

RESEARCH ARTICLE

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The Relationship Between Nurse Manager's Resilience and Empowering Leader Behavior During Covid 19

Dr. Eman Salman Taie¹, Dr. Amira Fathy Akeel², Nessma Nehmedo Amine³

Professor of Nursing Administration, Helwan University.
 Lecturer of Nursing administration, Modern University of Technology and Information MTI.
 3-Demonstrator of Nursing administration, Benisuef university.

Abstract

Background: COVID-19 had a significant impact on frontline healthcare professionals, particularly nurse managers. Resilient nurse managers are able to survive and thrive. This is the empowering leader behavior, which will also improve the productivity and efficacy of nurses' work. Aim of the study: To explore the relationship between nurse manager's resilience and empowering leader behavior during covid 19. Design: A descriptive correlational design was utilized. Setting: The study was carried out in Benisuef university hospital. Subject: consisted of 284 staff nurses and 44 nurse managers. Tools: Data were obtained through two main tools; the resilience scale and staff Nurses' Perception regarding Head Nurses' Empowering Behavior during covid 19 Questionnaire. Results: Regarding nurse managers' resilience level, (50%) of them had high level, (15.9%) of them had low level. 66.9% of staff nurses perceived had high level of empowering leader behavior during COVID-19. and only (3.9%) had low level. There was highly statistically significant positive correlation between all dimensions of head nurses' resilience skill levels and all dimensions of staff nurses' perception of their empowering leader behavior during COVID -19. Conclusion: There was highly statistically significant positive correlation between all dimensions of head nurses' resilience skill levels and all dimensions of staff nurses' perception of their empowering leader behavior during COVID -19. Recommendations: Healthcare organization should Provide nursing personnel with resilience and empowering leader behavior training courses to enhance their professional development. Further studies: should be conducted to investigate nurses' perceptions of crises, such as the COVID-19 epidemic, and using the findings to create practical strategies to encourage nurses' resilience.

Introduction

Nursing is the most active partner in any primary and secondary infectious disease preventive interventions. Nursing is considered to be the top first line specialized career in the prevention of illness and reduction of suffering during and after a treatment of any disease, including COVID-19. Nurses were and still are the pioneers in establishing all the best practices in relevant to patient management everywhere, regardless of their socioeconomic development (Buheji & Buhaid, 2020).

Resilience is a positive force that can be used to overcome various types of adversity and changing situations. It refers to a person's overall ability to respond flexibly to violent situations or emergency changes as a positive force that can be used as a starting point to overcome various types of adversity and changing situations (Kim et al., 2022).

Resilience enables nurses to maintain healthy levels of performance despite hardship or to recover to regular functioning following adversity. Nurses with high levels of resilience who face major dangers and crises have positive mental health outcomes and are considered more flexible and adaptive when dealing with crises (Sternart et al., 2021).

The core of empowering leader behavior is a set of management practices that promote psychological empowerment by giving staff members more opportunities to participate in decision-making, which will raise their sense of self-efficacy and increase their productivity. Leading by example, participatory decision-making, directing, informing, and mutual attention are the five main components of empowering leader behavior (Yu et al, 2022).

Empowering leader behavior gives nurses managers the chance to make decisions independently, viewing faith in nurses' ability, and allows them the flexibility to act and perform in accordance with the circumstances (Yassin et al., 2021).

Nurse managers are crucial to any change and play a critical role in the immediate lives of staff nurses, with ramifications for the entire system. Nurse manager transforms the department's goals into action according to patient requirements (Elatrash et al.,2020). In order to achieve organizational goals, nurse managers are responsible for planning and coordinating the delivery of care, as well as providing suitable and necessary resources to support the delivery of high-quality patient outcomes and staff management (University of North West,2020).

The COVID-19 pandemic, which began in 2020, exacerbated these tensions and tested the resiliency of many nursing leaders (Carter&Turner,2021). While achieving productive goals, nurse managers must acquire empowering skills and resilience. Where resilient leaders inspire employees by involving them in the discussion of potential barriers to achieving the new reality (Yassin et al.,2021).

Keywords: Nurse manger, resilience, leader behavior, COVID-19 pandemic.

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AIM OF THE STUDY:

The aim of this study was to explore the relationship between nurse manager's resilience and empowering leader behavior during COVID-19 through: 1-Assess nurse manager's resilience level.

