

The Value of Reflection in Nursing Practice

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ABSTRACT

Background: Reflection is a proven process to help nurses acquire the skills and competencies needed for clinical training. In general, the goal of reflection in clinical education is to support the development of self-directed health professionals in enhancing new skills through reflection; **Aim:** To assess the value of reflection in nursing practice. **Research Design:** A descriptive correlation design was utilized. **Setting:** This study was conducted at Dar al Fouad Hospital on 6th October City. **Subjects:** A purposive sample (145) of nurse managers, clinical nurse educators, and staff nurses. **Tools:** Two tools were used to collect data in this study. The first tool was the nursing personnel's level of knowledge questionnaire. The second tool was the nursing personnel's perception questionnaire about reflection. **Results:** 80.5% of the study sample had an unsatisfactory knowledge level about reflection in nursing practice, and 98% of the studied sample had a positive perception of reflection. **Conclusion:** There is no significant correlation between total knowledge and total perception of the study sample. There is a significant direct correlation between knowledge age and experience. Also, there is a significant direct correlation between knowledge and training while there is no significant correlation between perception and personal data. **Recommendations:** Develop a nursing curriculum in which the nursing students are actively involved in their education and training plans. As well as incorporate reflective practice into performance reviews and professional development plans, encouraging nurses to engage in continuous self-assessment and improvement.

Keywords: Nursing, Practice, Reflection, The Value.

Introduction:

Reflection is the process by which individuals critically assess their thoughts, feelings, and actions to gain insights and learn from their experiences. It involves a conscious effort to examine one's responses, decision-making processes, and interactions in various situations. In nursing, reflection is not merely a passive recollection of events but an active engagement with experiences to enhance clinical practice and improve patient outcomes. This process helps nurses to bridge the gap between theory and practice, fostering a deeper understanding of their roles and responsibilities in patient care (Fraser et al., 2024).

The primary aim of reflection in nursing is to facilitate continuous learning and professional development. Through reflection, nurses can evaluate their clinical performance, identify areas for improvement, and develop strategies to enhance their practice. Reflection encourages critical thinking, allowing nurses to question assumptions, explore alternative perspectives, and apply evidence-based knowledge in clinical decision-making. Moreover, reflective practice fosters a culture of lifelong learning, where nurses remain open to new ideas and adaptable to the ever-changing healthcare landscape. By engaging in reflection, nurses can improve their clinical competence, enhance patient care, and contribute to the overall advancement of the nursing profession (Sherwood et al., 2023).

The nurses can identify patterns, recognize potential errors, and develop strategies to prevent future mistakes by reflecting on their experiences. This proactive approach to learning contributes to patient safety and quality of care. Additionally, reflection supports emotional resilience, helping nurses cope with the stress and emotional demands of their profession. By processing their experiences, nurses can manage their emotions, reduce burnout, and maintain their mental well-being (Dresser, Teel & Peltzer, 2023).

Engaging in reflective practice offers numerous benefits for nurses. Reflection encourages nurses to think critically about their practice, leading to deeper analysis and better clinical decision-making. By learning from their experiences, nurses can enhance their clinical skills and provide more effective and compassionate care to patients. Reflective practice supports continuous professional development, helping nurses to expand their knowledge and expertise. Reflection provides an outlet for processing emotions and managing stress, contributing to nurses' mental well-being and reducing burnout. Reflection promotes ethical decision-making by encouraging nurses to consider the moral implications of their actions and decisions (Joseph et al., 2023).

Reflection is a vital component of nursing practice that enhances clinical competence, promotes personal and professional growth, and improves patient care. By engaging in various types of reflection and utilizing structured models, nurses can critically analyze their experiences, learn from them, and apply their insights to future practice. While reflection poses certain challenges, its advantages in fostering a culture of continuous learning and improvement make it an invaluable tool in nursing. Ultimately, reflective practice contributes to the advancement of the nursing profession and the overall quality of healthcare, benefiting both patients and healthcare providers (*Froneman, du Plessis, & van Graan, 2023*).

Significance of the study:

Enhancing nursing education and professional development, which assesses the value of reflection in nursing practice, holds considerable significance for nursing education and professional development. Evaluating nursing personnel's level of knowledge about reflection provides insights into current educational gaps and opportunities for curriculum enhancement. Understanding how well nurses grasp the concept and practice of reflection can inform the development of targeted training programs and educational interventions that foster reflective practice. Such enhancements can lead to improved critical thinking, problem-solving skills, and clinical judgment among nursing professionals, ultimately leading to higher-quality patient care (*King et al., 2021*).

Reflection in nursing practice is a crucial component that can significantly impact clinical practice and patient outcomes. By determining the value of reflection as perceived by nursing personnel, reflection allows nurses to learn from their experiences, both positive and negative, leading to continuous improvement in practice. The insights gained from this study can be used to advocate for the integration of structured reflection opportunities in clinical settings, thereby enhancing the overall effectiveness of nursing practice and patient safety (*Lilienfeld & Basterfield, 2020*).

Reflection promotes a culture of continuous improvement within healthcare organizations. Reflection encourages a mindset of lifelong learning and adaptability, which are essential in the ever-evolving healthcare landscape. By highlighting the perceived benefits of reflection among nursing personnel, healthcare institutions should adopt policies and practices that encourage regular reflective activities, such as debriefing sessions, peer reviews, and reflective journaling. This cultural shift towards continuous improvement can lead to more innovative and adaptive healthcare practices (*Tolosa-Merlos et al., 2023*).

Reflection in nursing practice is closely tied to ethical practice and professional integrity. Assessing nursing personnel's knowledge and perceptions of reflection underscores the importance of reflective practices in making ethical decisions and maintaining professional standards. Reflection helps nurses critically evaluate their actions and decisions, fostering a deeper understanding of ethical principles and their application in complex clinical scenarios (*Seidlein & Kuhn, 2023*).

