

EXPLORING AGILE LEADERSHIP COMPETENCIES FROM THE PERSPECTIVE OF NURSE MANAGERS

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Abstract

Background: Agile leadership is a leadership approach that adapts to changing circumstances, promotes employee empowerment, and enhances an organization's ability to respond effectively to dynamic and unpredictable work environments. **Aim:** to explore agile leadership competencies from the perspective of nurse managers. **Methods:** descriptive exploratory design used in current study; this study was conducted at Al Moneira pediatric university hospital affiliated to Cairo University, Egypt; on a convenient sample of nurse managers their numbers (31 nurse managers). Three tools were utilized, namely :(1) Personal data sheet, (2) agile leadership knowledge questionnaire and (3) agile leadership practices observational check list. **Results:** most participants had low level in total agile leadership knowledge scores as (61.3%) and the majority of the participants had low level in total agile leadership practices as (96.8%). **Conclusion:** there was no statistical correlation between nurse managers' knowledge and practices. **Recommendations:** training program should be conducted for nurse managers to enhance their knowledge and practices related to agile leadership.

Keywords: Agile Leadership, Competencies, Nurse Managers.

1. INTRODUCTION

Leadership is a key driver of organizational success and plays a crucial role in influencing productivity, employee engagement, and business performance. Leadership is particularly important in shaping organizational culture because it dictates the work culture, values, and worldviews.

In today's dynamic environment, effective leadership is essential for fostering innovation, adaptability, and long-term sustainability, shaping morale, performance, efficiency, and innovation. Effective leadership builds a positive climate, and research has shown that companies with strong leadership perform better financially, employee engagement and satisfaction rise when leaders are perceived as being transparent, trustworthy and caring [1].

Agile leadership is a leadership approach that adapts to innovation processes in organizations and allows organizations to survive in competitive environments full of uncertainties. Agile leadership is considered one of the most effective in enhancing the

career success of employees because of its flexibility, competency results, and change-oriented approach [2].

Agile leadership is defined as a collection of strategies that impact career success in terms of reaching desired outcomes. In order to promote their team vision and organizational goals, constant group motivation around career success based on feelings is required. Agile leadership is responsive to emerging challenges or opportunities, and it works in quick development cycles of adaptation, learning, and improvement [3].

The main goal of agile leadership is to increase teams' capabilities to attain higher levels of accomplishment and is like the goal of a regular team coach. The main tasks of agile leadership are to support staff nurses, stakeholders, and nursing managers to understand and apply agile methods and facilitate and monitor effective implementation of agile throughout the whole organization [4].

Agile leaders act as change agents whose leadership styles include promoting collaboration, developing highly effective agile teams, self-organization, delivering value, driving consistent results, and effectively adjusting to changing circumstances. Agile leaders are able to adjust to a constantly shifting and unpredictable environment. Agile leaders focus on working as a team rather than individual authority [5]

The most important competencies of agile leader are: 1-Continuous learning and improvement (agile leaders prioritize learning and the continuous development of their teams), 2-Adaptability (agile leaders must be highly adaptable to changing environments, requirements, and team dynamics), 3-Collaboration and empowerment (agile leadership emphasizes collaboration over hierarchical control and focus on empowering their teams), 4-Emotional Intelligence (agile leaders must possess high emotional intelligence to manage their own emotions and those of their teams), 5- Focus on outcomes (agile leaders are outcomes-oriented, focusing not on processes or rigid plans but on delivering value to customers and achieving desired results [6].

Agile leadership has received considerable attention from researchers in recent years. The concept is commonly described through several key dimensions:1-Humility Dimension: (the leader is approachable, agrees with the staff's tasks, helps achieve results & engages in dialogue with the staff. 2- Trust Dimension (appreciation of staff opinions, trust and motivation, shared responsibility, involvement in decision-making & leadership by example. 3-Objective Dimension:(the leader provides feedback, addresses problems, acts effectively, the contributes to the organization's reputation and is sensitive to time and place, 4-Leadership wisdom: (agile leaders use of rationality in dealing with employees and in their approach to solving complex administrative issues, 5-Tranquility (Calmness):(a calm leader can think more deeply and effectively tackle difficult problems [7]

According to study conducted by [8] organizational agility plays a mediating role in enhancing nurses' competencies by providing essential support for nurses transitioning into advanced practice roles, thereby facilitating professional development and the achievement of career goals.