2- Identify empowering leader behavior as perceived by staff nurses during COVID-19.

3-Find out the relationship between nurse manager's resilience and empowering leader behavior during COVID-19.

Subject and Methods:

Research design:

A descriptive correlational research design was used in this study.

Setting

The study was conducted at all departments of Benisuef university hospital- Benisuef governorate.

Subjects

1.Sample size:

Included 284 staff nurses and 44 nurse managers **2.Inclusion criteria:**

All nurse managers as 1st line nurse managers "head nurses" both genders and had at least one-year of experience in their current position were included in the study sample from all departments of Benisuef University Hospital, while the researcher excluded those who attended training programs about nursing resilience. Also, both genders staff nurses who had at least one-year experience at their current positions from all departments of Benisuef University Hospital. **Tools for data collection:**

Two tools were used for collecting data:

Tool 1: The resilience scale. It consisted of two parts:

Part I: personal data of head nurses: This part included (age, gender, educational level in nursing, years of experience, attending previous training about resilience.

Part II: Head Nurses' Resilience scale: This tool designed by **(Wagnild &Young, 1993).** and modified by **(Tau et al., 2018).** Also, it modified by the researcher after reviewing relevant literature. It is composed of (25) items

Scoring system: Head nurses' responses were measured using five points Likert Scale ranging from 1-5 where (1) Strongly Disagree and (5) strongly Agree, (5) Strongly Agree. Total score (125), on the cut-off point (75) as follows:

- High Level of resilience skills >75% (> 94).

-Moderate level of resilience skills 60% - 75% (75-94).

-Low level of resilience skills <60% (<75).

Tool 2: Empowering Leader Behavior during COVID-19 Questionnaire. It consisted of two parts:

Part I: personal data of staff nurses: This part included (age, gender, educational level in nursing, years of experience).

Part II: Empowering Leader Behavior during COVID-19: This tool designed by (**Arnold et al,2000**) and modified by (**Tau et al.,2018**). Also, it modified by the researcher after reviewing relevant literature. It is composed of (38 items).

Scoring system: Staff nurses' responses were measured on five points Likert Scale ranging from 5-1

where (5) always and (1) never. Total score (190), on the cut-off point (75) as follows:

-High level of empowering behavior >75% (> 143).

-Moderate level of empowering behavior 60% - 75% (114-143).

-Low level of empowering behavior <60% (< 114). Validity:

The two tools were translated into Arabic then to English and tested by three experts in the field of the study for their face and content validity through an opinionnaire sheet.

Reliability:

Head nurses' resilience scale yield Cronbach's alpha showed (0.853), While Empowering leader behavior during COVID-19 questionnaire yield Cronbach's alpha showed (0.934).

Pilot study:

A pilot study was conducted on (4 head nurses and 28 staff nurses) to determine clarity, understanding, and applicability of the study tools and to estimate the time needed to fulfil each tool of questionnaire and scale.

Administrative design.

To carry out the study, an official letter was issued from the faculty of nursing; Helwan University explains the aim of the study to the director of Benisuef university hospital to conduct their facility. Ethical Considerations:

Prior study conduction, approval was obtained from the scientific research ethical committee at Faculty of nursing, Helwan University. In addition, an approval was obtained from the director of Benisuef university hospital for data collection. Individual written consent was also obtained from each head nurse and staff nurse in the study.

Statistical item:

The collected data was organized, categorized, computerized, tabulated and analyzed using excel program and SPSS software version 24. For quantitative data, mean, and standard deviation were calculated. For qualitative data the number and percent were calculated and Chi-square was used. Correlation between variables was done using Pearson correlation for parametric data.

Results:

As shown in **table (1)** Personal data of head nurses (84.1%) of them ranged between 25 to less than (35) years old, while only (4.5%) of them aged 45 years old or more with Mean \pm SD (30.98 \pm 6.30). While (68.2%) of them had master degree in nursing and only (6.8%) of them were graduated from technical nursing institute with Mean \pm SD (30.98 \pm 6.30). (79.6%) of them had from one to less than five years of experience and only (4.5%) of them had from five to less than ten years of experience. Meanwhile, less than one fifth (15.9%) had more than or equal ten years of experience, Mean \pm SD (7.20 \pm 7.83).