The practice of reflection is also crucial for supporting the emotional well-being and resilience of nursing personnel. Reflective practices provide nurses with a means to process their experiences, cope with stress, and manage the emotional demands of their profession. Assessing the value of reflection from the perspective of nursing personnel highlights the role of promoting mental health and reducing burnout. The insights gained can inform the development of wellness programs and support structures that incorporate reflection as a key component, helping nurses maintain their emotional well-being and sustain their commitment to the profession (*Chidi et al., 2024*).

Influence policy and organizational practices within healthcare settings. By providing evidence on the knowledge and perceived value of reflection among nursing personnel, healthcare organizations develop frameworks that integrate reflection into routine nursing activities, performance evaluations, and professional development plans. These policies can ensure that reflection becomes standard practice, fostering a more thoughtful, responsive, and adaptive nursing workforce (*Dufour & Duhoux, 2024*).

The value of reflection in nursing practice is multifaceted. It enhances nursing education and professional development, improves clinical practice and patient outcomes, promotes a culture of continuous improvement, enhances ethical practice and professional integrity, supports emotional well-being and resilience, informs policy and organizational practices, and advances nursing research. Providing a comprehensive understanding of the knowledge and perceived value of reflection among nursing personnel contributes to the overall advancement of nursing practice and the well-being of both patients and healthcare providers (*Joseph et al., 2023*).

Aim of the Study:

The study aims to assess the value of reflection in nursing practice through the following objectives: -

1. Assess nursing personnel's level of knowledge about reflection.
2. Determine the value of reflection in nursing practice as perceived by nursing personnel.

To fulfill the aim of this study, the following two stated research questions were formulated:

Research Questions:

Q (1): What is the nursing personnel's level of knowledge about reflection?

Q (2): How are nursing personnel perceiving the value of reflection in nursing practice?

Subject and methods:

Research design: A descriptive research design was used to carry out the current study.

Setting: The study was conducted at Dar Al-Fouad on 6th October, in Egypt, it offers cardiothoracic, general surgery, cardiology, oncology, liver and kidney organ transplant, and orthopedic departments,

Subjects: The study sample comprises all nursing personnel (N=149), consisting of three groups.

1st Group: Nurse managers: It Included the nursing director, assistant nursing director, head nurses, and assistant head nurses, (N=43). It included both genders of nurse managers who had at least two years of nursing experience in the current position, the researcher excluded those who attended previous training about reflection.

2nd Group: Clinical nurse educators: It Included the head of the education department and clinical nurse educators, (N=4). The inclusion and exclusion criteria, were the same as mentioned previously for the nurse managers.

3rd Group: staff nurses: It included bachelor's degree nurses and associate degree nurses (N=102). It included the staff nurses who have at least one year of experience in the current hospital, the researcher excluded those who attended previous training about reflection.

Tools for data collection: Two tools were used for collecting data included.

Tool I: Nursing Personnel's Knowledge Questionnaire About Reflection in Nursing Practice:

Part 1: Personal data: This part included personal data of nursing personnel such as age, years of experience, gender, level of education in nursing, current position, attended previous training about reflection.

Part 11- Nursing Personnel's Knowledge Questionnaire About Reflection in Nursing Practice: This tool was developed by the researcher based on the review of the related literature, (*Radović et al., 2023; Torre et al., 2023*). It included the definition of reflection, types of reflection, reflection practice benefits, etc.

Scoring System: The nursing personnel opinionnaire was scored (one) for the correct answer and (zero) was given for the incorrect answer, the total score was 20, and the cut point was done at 70% = 14 points, the total knowledge score was calculated as follows:

- Satisfactory level of knowledge ≥ 14 points ($\geq 70\%$).
- Unsatisfactory level of knowledge < 14 points ($< 70\%$).

Tool II - Nursing Personnel's Perception Questionnaire About Reflection: This tool was developed by the researcher based on the review of related literature, (*López-Deflory et al., 2023; Matahela & van Rensburg, 2023*), It was used to assess nursing personnel's perception of the value of reflection in nursing practice.

Scoring system: Nursing personnel responses were measured on a 3- points Likert scale ranging from, 3=Agree, 2=neutral, 1=disagree, total score (of 96), All perception questionnaire items were positively worded which made a score (of 78) except items (6,9,15,17,20,25), which were reversed items with a score (6) and the cut point was at 70%= 68 points.

- Positive level of nursing perception > 78 grades ($> 70\%$).
- Negative level of nursing perception ≥ 78 grades ($\geq 70\%$).

Validity of the tools: Face and content validity for the study tool were done. Two tools were translated into Arabic and were tested by a jury group of three specialized in nursing education from two universities, one expert from Cairo University and two experts from Damanhur University, through an opinionative sheet to measure the face and content validity of the tools.

Face validity: It is the extent to which a test is subjectively viewed as covering the concept that study tools were used to measure. It refers to the transparency or relevance of a test as it appears to test participants. Jury opinions were elicited regarding the tools' format, layout, parts, and scoring system. The responses were agreeing and disagreeing. In addition to their comments.

Content validity: Content validity is the extent to which an instrument or test measures an intended content area. Content validity was conducted to determine the appropriateness of each item to be included in the tools and to determine the agreement of about the translation of each item of the questionnaire sheet. It was evaluated by either comparing the content of the instrument with the literature or by a panel of experts. The responses were agreeing and disagreeing. Based on the jury recommendations minor modifications were made.

Reliability of the tools: Tools were examined by assessing their internal consistency by Cronbach's alpha.