The study by [9] concluded that the characteristics of an agile leader empower employees to accept changes in the environment and become more flexible in the complex, unpredictable, and dynamic environment in their organization.

Furthermore, study by [3] reported that agile leadership positively influences healthcare employees' perceptions of career success. The study demonstrated that agile leadership practices contribute significantly to employees' professional growth, satisfaction, and career advancement. In addition, an analysis of recent studies and publications by [10] revealed that leaders in agile organizations actively embrace change and continuously adapt their strategies to achieve organizational goals and realize their vision.

Based on the investigator's experience with nurse managers in the study setting, it was observed that managerial practices are predominantly routine-oriented, with limited efforts to introduce innovative ideas or adopt creative approaches to problem-solving and unit improvement.

Additionally, communication between nurse managers and their subordinates was found to be largely formal and indirect, which may hinder effective collaboration and employee engagement.

Given the critical role of nurse managers in providing effective leadership and contributing to the overall success of healthcare organizations, it is essential to explore leadership approaches that promote innovation, adaptability, and effective communication within healthcare settings.

2. METHODS

2.1 Aim

The current study aimed to explore agile leadership competencies from the perspective of nurse managers.

Research question:

What are nurse managers' perceptions regarding agile leadership competencies?

2.2 Design

Descriptive exploratory design was utilized in the study. It is a non-experimental approach that describes things "the way they are." and describe meaningful characteristics of a distinct group or to develop normative information [11].

2.3 Setting

This study was conducted at Al Moneira pediatric university hospital affiliated to Cairo University. It's a governmental hospital which provides free and paid service for pediatric patients. This hospital consisted of nine floors with 265 beds and seven ICUs (Neonatal ICU: 40 Incubators, Emergency ICU: 5 beds, Hemodialysis ICU: 8 beds, General ICU: 30 beds, Surgery ICU: 6 beds, Endocrine and Diabetes ICU: 6 beds, Gastrointestinal ICU: 2 beds). The study data was collected from previously mentioned ICUs units.

2.4 Participants

A convenient sample of nurse managers whose number (31) was divided into (1) nurse director, (1) assistant director, (8) unit managers and (21) charge nurses.

2.5 Data Collection Tools

Data of the current study were collected using these three tools:

First tool: Personal data sheet developed by the investigator which includes personal data about nurse managers such as (age, gender, educational level, job title, years of experience in nursing).

Second tool: Agile leadership Knowledge Questionnaire: It was developed by the investigator and guided by [12] and [13]. It was used to assess nurse managers' knowledge regarding agile leadership. It consisted of (22) items divided into six dimensions as follows 1. concept of agile leadership (3items) 2. Importance of agile leadership (3 items) 3. characteristics of agile leader (4 items), 4. agile leadership principles (5 items), 5. dimensions of agile leadership (5 items), 6. Barriers of agile leadership (2 items). The questionnaire was in the form of multiple-choice questions. The questionnaire was in the form of multiple-choice questions. Two -point response was used as following "1 score " for the correct answer, and "zero" for incorrect answer. The nurse manager knowledge was considered good of score $\geq 75\%$, moderate knowledge 50- 75% and poor knowledge of score $\leq 50\%$.

Third tool: Agile leader practices observational checklist: This tool was developed by the investigator and guided by [13] and [14]. It was used to assess agile leader practices among nurse managers and consisted of 47 items covering the following 12 dimensions 1. organizing working environment (5 items), 2. continuous improvement (5 items) 3. humility trait (3 items) 4. Persuasion skills (3 items), 5. Negotiation skills (3 items), 6. Social leadership skills (3 items) 7. wiseness trait (4 items) 8. Decision making skills (5 items) 9. placidness traits (4 items) 10. patience trait (3 items) 11. objectivity trait (5 items) and 12. confidence trait (4 items). Two-point responses of practices "1" (done), "zero" (not done). These scores were converted into percentage scores. The level of agile leadership practices was considered high level $\geq 75\%$ of total scores, while moderate level 50- 75% of total scores and low level $\leq 50\%$.