Table (2) shows staff nurses Personal data, pertaining to age (56%) of them less than 25 years old, and only (0.7%) of them more than or equal 45 years old, Mean±SD (24.76±3.88). Regarding level of education in nursing (81.7%) of them had bachelor degree in nursing and only (3.5%) of them graduated from technical nursing institute. The majority (86.9%) of

them had one to less than five years of experience, Mean \pm SD (3.80 \pm 3.91).

Table (3) and Figure (3): illustrates total nurse managers' resilience level (50%) of them had high level of resilience. and only (15.9%) of them had low level.

Table (4) and Figure (4): exemplifies total staff nurses' level of perceived empowering leader behavior

during COVID-19. (66.9%) of them had high level, and only (3.9%) had low level with Mean \pm SD (23.46 \pm 4.29). **Table (5) and Figure (5):** Validates that there was highly statistically significant positive correlation between all dimensions of head nurses' resilience skill levels and all dimensions of staff nurses' perception of their empowering leader behavior during COVID - 19(r=0.750 &p=000**).

Personal Data	Head Nurses (n=44)				
	N	%			
Age (years)					
• 25- <35	37	84.1			
• 35 - <45	5	11.4			
• 55 - <45	2	4.5			
• <u>></u> 45	2	4.5			
Mean±SD	30.98±6.30				
Level of education in nursing					
Technical nursing institute	3	6.8			
De ekstern de energ	11	25.0			
Bachelor degree	30	68.2			
Master's degree	50	00.2			
Years of experience					
 1 <5 years 	35	79.6			
• 5 <10 years	2	4.5			
• <u>></u> 10 years	7	15.9			
	/	13.9			
Mean±SD	7.20±7.83				

Table (1): Personal data of studied head nurses (n1=44).

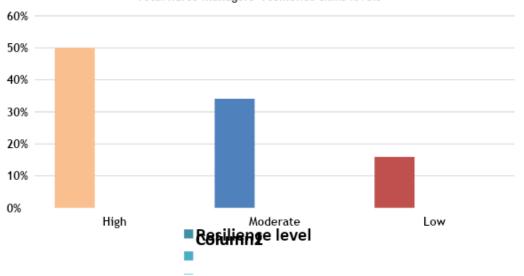
Personal Data	Staff Nurses (n=284)			
	N	%		
Age (years) • <25 • 25- <35 • 35 - <45 • <u>></u> 45	159 116 7 2	56.0 40.8 2.5 0.7		
Mean±SD	24.76±3.88			

Level of education in nursing Technical Nursing Institute Bachelor degree Master's degree 	10 232 42	3.5 81.7 14.8
Years of experience • 1 - <5 years • 5- <10 years • \geq 10 years	247 30 7	86.9 10.6 2.5
Mean±SD	3.80±3.91	

Table (2):	Personal	data d	of	studied	staff	nurses	(n2=284)
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	Nurse (n1=4	e Manager: 14)	Mean	SD					
Nurse Managers' Resilience Dimensions	High >75	-				Low <60	%		
	N	%	N	%	N	%			
1. Purposeful life	22	50	15	34.1	7	15.9	17.52	4.75	
2. Perseverance and persistence	20	45.5	13	29.5	11	25	15.30	4.22	
3. Self-reliance	24	54.5	14	31.8	6	13.7	15.55	3.97	
4. Existential aloneness	23	52.3	16	36.4	5	7.7	16.48	3.82	
5. Equanimity	21	47.7	14	31.8	9	20.5	18.84	3.29	
Total	22	50	15	34.1	7	15.9	28.58	7.97	

(2)	D	1			
2 (3):	Percentage	distribution of	nurse managers	s' resilience skills	1 = 44



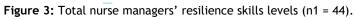


 Table (4): Percentage distribution of staff nurses' perception regarding levels of nurse mangers' empowering leader behavior during COVID-19 (n2 = 284).

