



## Polarity Management Skills among Unit Managers at Mansoura University Children's Hospital

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**Abstract: Background:** Polarities are a part from the day which involved in every important issue and every important decision. Polarity is a theoretical frame for dealing with complex challenges that provide nursing managers a new vision for how to deal with these professional issues. **Aim:** To assess polarity management skills among unit managers at Mansoura University Children's Hospital. **Methods:** A descriptive, A cross-sectional approach was used employing a sample of 63 unit managers at Mansoura University Children's Hospital. **A tool of data collection was;** Polarity Management Skills Test. **Results:** all unit managers (100%) had poor level polarity management skills. **Recommendations:** Adopting polarity management in hospitals as a means for evaluating the quality of health care services through collaboration with quality management units in hospitals. Conducting polarity management training program, workshops periodically for unit managers to improve their skills, emending the concept of polarity in cultures of healthcare settings.

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### 1. Introduction

Polarities and polarity management are critical components of management today. The ability to appropriately evaluate downsides and maintain a balance between the multiple poles of a polarity is a critical talent for every management. Polarities are interdependent pairings of values or points of view that are quite different, and may look as opposites and competing, yet need each other over time to realize a greater goal or conclusion that neither can achieve alone. (Yohemas, 2020). Children in hospitals may encounter emotional and behavioral issues as a result of their medical illnesses, discomfort, or lengthy stays away from home. (Friedrichsdorf and Goubert, 2020, Pem, 2021).

One of the most challenges organizations and unit managers' face on daily basis is making judgments that may appear uncontrollable. They are constantly faced with problems that cannot be avoided and cannot be resolved, These are termed as polarities (Mintzberg et al., 2020).

Polarities are pairs of strongly opposing values or points of view that rely on one another for free energy. They may appear to be diametrically opposed, yet over time, they compete with one another to reach a larger aim or outcome than either

could achieve on its own. Polarities refer to energy systems that cannot be halted, avoided, or solved (Thomas, 2024).

Polarity management acknowledges that polarities are inherent in nursing practice and healthcare systems. Rather than viewing them as problems to be solved, unit managers are encouraged to see them as natural and ongoing tensions that require attention and management (Mazzarella and Gotzner, 2021).

Polarity management assist unit managers navigate these changes by identifying and balancing polarities that arise during periods of transition (Fish and Bergquist, 2022). By using polarity mapping, which was developed by Barry Johnson (1992) as a way to combine the benefits and drawbacks of opposing ideas to create a flow that maximizes the positive aspects while minimizing the negative ones, it encourages them to embrace innovation, adapt to change, and discover innovative solutions that integrate various perspectives and goals (Pesut et al., 2023).

The Polarity Map, which offers a framework for identifying what we know, what we don't know, what is certain, and what is uncertain, may be used as a brief brainstorming exercise at first and then as a

foundation for more in-depth discussions among individuals with different viewpoints about how things should be. When paired with coaching questions, the mapping exercise gives groups a focus to discuss various viewpoints, such as what's vital in this situation and what is fear if this isn't taken into account. What is unclear, what may be imagined? And what isn't certain? (Wilkerson and Trellevik, 2021).

When making a decision, the polarity map approach is crucial for identifying the advantages and drawbacks of opposing elements, or poles that work against one another, particularly when the validity of the two options is about equal. A business may also better understand the inherent opposition that comes with change initiatives that aim to more completely embrace and anticipate the opposing pole by creating a polarity map (Sapiro, 2024).

### Significance of Study

Many health-care organizations are facing the challenge of transforming the way they work. From these organization Mansoura University Children's Hospital, that provides a wide spectrum of health service for children who have serious health problems, and those consider vulnerable patients which require the highest level of quality care that make staff under pressure all the time and dissatisfaction leading to confront with numerous dilemmas. Traditional problem solving not effective to overcome these dilemmas and require implementing new strategies as Polarity management allows unit managers to treat these issues as interdependencies that must be managed rather than individual problems that must be handled. If managed properly, this strategy will unite the workforce, improve quality of patient care, striving stability in their organizations while accepting the change required to go forward around its larger mission of making a difference in the health of society, reduce our biggest worry. So the current study aims to assess polarity management skills among unit managers at Mansoura University Children's Hospital

### Aim of the study

This study aims to assess polarity management skills among unit managers at Mansoura University Children's Hospital

## 3. Methods

### Research design:

This study research methodology was descriptive cross sectional design

### The study setting :

The study was carried out in all inpatient units at Mansoura University Children's Hospital (MUCH) which affiliated to Mansoura University Hospitals and provides a wide spectrum of health service for children.

### Study participants:

A convenience sample was utilized which includes all available unit managers (n=63) during collected data.

### Tool of data collection:

Data was collected using polarity Management Skills Test.