The tools were checked for validity and reliability, Content validity was established by a panel of three experts from nursing administration department at faculty of nursing, Cairo university. They were asked to examine the data collection tools for content coverage, clarity, wording, length, format, and overall appearance.

In addition, the reliability was determined statistically by testing the internal consistency using Cronbach's Alpha Coefficient test. The Cronbach's Alpha for nurse managers agile leadership knowledge test was (0.86) while nurse managers agile leadership practices observational checklist reliability was (0.90).

2.6 Procedure

Prior to data collection, an official approval was obtained from the research ethical committee of the faculty of nursing- Cairo University, the official permission was obtained from the medical and nursing managers of Al Moneira pediatric university hospital to carry out the current study.

Nurse managers of the selected units were invited to participate in the study, and they were informed by the investigator that participation is completely voluntary with informed consent and there is possibility for withdrawing from the study at any time.

Furthermore, confidentiality of the information was assured. The aim, nature and significance of the study were explained to each participant individually. Then, the investigator obtained their acceptance in a written form.

2.7 Statistical data analysis

The collected data was tabulated, computed and analyzed statistically using Statistical Package for the Social Sciences (SPSS) program version 24. Descriptive statistics in the form of frequency distribution, percentages, mean and standards deviations were utilized.

3. RESULTS

Table 1 shows that the majority (64.5%) of nurse managers were female. The highest percent (51.6%) of them were in the age range of 30 to less than 40 years, while 35.5% of them were aged more than 40 years. As regards to educational background, the highest percentage (58.1 %) of nurse managers had diploma in nursing, while 41.9% of them had bachelor's degrees on other hand, the highest percent (67.7%) of nurse managers were charge nurses, (25.8%) were unit managers while the lowest percent (6.5%) of them were nurse directors.

Moreover, 32.3% of the nurse managers were working in hemodialysis intensive care, while 22.6% were working in neonatal intensive care. Regarding to years of experience, this table illustrate that 45.2% of the nurse managers had more than 15 years of experience, while 29% of them had 10 to less than 15 years of experience.

Table 2 shows that the nurse managers had low mean scores regarding agile leadership knowledge dimensions

Figure 1 shows that the majority of participants had low level in total agile leadership knowledge scores as (61.3%)

Table 3 shows that the nurse managers had low mean scores of agile leadership practices dimensions

Figure 2 illustrates that the majority of participants had low level in total agile leadership practices scores as (96.8%) of nurse managers scored low (< 50%)

Table 4 shows that there was no relation between nurse managers' total agile leadership knowledge and their total practices.

Table 1: Frequency Distribution of nurse managers According to Personal data (n=31)

personal characteristics	No.	%
Gender		
Male	11	35.5
Female	20	64.5
Age		
25-<30	4	12.9
30-<40	16	51.6
40+	11	35.5
Educational qualifications		
Bachelor's degree in nursing	13	41.9
Diploma in nursing school	18	58.1
Position		
Nurse director	2	6.5
Unit manager	8	25.8
Charge nurse	21	67.7
Name of workplace		
Neonatal intensive care	7	22.6
Emergency department	5	16.1
Surgery intensive care	2	6.5
Hemodialysis intensive care	10	32.3
Diabetic and Endocrine intensive care unit	3	9.7
General intensive care unit	2	6.5
gastrointestinal intensive care unit	2	6.5
Years of experience		
<5	4	12.9
5-<10	4	12.9
10-<15	9	29.0
15+	14	45.2

Table2: The Total Mean Scores of Nurse Managers 'Agile Leadership Knowledge Dimensions (n=31)

Dimensions of agile leadership Knowledge	Mean ± SD	Mean %
Concept	0.67 ± 0.48	22.3%
Importance	0.42 ± 0.48	14%
Characteristics	0.45 ± 0.46	11.25%
Principles	0.36 ± 0.45	7.2%
Dimensions	0.43 ± 0.47	8.6%
Barriers	0.68 ± 0.47	34%
Total	10.3 ± 3.2	46.8%