		Perceived	d Empowe	ring Behavio	or Levels		Mean	SD
Domains of Empowering Behavior	High ≥75		Moderate 60-75%		Low <60%			
	N	%	N	%	N	%		
1. Leading By Example	203	71.5	41	14.4	40	14.1	15.79	3.58
2. Participative Decision-Making	193	68.0	51	18.0	40	14.1	18.65	3.93
3. Coaching	188	66.2	65	22.9	31	10.9	34.16	6.16
4. Informing	181	63.7	62	21.8	41	14.4	18.04	3.42
5. Showing Concern/Interacti ng with the Team	193	68.0	75	26.4	16	5.6	30.65	4.40
Total	190	66.9	83	29.2	11	3.9	23.46	4.29

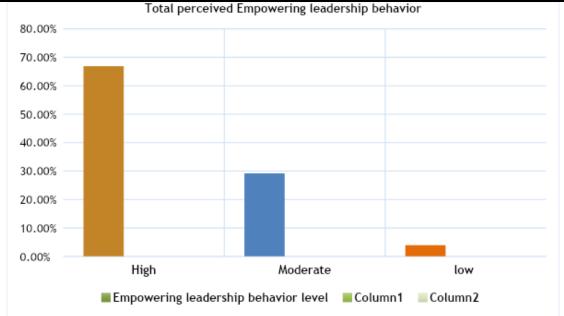


Figure (4): Total empowering leadership behavior levels as perceived by staff nurses during COVID-19 (n2 = 284).

		Staff Nurses' perception of Nurse Managers' Empowering Leader Behavior during COVID-19						
Nurse Managers' Resilience Skill Levels		Leading by Example	Participative Decision Making	Coaching	Informing	Show Concern and interacting with the team		
Purposeful life	r p	0.603 000**	0.540 000**	0.430 000**	0.520 000**	0.439 000**		

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Perseverance	and	r	0.579	0.613	0.579	0.479	0.379
persistence		р	000**	000**	000**	000**	000**
Self-reliance		r	0.750	0.651	0.735	0.379	0.479
Sell-reliance		р	000**	000**	000**	000**	000**
Existentional		r	0.423	0.593	0.477	0.570	0.580
aloneness		р	000**	000**	000**	000**	000**
Equanimity		r	0.235	0.511	0.463	0.357	0.704
Equalimity		р	000**	000**	000**	000**	000**

 Table (5): Correlation between head nurses' resilience skill levels and staff nurses' perception of their empowering leader behavior level during COVID -19 (n = 328).

(*) Statistical significant at p <0.05 (**) Highly statistical significant at p< 0.001

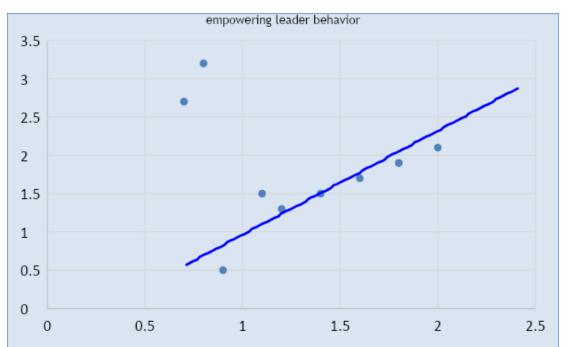


Figure (5): correlation between head nurses' resilience skills levels and staff nurses' perception of empowering leader behavior during COVID-19 (n= 328).

DISCUSSION:

To assess nurse managers' resilience level, present study results asserted that half (50%) of nurse managers had high total level of resilience, with Mean \pm SD (28.58 \pm 7.79). This current study results were congruent with the results of the study conducted by (*Mohamed et al., 2022*) in Egypt. they emphasized that more than half (56.8%) of head nurses had a highest level of work resilience. On the same line, the study conducted also in Egypt by (*Elsayed et al., 2022*)'supported present study results. They found that less than three quarters (69.17%) of studied head nurses had high level of resilience.

In this respect, these results were inconsistent with (Almegewly et al., 2022) in their study performed in Saudi Arabia. they mentioned that less than one fifth (18%) of nurses had high level of resilience. From the researchers' point of view, present study results indicated that nurse managers respond to COVID-19 pandemic obstacles in an adaptive manner by displaying high levels of feelings of independence and a sense of distinctiveness, a higher capacity for self-belief, a more balanced view of their own lives and experiences. Also, they had greater capacity for persistence in the face of hardships or a dangerous situation, and a great ability to comprehend the meaning of life and their collaborators.