First tool: Nurses' level of knowledge Questionnaire about reflection yield Cronbach's alpha showed (0.74), which indicated acceptable reliability.

Second tool: Nursing Personnel's Perception Questionnaire About Reflection showed (0.81), Which indicates good internal consistency.

Preparatory Phase: The phase started from January 2023 till March 2023. The researcher reviewed previous, current, national, and international related literature, and theoretical knowledge of various aspects of the study using textbooks, articles, internet, periodicals, and magazines to develop tools for data collection.

Pilot Study: A pilot study was conducted on 10% of the study subjects (14 nursing personnel), they were selected randomly. From the beginning of August 2023 and completed by the end of August 2023. The pilot study aimed to confirm the clarity, and applicability of the tools and to estimate the time required for fulfilling the questionnaire sheet. Based on the pilot study, no modifications were required, and final versions of both tools were prepared. So nursing personnel from the pilot study were included in the entire study.

Field Work: The actual field work started at the beginning of September 2023 and was completed by the end of October 2023. The researcher met the Director of Nursing Dar Al-Fouad Hospital, to explain the aim of the study to gain approval for Data collection. The researcher collected the data by himself by meeting nurse personnel and explaining the purpose of the study to them in their setting. The questionnaire sheet was completed by the nursing personnel. The researcher went to the mentioned hospital on the day shift three days per week. The time needed to complete both study tools ranged between (25 - 40) minutes. The researcher checked the completeness of each filled sheet after the nurse educators completed it to ensure the absence of any missing data.

Ethical considerations: Prior study's conduct, approval was obtained from the scientific research ethical committee at the Faculty of Nursing Helwan University. In addition, approval was obtained from the Chief executive officer and Director of Nursing at Dar Al-Fouad Hospital for data collection. The nursing personnel were informed about the aim of the study. Anonymity and confidentiality were guaranteed. Written consent was obtained from the nursing personnel before inclusion in the study. Nursing personnel were informed that they were allowed to participate or not in the study and that, they had the right to withdraw from the study at any time.

Statistical Design: Data collected from the studied sample was revised, coded, and entered using a PC. Computerized data entry and statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) version (26.0). Numbers and percent were calculated for qualitative variables, and means, and standard deviations were calculated for quantitative variables. The Pearson correlation coefficient was used for relations between quantitative variables while the Chi-square correlation was used for relations between qualitative variables. Any test was considered significant if p-value <0.05.

Results:

Table (1): shows that staff nurses and nurse managers were in the age group 20-29 respectively. While half (50%) of nurse educators their age ranged between 30-39 years old. Also, more than half (65.7% & 55.8%) of staff nurses and nurse managers respectively, and half (50%) of nurse educators were males. Furthermore, the majority (91.2%) of staff nurses, three-quarters (75%) of educators, and about two-thirds (72.1%) of nurse managers had a bachelor's degree in nursing and no one had previous training in reflection.

Figure (1): shows that the mean age for the nurse managers was 34.7 years while it was 33.5 for nurse educators and 25.6 for staff nurses.

Figure (2): shows that the mean years of experience for the nurse managers was 8.6 years while it was 9.2 for the educators and 2.1 for staff nurses.

Figure (3): shows that more than three quarters (80.5%) of the study sample had an unsatisfactory knowledge level about reflection in nursing practice. While only (19.5%) of them had a satisfactory level.

Figure (4): reveals that the majority (98%) of the studied sample had a positive perception of reflection.

Figure (5): shows that the mean percent score of perception was the majority of the study sample's total perception mean percentage was (90.3%). Meanwhile, it was (52.9%) for the total knowledge.

Table (2): indicates that there is no significant correlation between total knowledge and total perception of the study sample.

Table (3): indicates there is a significant direct correlation between knowledge and training while there is no significant correlation between perception and personal data.

Figure (6): indicates that there is a significant direct correlation between knowledge and age.

Figure (7): indicates that there is a significant direct correlation between knowledge and experience.

Table (1): Personal data of studied sample (N=149)

Personal data	Staff nurses (N=102)		Nurse Educator (N=4)		Nurse Manager (N=43)	
	No.	%	No.	%	No.	%
Age						
20-29	91	89.2	1	25.0	17	39.5
30-39	9	8.8	2	50.0	15	34.9
40-49	1	1.0	1	25.0	9	20.9
50-60	1	1.0	0	0.0	2	4.7
Mean \pmSD	25.6\pm4.9		33.5\pm7.8		34.7\pm8.5	
Gender						
Male	67	65.7	2	50.0	19	44.2
Female	35	34.3	2	50.0	24	55.8
Level of education in nursing						
Associate degree	4	3.9	0	0.0	1	2.3
Bachelor's degree	93	91.2	3	75.0	31	72.1
Masters	2	2.0	0	0.0	5	11.6
PhD	3	2.9	1	25.0	6	14.0
Years of experience						
1- 4	95	93.1	1	25.0	11	25.6
5+	7	6.9	3	75.0	32	74.4
Mean \pmSD	2.1\pm2.3		9.2\pm7.2		8.6\pm6.1	
Attended previous training about reflection						
No	102	100.0	4	100.0	43	100.0
Yes	0	0.0	0	0.0	0.0	0