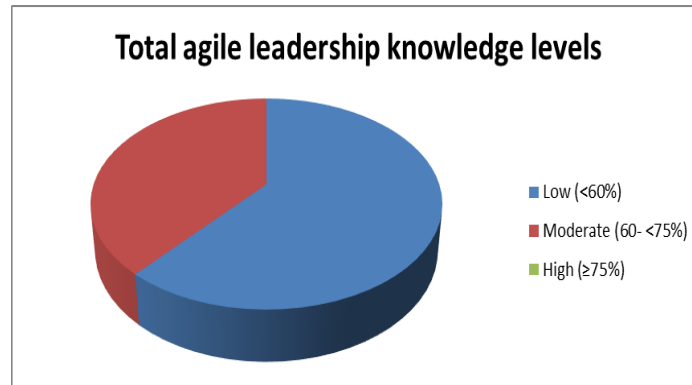


Figure 1: Frequency Distribution of Total Agile Leadership Knowledge Levels Among Nurse Managers (n= 31)

Table 3: The Total Mean Scores of Nurse Managers' Agile Leadership Practices Dimension (n= 31)

Dimensions of agile leadership practices	Mean ± SD	Mean %
Organizing work conditions	0.50 ± 0.44	10%
continuous improvement:	0.41 ± 0.37	8.2%
Humility traits	0.49 ± 0.50	16.3%
Persuasion skills	0.48 ± 0.50	16%
Negotiation skills	0.33 ± 0.41	11%
Social leadership skills	0.28 ± 0.46	9.3%
Wiseness trait	0.32 ± 0.43	8%
Decision making skills:	0.33 ± 0.40	6.6%
Placidness trait:	0.40 ± 0.45	10%
Patience trait	0.54 ± 0.99	18%
Objectivity trait	0.54 ± 0.48	10.8%
Confidence trait:	0.33 ± 0.48	8.25%
Total	19.5 ± 4.1	41.5%

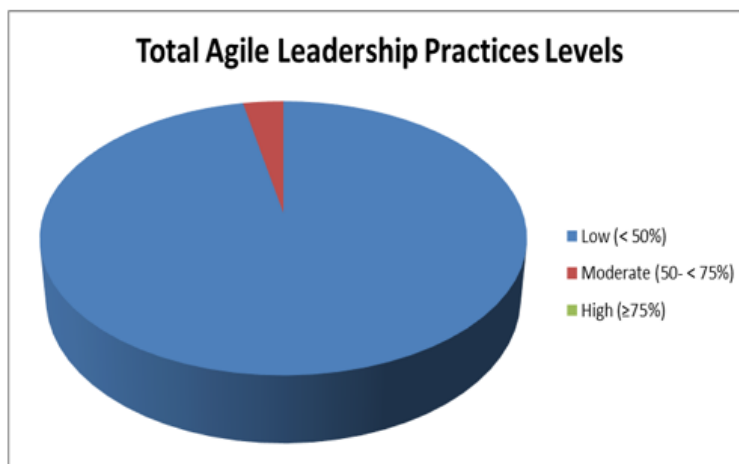


Figure 2: Frequency Distribution of Total Agile Leadership Practices Levels Among Nurse Managers (n=31)

Table 4: Correlation between Nurse Managers Total Agile Leadership Knowledge and Practices (n=31)

Nurse managers total agile leadership knowledge	Nurse managers total agile leadership practices	
	R	P
	0.14	0.42

4. DISCUSSION

Agile leadership contributes positively to organizational performance and can influence an organization's ability to sustain its competitiveness over time and agile leaders must anticipate change, build trust, initiate timely action, and conduct regular evaluations to ensure effective leadership [15]

The present study revealed that more than half of the nurse managers were aged between thirty to less than forty years. This aligns with [13], who found that more than one third were aged between 25-29 years. However, this finding contrasts with [15], who reported that the most significant proportion of respondents (32%) were aged between 41 and 45 years

In addition, the findings showed that the majority of the nurse managers were females. This is consistent with [16], who found more than three quarters of study sample were female. Conversely, [17] indicates that the male demographic forms a significant majority within the sample.

Besides, this study revealed that more than half of the nurse managers held diploma in nursing, this agrees with [18] who showed that most of study sample possessed a diploma in Nursing. However, [2] delineated that regarding the participants' education (65.9%) of them had bachelor's degree.