### Tool (I): Polarity Management Skills Test

It was designed by the researcher guided by literature review as (Rushdy et al., 2021, Van Wyngaard, 2012; Wesorick, 2014). It aimed to assess unit managers' skills and ability about polarity management. It consists of two different tests namely, the practical test and polarity map application test.

### First part: The practical test:

It aimed to assess study unit managers skills about ability to differentiate between polarity and problem. It consisted of nine examples and the researchers ask them to differentiate if these examples were problems or polarity.

### Second part is a Polarity Map Application Test

It aimed to assess study unit managers skills about ability to identify parts of the polarity map. It consisted of eight statements, and the researcher ask unit managers to set an example for polarity commonly faced by them and identifying the steps of polarity mapping to manage this polarity

### Scoring system

Each statement will be scored (1) for right answer and (zero) for false answer. One point was given for each right answer. The scoring system of polarity management skills test tool based on statistically cutoff point ranged from (0-17) and was categorized into three levels as the following:

- Poor level: < 60% (0-9)
- Average level: 60-75% (10-13)
- Good level: >75% (14-17)

### Validity and reliability

#### Validity:

Five experts with expertise in nursing administration reviewed the instruments after they were translated into Arabic to ensure that they were clear, relevant, applicable, comprehensive, easy to understand, and feasible to use. They also assessed each item separately to ensure that it was appropriate and relevant for testing the objectives of the instrument, and considering their suggestions, the required adjustments were done, such as increasing the number of examples in the practical test from three to nine. Based on the opinions of experts, the questionnaire's face validity was determined and it

was 92% for polarity management skills test questionnaire.

#### Reliability:

The pilot participants evaluated the instruments in order to determine Cronbach's Alpha, which came out to be (0.844) for the polarity management skills test.

#### Pilot study

Before starting a primary investigation, a pilot study using the data gathering instruments was carried out. At Mansoura University Children's Hospital, A pilot study was conducted with seven unit managers (ten percent) of the research sample. They were eliminated from the research after being chosen at random. The pilot study's objectives were to assess the questions' viability and clarity, spot any roadblocks and issues during data collection, evaluate the language's clarity, and calculate the amount of time needed to complete each question. Unit managers needed around twenty to twenty-five minutes to complete all of the surveys.

#### Ethical Considerations:

Ethical approval was given by the Mansoura University Faculty of Nursing's Research Ethics Committee. The hospital's responsible administrator granted formal approval to conduct the study. Every person who agreed to take part in the study gave written informed permission after being informed of its purpose and design. Each participant was informed that participation in the study was entirely voluntary and that they might stop at any time. At every stage of the research's data collection, Participants were given assurances regarding the confidentiality of the collected data and the privacy of the research sample.

#### Data Collection:

The questionnaire papers (I) was delivered to all available unit managers. The researcher explained the purpose of the study as well as how to fill out the questionnaire. Unit managers completed the tool separately at once, reading the questions and filling out the sheets which took 25-30 minutes. The data gathering procedure began in early January 2024 and ended in late February 2024.

#### Data Analysis:

The acquired data was coded, entered, organized, and analyzed using SPSS (Statistical Package for Social Science) version 25 (IBM Corporation, Armonk, NY, USA). The range, mean, and standard deviation were determined for quantitative data. For qualitative data, which represent a categorical collection of data by frequency, percentage, or proportion of each category (Dawson and Trapp, 2001).

### 3. Results:

Table (1) illustrates personal characteristics of the studied unit managers. It discovered that more than two third (65.1%) of unit managers' age were between (30-40) years old with mean score (36.98±5.27), all of them were women (100%) also more than half of them (52.4%) had years of experience ranged from (1-10) years with mean score (10.27±5.35). Concerning unit managers' educational qualifications, majority of them (68.3%) had bachelor degree and (61.9%) of them don't attend any previous training program about management.

Table (2) illustrates polarity management skills test mean scores of the studied unit managers. It showed that the total polarity management skills mean core was 3.94±1.63. The highest mean score was 3.73±1.63 as regard to the practical test, while the polarity map application test mean score was 0.21±0.41.

Table (3) illustrates total polarity management skills level of the studied unit managers. It showed that all unit managers' skills were at poor level (100%).