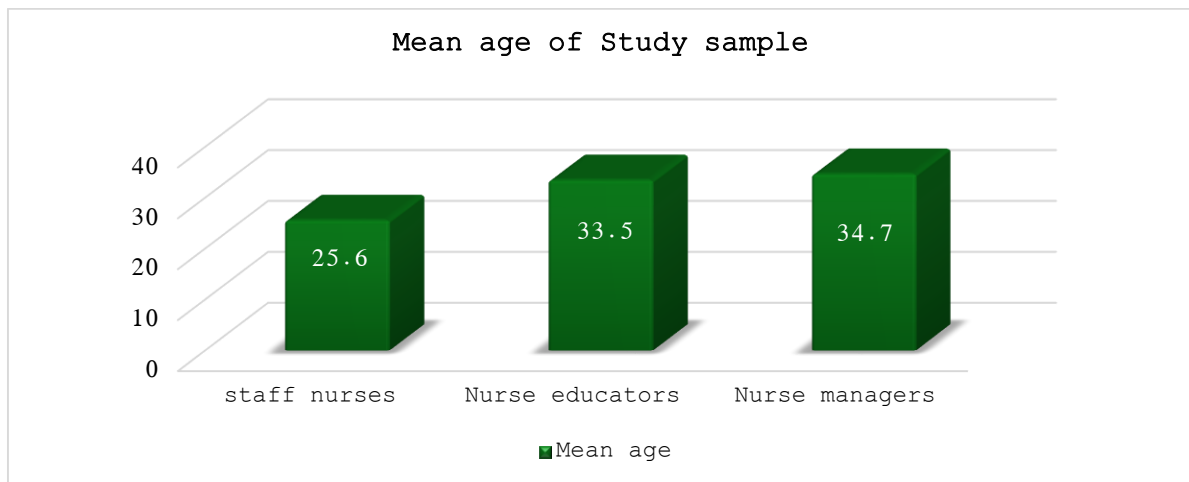


Figure (1): The mean age of the studied sample.

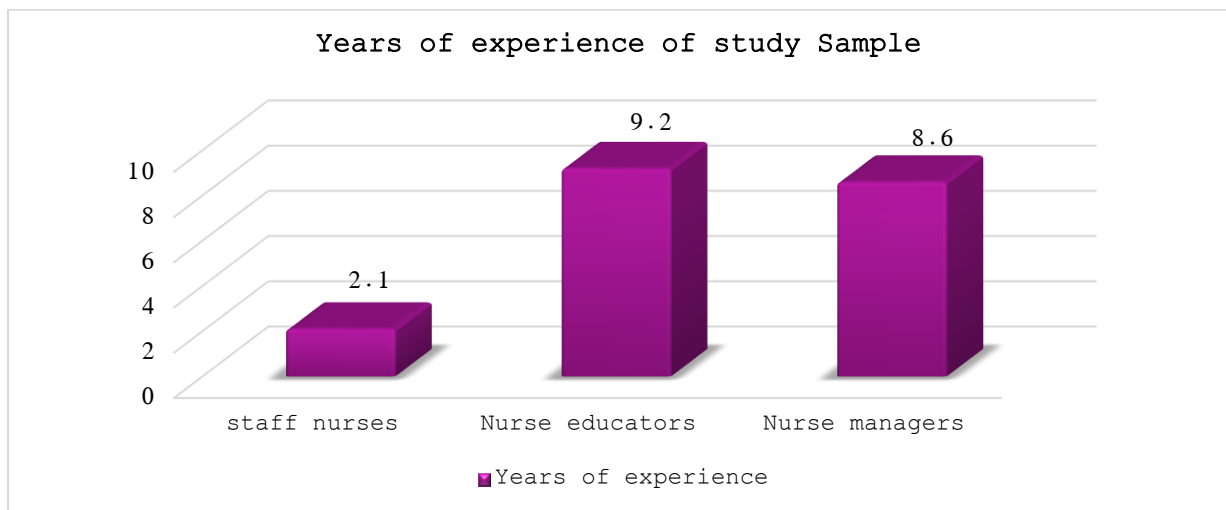


Figure (2): Years of experience of the study sample

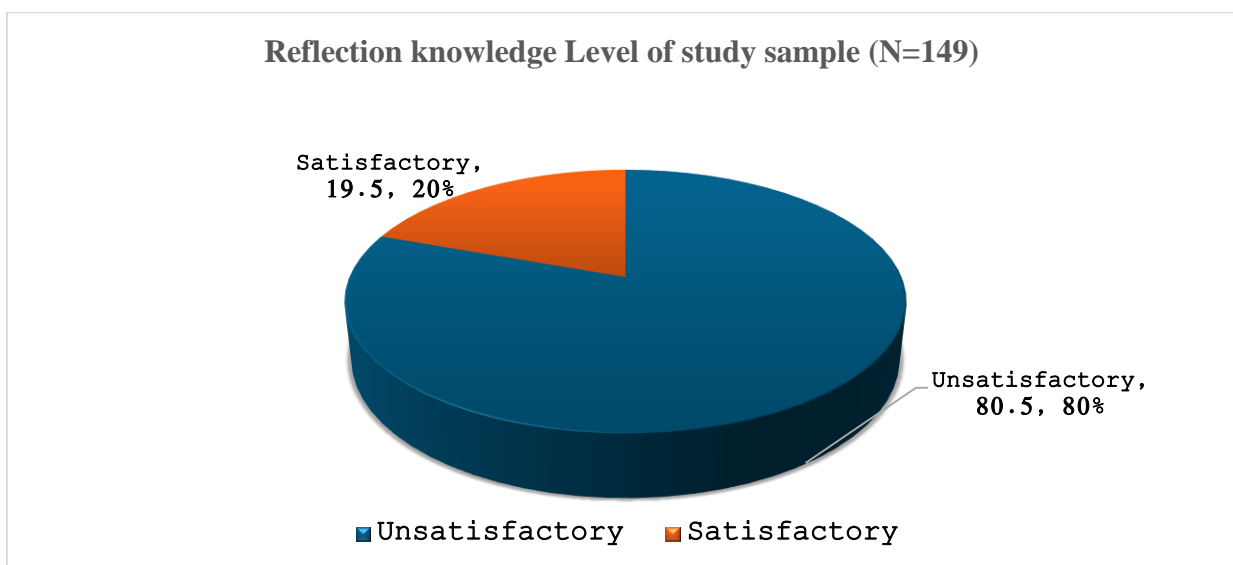


Figure (3): Total Knowledge level of the study sample.

