levels of head nurses' entrepreneurial leadership, decision-making effectiveness, and knowledge sharing behavior were high (71.1%, 63.3% and 71.1%) respectively. Whereas the lowest level was (8.9%) for decision-making effectiveness, and knowledge sharing behavior.

**Table (6):** Showed correlation between entrepreneurial leadership with decision-making effectiveness and knowledge sharing behavior as reported by the studied head nurses. The findings of this table exposed that there were a significant correlation between all domains of entrepreneurial leadership and decision-making effectiveness as apparent by head nurses in the chosen setting ( $r=0.980^*$ ,  $p \leq 0.001$ ). All of the entrepreneurial leadership domains were also significantly correlated with all subscales of decision-making effectiveness. Also, there were a significant correlation between all domains of entrepreneurial leadership and knowledge sharing behavior as observed by head nurses in the chosen setting ( $r=0.985^*$ ,  $p \leq 0.001$ ). Wholly

entrepreneurial leadership domains were also significantly correlated with all dimensions of knowledge sharing behavior.

**Table (7):** Showed correlation between total entrepreneurial leadership with total decision-making effectiveness and total knowledge sharing behaviors amongst the studied head nurses at Specialized Medical Hospital. The results displayed that there was a highly statistically significant positive correlation between total entrepreneurial leadership and decision making effectiveness ( $r=0.980$ ,  $p < 0.001$ ). Also, there was a highly statistically significant positive correlation between total entrepreneurial leadership and total knowledge sharing behaviors ( $r=0.985$ ,  $p < 0.001$ ).

**Figure (1):** Shows correlation between entrepreneurial leadership and decision-making effectiveness among the studied head nurses. There was a highly statistically significant positive correlation between total entrepreneurial leadership and total decision making effectiveness ( $p < 0.001$ ).

**Figure (2):** Shows correlation between total entrepreneurial leadership and total knowledge sharing behavior amongst the studied head nurses. There was a highly statistically significant positive correlation between total entrepreneurial leadership and total knowledge sharing behavior ( $p < 0.001$ ).

### Discussion:

Entrepreneurial leadership is becoming more essential since it generates entrepreneurial behavior for the work teams associated with a shared aim. Like this behavior strengthens as well as improves alteration and innovation amongst followers in addition to making leaders having creativity, as well as revolution and decision-making effectiveness. Also, this leadership style creates an operational atmosphere that make head nurses sense permitted to discuss their thoughts and sharing their knowledge (Salim, 2020). Therefore, this study aims to investigate entrepreneurial leadership and its relation to decision making effectiveness and knowledge sharing behavior among head nurses at Specialized Medical Hospital.

The results of the current study showed that total entrepreneurial leadership was at the high level. This may be due to that head nurses thought that entrepreneurial leadership considerably helping in their success to make effective decisions firmly and quickly rather than other leadership styles. Moreover, they thought in the entrepreneurial leaders' strengths such as the capability to identify chances in order to enhance nurses' achievement by create an environment that promotes persistent invention as well as chance appreciation and demonstrate the capability to manage time effectually.



This result was agreed with **Jakobsen, (2021)** who found that the majority of head nurses had high level of entrepreneurial leadership, confirming that entrepreneurial leaders not only come up with new ideas on their own but also help as well as inspire their workers to demonstrate their ability to solve difficult problems in addition to complete interesting jobs by employing innovative methods. This was in the same line with **Demircioglu, & Chowdhury, (2021)** who revealed that head nurses scored their total entrepreneurial leadership as high, clarifying that most first-line managers had bachelor's degrees and were equipped with the needed knowledge and skills. Additionally, **Karnsomdee, (2022)** reported that the study participants showed high level perception about entrepreneurial leadership, and declared that entrepreneurial leaders had the capabilities to define extremely stimulating objectives as well as principles for the act of employees and the profession utilizing their extraordinary information and vision. On the contrast, **Goldsby, (2020)** who mentioned that above two fifth of staff nurses perceived low level of entrepreneurial leadership.

Regarding to head nurses' total decision making effectiveness, the result of the present study discovered that head nurses' total decision making effectiveness was at the high level. These result means that high perception level of head nurses regarding entrepreneurial leadership participate in decision making effectiveness. This may be due to that, head nurses with entrepreneurial leadership are willing to avoid risk or taking responsibility, taking appropriate as well as effective decision, problem-resolving abilities in addition to better discussing competences to eliminate the obstacles in followers' work. Furthermore, head nurses who persuaded in entrepreneurial leadership are capable of delegate, maintaining human relationships in the organization in the first place, make and determine decisions, and observe the laws and regulation.

This was supported by **Mohammed & Amer (2022)** who found that the total level of decision making effectiveness amongst the studied head nurses was at high level, and stated that effective decision-making is an important element of proficient nursing care and, nurses' capability to take effective decisions is the greatest significant aspect influencing the quality of care. In the same line **Oh, Gu, & Sok, (2022)** who mentioned that the degree of efficiency of managerial decision-making in disaster managing amongst academic leaders in Jordanian universities was elevated. Confirming that experience and knowledge as well as supportive management are major factors affecting decision-making effectiveness.

In agreement of the existing study **Abu Arra, et al., (2023)** stated that their contributors informed raised

grades of decision-making effectiveness. Declaring that the active as well as undefined environment of health care needs head nurses to be proficient and effective decision-makers to react and deal with patients' wants, they should be capable of selecting as well as synthesizing data, make decisions in addition to correctly apply these decisions in order to solve patients' difficulties in the environment of a multispecialty group. On the contrast with **Arkan, et al., (2021)** who discovered that the lowest percentage of study participants continuously as well as frequently creates an effective decision.