Present study results indicated that more than one third (34.1%) of studied head nurses had moderate level of total resilience skills. These results were supported by (Yassin et al., 2021) who stated that quarter (25%) of head nurses had moderate level. In addition to (AbdelAziz& Adam, 2020) who found that less than one fifth (19%) of nurses had moderate level. Furthermore, these results were consistent with the results of the study conducted by (Jose et al., 2022) who found that less than half (45.3%) of study sample had a moderate level of total resilience. Also, reinforced by (Roberts et al., 2021) who found that less than one third (27.8%) of head nurses had moderate level of total resilience.

Current study findings displayed that less than one fifth (15.9%) of head nurses had low level of total resilience skills. These results were consistent with the results of the study conducted by (Yassin et al., 2021) who found that only (12.5%) of head nurses had low level of resilience. Likewise, reinforced by (Hamza et al., 2022) in their study conducted in Egypt. they declared that one fifth (20%) of study sample had low level of resilience.

While, these results were inconsistent with the results of the study of *(Almegewly et al., 2022)* who mentioned that less than one third (32%) of nurses had low level of resilience. Additionally, these results

were inconsistent with the results of the study of *(Vijayalakshmi et al., 2023)* who mentioned that less than one third (32.8%) of study sample had low level of resilience.

Empowering leader behavior offers a technique to stabilize the nursing workforce and support new nurses. These behaviors are recognized to support nursing staff during periods of change and improve patient and nurse outcomes (*Elsayed et al., 2021*). Present study results indicated that more than two thirds (66.9%) of staff nurses had high level of total perceived empowering leader behavior during COVID-19, These results were supported with the results of the study of (*Oducado &Michael, 2019*) who found that high percent (80%) of young staff nurses had high level of empowering leader behavior.

Moreover, these results were supported with the results of the study done by *(Elkholy et al., 2019)* in Egypt. they found that more than two thirds (67.6%) of staff nurses perceived high level of empowering leader behavior. But these results were inconsistent with the results of *(Zhang et al., 2022)* in their study conducted in China. they found that more than one fifth (21.7%) of staff nurses perceived high level of empowering leader behavior.

In addition, these results revealed that less than one third (29.2%) of staff nurses had moderate level of total perceived empowering leader behavior during COVID-19. These results were consistent with the results of the study conducted by (Yassin et al., 2021) who found that more than quarter (22.8%) of staff nurses had moderate level of empowering leader behavior. Also, the study results identified that only (3.9%) of staff nurses had low level of total perceived empowering leader behavior during COVID-19. These results were varying with the results of the study done by (Yassin et al., 2021) who found that less than one third (32%) of staff nurses had low level of empowering leader behavior.

Furthermore, this study results identified that only (3.9%) of staff nurses had low level of total perceived empowering leader behavior during COVID-19. These results were supported with the results of the study of (*Yassin et al., 2021*) who emphasized that less than one third (32%) of staff nurses had low level of empowering leader behavior.

The third aim of this study was to find out the relationship between nurse managers' resilience and empowering leader behavior during COVID-19. Present study results indicated that there was highly statistically significant positive correlation between all dimensions of head nurses' resilience skill level and all dimensions of staff nurses' perception of their empowering leader behavior during COVID-19. This was supported by (Yassin et al., 2021) who emphasized that correlation between all dimensions of head nurses' resilience levels skills had statistically significant correlation with all dimensions of head nurses' empowering behavior as perceived by their staff nurses.

Conclusion

In the light of the study findings, it can be concluded that during COVID-19 pandemic, half of head nurses had high level of total resilience skills, and less than one fifth had low level. Moreover, more than two thirds of studied staff nurses perceived high level of empowering leader behavior during COVID-19& tonly 3.9% had low level. The study findings also emphasized that there a highly statistically significant positive correlation between total head nurses' resilience skills levels and total staff nurses' perceived empowering leader behavior during COVID -19.

Recommendations

In the light of the study findings, the following recommendations were suggested:

- Support empowering leader behavior from senior managers through placing their trust in staff, listening to employee feedback, and showing appreciation for employees.
- Include resiliency competencies in nurse managers' performance appraisal.
- Develop resilience skills through participating in regular training to be able to deal with challenging working conditions.
- Use a coaching technique to guide and evaluate their staff nurses
- Introduce resilience and empowerment into undergraduate nursing curricula.
- Carrying out mixed research to investigate nurses' perceptions of crises, such as the COVID-19 epidemic, and using the findings to create practical strategies to encourage nurses' resilience.

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