**Table (1): Personal characteristics of the studied unit managers**

Personal characteristics	The studied unit managers (n=63)	
	No	%
<b>Age years</b>		
• 28-30	9	14.3
• >30-40	41	65.1
• >40-51	13	20.6
Range	28-51	
Mean±SD	36.98±5.27	
<b>Gender</b>		
• Women	63	100
• Men	0	0
<b>Experience years</b>		
• 1-<10	33	52.4
• 10-<20	23	36.5
• 20-22	7	11.1
Range	1-22	
Mean±SD	10.27±5.35	
<b>Educational qualification</b>		
• Bachelor degree	43	68.3
• Master degree	7	11.1
• Others	13	20.6
<b>Attending any previous training program about management?</b>		
• No	39	61.9
• Yes	24	38.1

**Table (2): Polarity management skills test mean scores of the studied unit managers**

Polarity Management Skills Test sub items (Each item was scored from 0-1)	Polarity management skills test mean scores of the studied unit managers	
	No. (Score)	Range Mean±SD
A-The practical test	9 (0-9)	0-7 3.73±1.63
B-Polarity map application test	8 (0-8)	0-1 0.21±0.41
<b>Total polarity management skills score</b>	<b>17 (0-17)</b>	<b>0-7 3.94±1.63</b>

**Table (3): Total polarity management skills level of the studied unit managers**

Total polarity management skills level of the studied unit managers (n=63)		
	n	%
Poor level (0-9)	63	100
Average level (10-13)	0	0
Good level (14-17)	0	0

N.B. Polarity Management Skills level was classified into; poor level (<60% of scores), average level (60-75% of scores) and good level (> 75% of scores)

#### 4. Discussion

Polarity management preserves the key of coping with paradox; it is to realize that there is a class of issues that cannot be permanently addressed, since they require shifting back between two opposing yet interdependent states (Lewis and Smith, 2023).

The goal of the present study was to assess polarity management skills among unit managers at Mansoura University Children's Hospital. The result in present study revealed, all unit managers' skills was at poor level. From the examiner's opinion, the poor level of skills about polarity management may attributed to most of unit managers don't aware that most of situation that are facing at workplace called polarity and don't understand the difference between problem and polarity. For this reason, they using traditional technique for solving complex persistent issues which not suitable for managing these issues.

This result was congruent with Saleh and Ali (2023) who explored effect of polarity thinking training program on intra-professional collaboration among nursing staff, conducted at Sohag University Hospital, who asserted that the majority of the participants were poor in applying a polarity map

application test. This was due to all nursing staff deal with any conflicting issue as a problem.

This result also was in harmony with the study of Lewis and Smith, (2022) who conducted a study about navigating paradox and developed the polarity assessment tool, which emphasizes (both/and) thinking and promotes the building of leverage for the complex and critical challenges that all leaders, teams, and organizational systems face. The polarity mapping tool provides an accurate method for measuring the dynamics of complex and interconnected systems.

This result goes on track with Elsayed et al. (2023) who examined effect of polarities management educational program on head nurses' performance, conducted at Tanta International Teaching Hospital and indicated that more over two-thirds of the head nurses had low polarity management practices. This may be due to head nurses willingness to develop deal with different issues as well as lack of adequate training for polarity mapping.

Also, this finding was supported by Sorour et al. (2023) who found that, all head nurses' unawareness of polarity management and polarity mapping, also, all participants had poor practice levels when it came to using polarity management, and they exposed that, in terms of polarity mapping skills,

Also this was in the same line with Ahmed et al. (2022) who conducted study about polarity based model for guiding medical school strategy during crisis—a cross sectional qualitative study which held with 108 medical educators from 22 countries and showed how polarity mapping using the polarity management model provides a different viewpoint on crisis decision-making. It is necessary to regard managing educational crises as polarity rather than as a problem for creating decisions. Also it was advised that unit managers must participate in a mapping process and be alert of warning signs that might result from concentrating too much on one of the poles.

This result was compatible with the study of Adams et al. (2020) who accompanied study about looking through a new lens, exploring the interdependent relationship between interprofessional education and collaborative practice with polarity thinking who disclosed that by utilizing the polarity map as a guide, it's essential to generate early warning signs and actions to encourage values, which improved the use of poles to create actual, efficient, and integrated healthcare.

This result was congruent with Taie (2014). in his study about designing and validating protocol for managing polarities in healthcare conducted in one University hospital (El-Demerdash Hospital), also in



one Health Insurance hospital (El-Nasr Hospital) and showed that the entire studied sample was not conscious of the difference between problem and polarity before awareness sessions and the majority of the sample became completely aware of this difference after training.

### Conclusion

This study concluded that all unit managers' were deficit skills regarding polarity management.

### Recommendations:

- Adding polarity thinking model in internship students' training to practice them on diagnosing and managing of healthcare polarities at their unit
- Adopting polarity management in hospitals as a means for evaluating the quality of health care services through collaboration with quality management units in hospitals
- Emending the concept of polarity in cultures of healthcare settings.
- Conducting polarity management training program, workshops periodically for unit managers to improve their skills.

### Further research:

- Effect of training program on polarity management knowledge and Skills.
- Impact of polarity management training program on quality of patient care.
- Using of polarity thinking for handling health teams' dysfunctions.

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