Regarding to levels of total head nurses' knowledge sharing behavior, the result of the current study shown that head nurses' knowledge sharing behavior was at the high level. This may be due to that, head nurses with entrepreneurial leadership are willing to engage in long term coaching relationships with subordinates, express ideas and thoughts in organizational conferences, ask better questions which stimulate others' reasoning and talking, make presentations in organizational consultations, participate experiences and keep others updated with important organizational information through individual discussion, that may assist others evade dangers as well as distress, and have online chats with others to aid them with their job-correlated difficulties.

This was confirmed by **Chen, et al., (2023)** who demonstrated that the study participants high positive level of knowledge sharing behavior, and mentioned that knowledge sharing is a strength part for enhancements as well as additional growth inside the healthcare field. **Furthermore, et al., (2022)** who specified that head nurses grading their total knowledge sharing behavior as high, and concluded that cooperation amongst head nurses is necessary for the production of fresh ideas, sharing experiences and keeping others updated with important information in addition to the increase of operational effectiveness, and the resolution of complex challenges. On the other hand the present result was differ from those of **Lee, et al., (2021)** who found that the study participants had low level of knowledge sharing during the crisis.

Regarding to correlation between entrepreneurial leadership with decision-making effectiveness. Results of the existing study shown that entrepreneurial leadership was positively correlated with decision-making effectiveness. These results means that head nurses with entrepreneurial leadership have the ability to make decisions in the line with the desired goals of the organization, choose the easiest alternative for application, when making decisions taking into account the capabilities of the workers and their knowledge necessary to implement

these decisions, choose the best alternative, make their decision in time and have the ability to make quick decisions to face urgent problems. This was in agreement with the results of **Wardan, et al., (2020)** who found that there was statistically significant positive correlation between head nurses' total scores of entrepreneurial leadership and the total scores of decision making effectiveness, and reported that entrepreneurial leaders are the key decision makers and policymakers who know chance and accumulate capitals needed to follow these opportunities.

In the same respect, **Bozdoğan, & Aksoy, (2023)** stated that there was a significant positive correlation between entrepreneurial leadership and decision-making effectiveness, and mentioned that entrepreneurial leaders had the competences in describing extremely exciting aims as well as values that in the line with the goals of the organization, utilizing their extraordinary information in addition to vision to choose the easiest alternative to practical application when making decisions, and taking into consideration the capabilities of the workers and their knowledge necessary to implement these decisions. This is consistent with the results of **Ibrahim, et al., (2022)** who revealed that there was a significant positive correlation between head nurses' overall perception of entrepreneurial leadership and their overall decision-making effectiveness, adding that efficient decision-making is continually the outcome of raised purpose, factual exertion, intellectual guidance, as well as clever implementation.

The results of this study also exposed that there was a significant positive correlation between entrepreneurial leadership and knowledge sharing behavior as perceived by head nurses. This may be due to that entrepreneurial leaders had the capability to create and promote knowledge sharing behavior through expressing ideas and thoughts, as well as exchanging information, and suggestions in organizational meetings, keeping the others modernized with significant institutional knowledge via individual dialog, sharing experiences as well as providing clear orientation and guidance, and having online conversations with others colleagues in order to assist them with their job-correlated complications. This was consistent with the findings of **Islam & Asad, (2021)** who concealed a significant positive correlation between entrepreneurial leadership and knowledge sharing behavior. Approving that knowledge sharing behavior is not created habitually, but the leaders form like these behaviors through assisting as well as stimulating their peers as well as subordinates in order to share their knowledge. This was in agreement with **Mostafa & Mahfouz (2021)** who reported that entrepreneurial leadership was positively associated with knowledge sharing

behavior, and clearing that entrepreneurial leaders enable employees to establish self-confidence and trust which are the foundations for knowledge sharing behavior, employees are willing to share knowledge because they believe that knowledge is not misused and the higher the trust, the more knowledge is shared.

In the same respect, **Tini, (2023)** stated that entrepreneurial leaders facilitate the practice of knowledge sharing behavior as they offering necessary guidance and feedback that encourage employees to exchange knowledge, to be well furnished to collaborate in order to create novel thoughts, answer questions, in addition to manage strategies. This was supported by Chua, **Thinakaran, & Vasudevan, (2023)** who stated that entrepreneurial leadership was positively correlated with knowledge sharing behavior and concluded that entrepreneurial leaders emphases on stimulating as well as guiding workers via job groups or teams in the direction of accomplishing organizational objectives as well as encouraging them to sharing their knowledge and experience for better achievement of these goals.

### Conclusion

Based on the results of the current study, it was concluded that most of head nurses shown high level of entrepreneurial leadership, nearly two thirds of them shown high level of decision-making effectiveness, and most of them demonstrated high level of knowledge sharing behavior. Entrepreneurial leadership has a highly statistically significant positive correlation with both decision-making effectiveness and knowledge sharing behavior. So, we can conclude that raising the entrepreneurial leadership of head nurses improve their decision-making effectiveness and knowledge sharing behavior.

### Recommendations

**Based on the results of the present study, it was recommended that**

- Providing head nurses with environment that enhances their creative abilities to make effective decision and sharing knowledge.
- Supporting and encouraging head nurses to share in ongoing education programs that assist them to gain required knowledge and skills for opportunity exploration and exploitation.
- Building trustful relationship and open communication with head nurse to gain confidence and feel free to discuss their ideas and sharing their knowledge.

- Developing training programs that help head nurses' to recognize existing market opportunities and learn accurate strategies for effective decision-making.
- Meeting regularly with head nurses and discuss the difficulties that influencing their administrative decision making in organization.
- Encouraging head nurses to create new ideas and creative solutions for problems that happen in workplace.
- Additional research must be carried out about entrepreneurial leadership training program and its effect on decision-making effectiveness and knowledge sharing behavior among nursing staff.

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