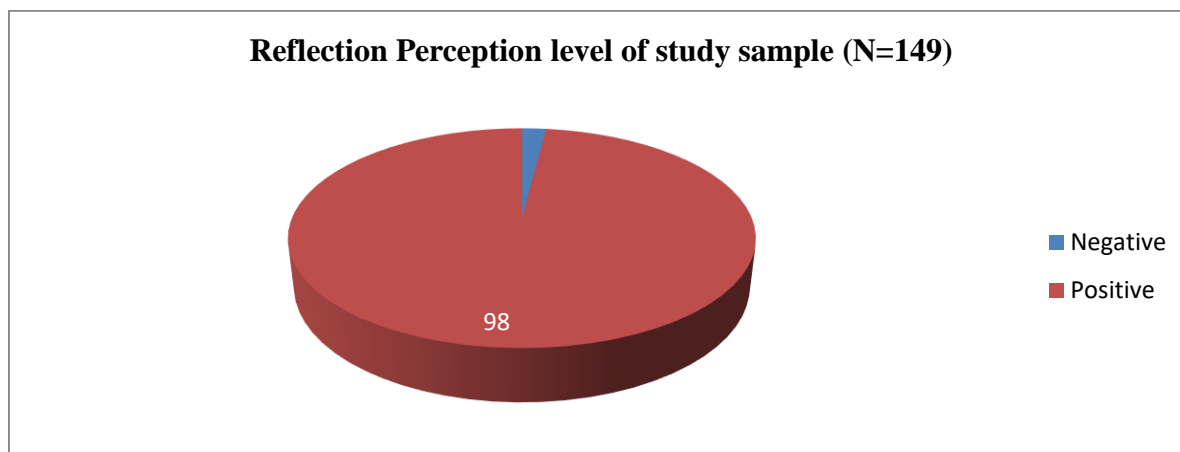


Figure (4): Perception level of the studied sample

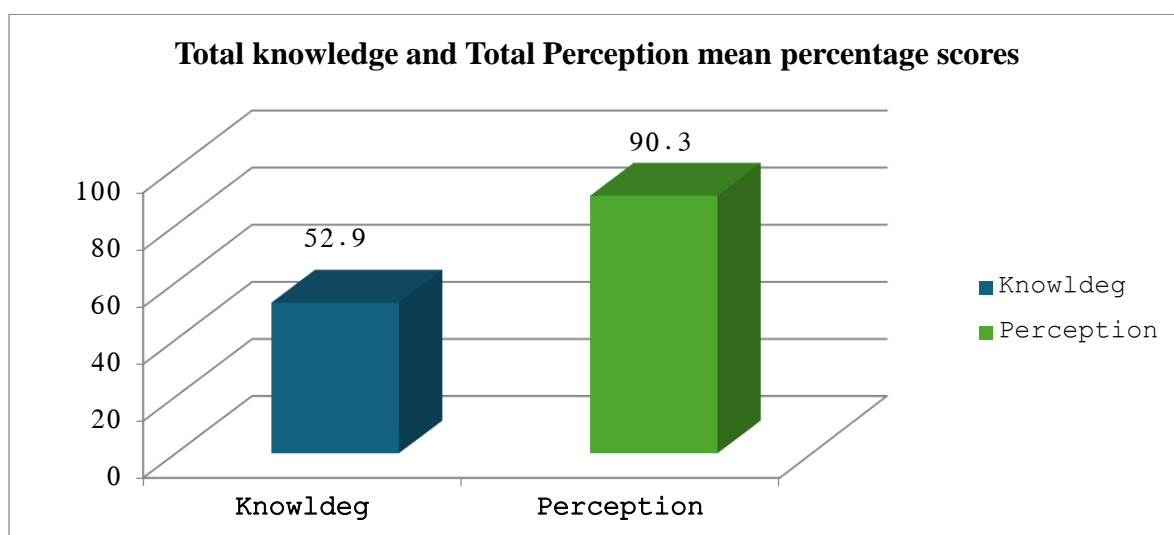


Figure (5): Total knowledge and total perception mean percentage scores.

Table (2): Correlation between total knowledge and total perception of the study sample (N=149)

perception	Knowledge	
	r	P
	0.06	0.46

Table (3): Correlation between personal data of nursing personnel total knowledge and total perception

Demographic data	knowledge		Perception	
	r	p	r	P
Age	0.27	0.001*	0.03	0.67
Gender	0.13	0.09	0.07	0.38
Education level	0.13	0.11	0.03	0.68
Years of Experience	0.25	0.002*	0.01	0.87
Title	0.16	0.05	0.06	0.44
Training about reflection	0.17	0.03*	0.08	0.29