Furthermore, nearly half of the nurse managers had more than fifteen years of experience. [14] reported that (62.5%) of head nurses had years of experience ranged from 10 to less than 20 years. In contrast, [19] argue that show that only 23.3 percent had experience of 10 years or over.

As regard, the study showed that most of the nurse managers worked in hemodialysis intensive care. This agrees with [20], who demonstrated that the highest percentage of the study' samples (69.8%) at Kidney and Urology areas Conversely, [21] found that more than two-thirds of nurses worked in ICUs.

The current study revealed that nurse managers demonstrated low mean scores across the knowledge dimensions of agile leadership. This finding suggests that agile leadership remains a relatively new concept within the study setting, and that nurse managers possess limited knowledge and understanding of its principles and applications. These findings are consistent with [22] who concluded that half of the nurses' managers had a low perception of agile leadership. In contrast, [14] who revealed a significant increase in the knowledge of agile leadership among head nurses.

Regarding to the participants' knowledge levels in the current study, the findings indicated that nurse managers had a low level of knowledge concerning agile leadership. This result is supported by [23], who found that participants' agile leadership characteristics were at a low level. Conversely, [24] reported that more than half of the study participants demonstrated a high level of agile leadership knowledge.

The current findings show that the nurse managers had low mean scores of agile leadership practices dimensions. From the investigator point of view, this finding may be attributed to nurse managers' limited awareness and understanding of agile leadership principles and strategies, which may negatively affect their ability to apply these concepts in their daily managerial practices. at the same line, [13] reported low improvement in agile leadership skills among head nurses. In contrast, [18] found that nurses demonstrated a moderate level of competency, with the majority of participants reporting their ability to apply the skills associated with agile leadership effectively.

Regarding the participants' practices levels, the current study revealed that nurse managers had low level regarding agile leadership practices. This congruent with [25] indicated slow improvement in total levels of head nurses' agile leadership practice. In contrast, [5] found that approximately two-thirds of head nurses exhibited positive agile leadership behaviors and indicated that agile leadership was practiced across different organizational levels.

Finally, the results revealed that there was no statistically significant correlation between nurse managers' agile leadership knowledge and practices. This agrees with [13] who display that there was no statistically significant correlation of head nurse regarding agile leadership knowledge and skills.in contrast, [26] and showed that there was statistically significant positive correlation among head nurses' agile leadership knowledge and practices.

5. CONCLUSION AND RECOMMENDATIONS

In the light of the present study findings, it can be concluded that the majority of participants had low level of knowledge regarding agile leadership, as well as a low level of agile leadership practices.so, nurse managers had low perception regarding agile leadership competencies. Furthermore, the study revealed no statistically significant relationship between nurse managers' total agile leadership knowledge and their total agile leadership practices. Additionally, at the level of hospital administration, implement mandatory and continuous in-service education and training programs on agile leadership to enhance nurse managers' awareness and understanding of agility in healthcare practice., develop comprehensive guidelines on practicing agile leadership in health care settings, develop policies that emphasize the importance of agile leadership practices on daily operations. integrate agile leadership concepts and competencies into nursing curricula, encourage nurse managers to participate regularly in workshops, seminars, and professional development programs related to agile leadership to enhance their knowledge and practical skills, for nursing research, replicate the study with a larger sample size and in different settings to confirm and generalize the findings, conduct

research studies to identify barriers in practice settings that hinder the implementation of agile leadership and develop strategies to overcome them.

6. DECLARATIONS

6.1 Ethical Considerations

A primary official approval was obtained from the research ethics committee, Faculty of Nursing, Cairo University, to conduct the proposed study then an approval from the director of Al Moneira hospital. All participants reported that Participation in the study is voluntary. The ethical considerations include explaining the purpose, nature of the study and stating the possibility to withdraw at any time. To ensure confidentiality for the participants; data will not be accessed by any other party without taking permission of the participants.

6.2 Availability of data and materials

The data that support the findings of this study are available from the corresponding author upon reasonable request.

6.3 Competing Interests

The authors declare that they have no competing interests.

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