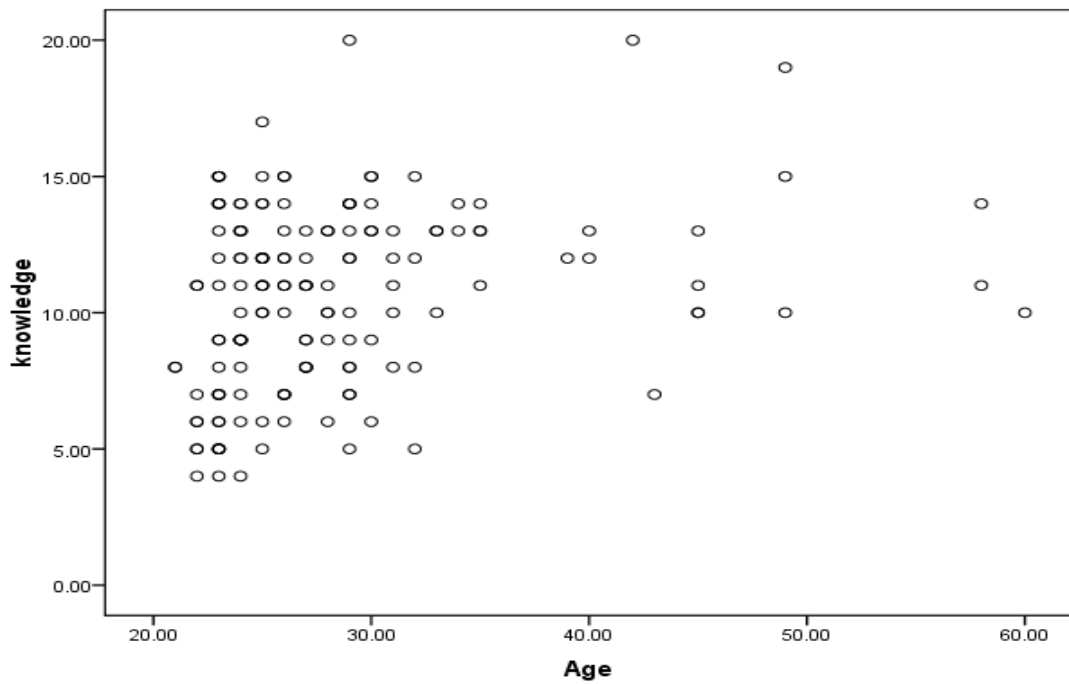


Figure (6): Correlation between age and knowledge.

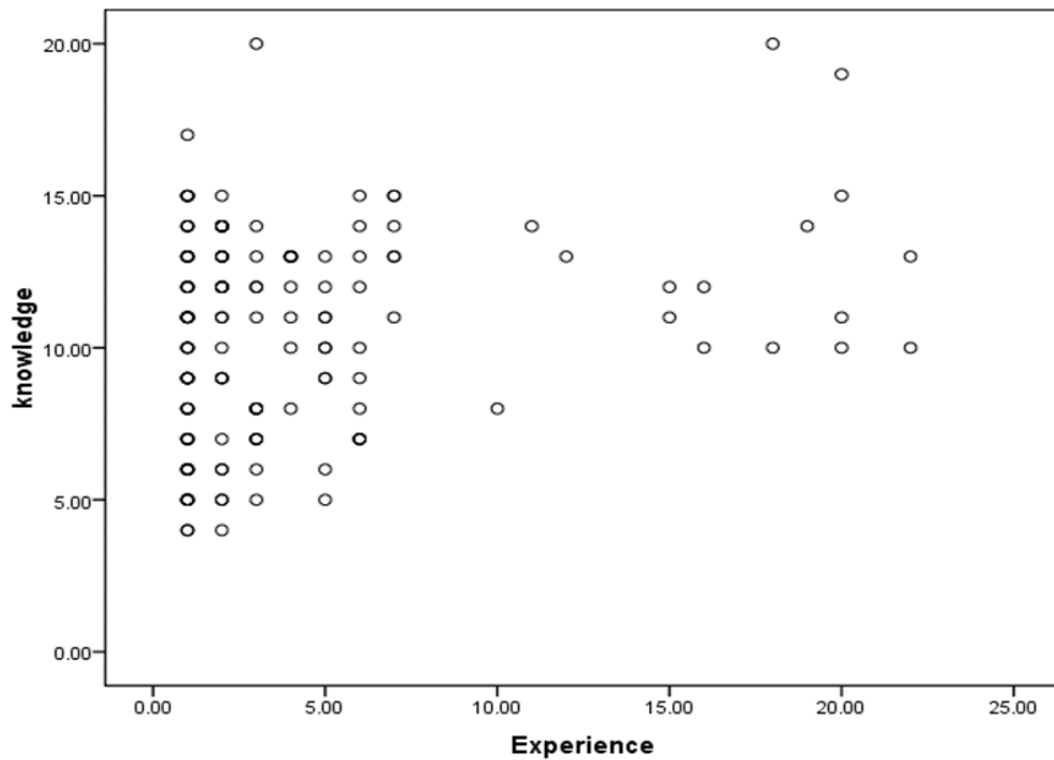


Figure (7): Correlation between experience and knowledge

Discussion:

Reflection is a cornerstone in nursing practice, providing a structured framework for healthcare professionals to examine their experiences, learn from them, and apply insights to enhance their skills. Reflection catalyzes continuous professional development in nursing. Through introspection on clinical experiences, nurses gain a deeper understanding of their strengths and areas for improvement. This self-awareness becomes a foundation for ongoing learning, shaping a nurse's evolving competence and adaptability in the dynamic healthcare landscape (Sujan et al., 2023).

Through reflective practices, nurses can revisit these experiences, critically analyze their actions, and gain insights into their decision-making processes. This introspective process not only allows nurses to identify areas for improvement but also helps in recognizing successful strategies and interventions. By encouraging nurses to reflect on their experiences, both positive and challenging, the profession cultivates a mindset of adaptability and resilience. Ultimately, the value of reflection lies in its ability to empower nurses to continually refine their skills, enhance patient outcomes, and contribute to the ongoing advancement of nursing practice (Froneman, du Plessis & van Graan, 2023).

The present study aimed to assess the value of reflection in nursing practice through the following objectives: Assess nursing personnel's level of knowledge about reflection. Determine the value of reflection in nursing practice as perceived by nursing personnel, this result was conducted at Dar Al Fouad Hospital. The research question was about, what is the nursing personnel's level of knowledge about reflection, and how nursing personnel perceive the value of reflection in nursing practice.

Before getting into the outcomes of the research aim, it is important to look at the personal data of the nursing students who participated in the study. The present study revealed that most of the staff nurses and nurse managers were in the age group 20-29. Half of nurse educators' ages ranged between 30 and 39 years old, and the mean age for the nurse managers was 34.7 years while it was 33.5 for nurse educators and 25.6 for staff nurses.

This result is supported by *Rania et al., (2021)* who conducted a study entitled "Reflective practices to study group dynamics: Implement empowerment and understand the functioning of groups" which had a participant with a mean age of 27.5 years in his study. This result disagrees with *Zarrin et al., (2023)* who conducted a study entitled "Relationship between Nurses Reflection, Self-efficacy, and Work Engagement" his study noted that A total of 240 clinical nurses with a mean (SD) age of 33.41(7.36) years participated in the present study.

From the researcher's point of view, the lower mean age observed among staff nurses could be attributed to the entry-level nature of the position, which often attracts younger individuals at the onset of their careers in healthcare. On the other hand, the higher mean age of nurse managers may reflect the need for experience and tenure in the field to assume leadership roles effectively. The age range of nurse educators falling between the two aforementioned categories suggests a subsequent career progression path in the nursing profession.

Concerning gender, more than two-thirds of staff nurses were male, and more than half of manager nurses were female. Concerning the level of education in nursing, the majority of staff nurses had bachelor's degrees while a minority of them had post-graduate degrees.

The recent study was supported by *Zarrin et al., (2023)*, who conducted a study entitled "Relationship between Nurses Reflection, Self-efficacy, and Work Engagement" and noted that most of them had a bachelor's degree in nursing. In addition, *Falcó-Pegueroles, (2021)* conducted a study "Critical Thinking in Nursing Clinical Practice, education, and Research, from Attitudes to Virtue" which found that nurses have undergone formal education and training in reflective techniques. While this result is inconsistent with in addition to *Zarrin et al., (2023)*, who conducted a study entitled "Relationship between Nurses Reflection, Self-efficacy, and Work Engagement", and noted that the majority of participants were women.

From the researcher's point of view, it could be that the gender disparities reflect societal norms and expectations surrounding caregiving roles, or they may be indicative of the career advancement opportunities available to men and women in nursing. Similarly, the imbalance in education levels could point to systemic barriers that prevent nurses from pursuing advanced degrees or it could simply be a matter of personal choice and priorities.

Regarding years of experience, the mean was 2.1 ± 2.3 , 9.2 ± 7.2 , and 8.6 ± 6.1 , for staff nurses, nurse educators, and managers. This result is supported by *Harmon et al., (2022)*, who conducted a study entitled “Habitus, Social Capital, leadership, and Reflection Insights for Early Career Nurse Academics”, which showed that the staff nurses had years of experience in the field more than two years.

From the researcher's point of view, this result could be the nurse educator and the managers should have had more experience, it is possible that a greater level of practical knowledge and expertise could have contributed to a more effective and successful outcome. Moving forward, it may be beneficial for these individuals to seek further opportunities for professional development and growth to enhance their capabilities and improve overall performance.

Regarding the knowledge level about reflection, this study shows that more than three-quarters of the study sample had an unsatisfactory knowledge level about reflection in nursing practice. This current study was supported by *Scheel et al., (2021)*, who conducted a study entitled “Reflection as a Learning Strategy for the Training of Nurses in Clinical Practice Setting” The research indicates that while reflection is recognized as valuable in nursing practice, there are challenges in its implementation. These include the compartmentalization of reflective practice in educational programs and the cognitive and experiential limitations of younger nurses.

These findings were inconsistent with, those of *Miller, (2020)*, who conducted a study entitled “Exploring the importance of reflective practice in deepening self-knowledge” and reported that the participants have a highly satisfactory level of knowledge about reflection in nursing practice and highlighting its positive impact on clinical competence and patient care. The study reveals that nurses who possess a deep understanding of reflective practices demonstrate enhanced critical thinking skills, self-awareness, and emotional intelligence. With a solid foundation in reflective practice.

From a researcher's point of view, the findings of this study highlight a significant gap in the knowledge base of nursing professionals concerning the concept and practice of reflection. This knowledge gap could be attributed to several factors. Firstly, it may reflect shortcomings in the nursing education curriculum, where the principles and application of reflective practice are either inadequately covered or not emphasized sufficiently. Secondly, it might indicate a lack of ongoing professional development opportunities that focus on reflective practices. Thirdly, there could be cultural or institutional barriers within healthcare settings that hinder the implementation and value of reflective practice.

This view was supported by *Patel & Metersky, (2022)* who conducted a study titled “Reflective practice in nursing: A concept analysis” and mentioned the findings indicate the emerging need to focus on developing future reflection models that accommodate all three ways of reflection in nursing education and practice. Moreover, to increase the nurses' use of reflection to improve knowledge and practice, the need to facilitate the process of reflective practice among nursing students and clinical nurses was distinguished, providing the direction for further research to discover strategies for that purpose.

Regarding total perception, the current study shows that the majority of the studied sample had a positive perception of reflection, this result was supported by *Yoong et al., (2023)*, who conducted a study entitled “Using Peer Feedback to Enhance Nursing Students' Reflective Abilities, Clinical Competencies, and Sense of Empowerment” revealed that the majority of participants perceived reflection as an essential tool for enhancing clinical competence, critical thinking skills, and patient care outcomes. Moreover, his participants expressed a deep appreciation for the role of reflection in promoting self-awareness, professional growth, and continuous learning.

Furthermore, research findings by *Malik & Shankar, (2023)*, who conducted a study entitled “Empowering Nurses: Exploring Self-Managed Organizations in Indian Healthcare” suggest that nurses who hold a high perception of reflection demonstrate greater job satisfaction and commitment to their profession. By engaging in reflective activities, nurses feel empowered to take ownership of their practice and contribute meaningfully to healthcare improvement initiatives, this sense of autonomy and agency fosters a culture of accountability and professionalism within nursing teams, ultimately enhancing teamwork dynamics and patient care experiences.

From the researcher's point of view, the high perception of reflection among nurses has been linked to improved resilience and well-being in the face of workplace challenges. Nurses who embrace reflective practices develop coping strategies to manage stress, overcome adversity, and maintain a positive outlook in demanding clinical environments. No doubt that a high perception of reflection not only elevates the quality of nursing practice but also nurtures the overall well-being of healthcare professionals.

On the other hand, these findings are inconsistent with those *Makhdzir, (2022)*, who conducted a study titled “Nurses’ Perception on the Impact of Technology on Nursing Care Practice in the Intensive Care Unit” and found that nurses express doubts or ambivalence towards reflective practices, as they perceived it as time-consuming or disconnected from the realities of their clinical responsibilities, this inconsistency in perception may stem from various factors, including organizational culture, competing priorities, and individual attitudes towards self-reflection.

In addition to research *Shorey & Wong, (2021)*, who conducted a study entitled “A Qualitative Systematic Review on Nurses’ Experiences of Workplace Bullying and Implications for Nursing Practice” reported that nurses’ perceptions of reflection may vary based on their level of experience and educational background, junior nurses, in particular, may perceive reflection as an unfamiliar or daunting concept, lacking the confidence or support to engage in reflective practice effectively.

From the researcher’s point of view, the findings highlight potential barriers to the adoption of reflective practices in nursing, including organizational constraints, workload pressures, and lack of resources or institutional support. Nurses operating in fast-paced or understaffed healthcare environments may perceive reflection as a luxury rather than a necessity, prioritizing immediate patient care tasks over introspective activities.

The present study results indicate that there is no significant correlation between total knowledge about reflection and total perception of reflection of the study sample. This result was supported by *Cronin, (2020)*, who conducted a study entitled “Exploring Oncology Nurse Perceptions of the Relationship Between their Self-Efficacy and the Quality of Communication with Their Patients” found that individual differences in attitudes, personal experiences, and contextual factors may play a more significant role in shaping how nurses perceive about reflection in their practice. Additionally, organizational culture, leadership support, and the availability of resources for reflective activities may also impact nurses’ perceptions, regardless of their level of knowledge on the subject.

While this result was inconsistent with *Sherwood et al., (2023)*, who conducted a study entitled “Reflective practices: meaningful recognition for healthy work environments” this data revealed a strong positive association, suggesting that nurses with a higher level of knowledge about reflection tended to have more positive perceptions towards its importance and application in clinical settings.

Another research by *Coutts et al., (2024)*, who conducted a study entitled “A reflective practice learning experience with higher education exercise physiology students” found that nurses who scored higher on assessments of reflective knowledge also demonstrated greater appreciation for the reflection in nursing practice. This correlation suggests that as nurses acquire a more comprehensive understanding of reflective practices, they are more likely to recognize their relevance and effectiveness in enhancing clinical competence, decision-making skills, and overall quality of care delivery.

From a researcher's point of view, this result suggests that an increase in knowledge about reflection in nursing practice does not necessarily translate into a more positive or accurate perception of its importance or utility. Several implications arise from this finding. Firstly, it challenges the assumption that knowledge alone is sufficient to influence perceptions and attitudes. This disconnect indicates that even when nurses are knowledgeable about reflective practices, it does not automatically mean they perceive these practices as valuable or are motivated to engage in them.

This view was supported by *Zia, Sabeghi & Mahmoudirad, (2023)*, who conducted a study titled “Problem-based learning versus reflective practice on nursing students’ moral sensitivity”, the study highlighted that knowledge alone is insufficient if not accompanied by supportive environments and practical applications. Without these, nurses may not value or utilize reflective practices effectively.

This study indicates that there is a significant direct correlation between knowledge age and experience about reflection. This result was supported by *Zia et al., (2023)*, who conducted a study entitled “Problem-based learning versus reflective practice on nursing students’ moral sensitivity” and the results indicated that older and more experienced nurses tended to possess a deeper understanding of reflection, suggesting that age and years of experience were positively associated with knowledge levels regarding reflective.

In addition to another study conducted by *Aurora et al., (2024)*. Who conducted a study entitled “An exploratory evaluation of the impact and acceptability of a structured reflective practice program piloted with staff in a forensic mental health setting” revealed that there is a significant direct correlation between age, years of experience, and knowledge levels about reflection in nursing practice.

Moreover, a study by *Zarrin et al., (2023)*, who conducted a study entitled “Relationship between Nurses Reflection, Self-efficacy, and Work Engagement”, noted that the mean (SD) score of nurses’ reflection was calculated as 86.51 (8.17) out of 115. Moreover, the results showed no statistically significant difference in the mean reflection scores in terms of gender, level of education, as well as years of work experience, and age.

From the researcher's point of view, the positive correlation between knowledge and age/experience suggests that as nurses gain more professional experience, their understanding of reflective practices deepens. This could be due to the accumulation of practical experiences that enhance their ability to engage in and appreciate reflective practices. And the significant correlation between knowledge and training highlights the importance of targeted educational interventions. Structured training programs can effectively enhance nurses' knowledge about reflection, underscoring the role of continuous professional development. This view is supported by *King et al., (2021)*, who study factors that optimise the impact of continuing professional development in nursing and heightened age, years of experience, and training enhance nurses' knowledge.

This view is inconsistent with *Lubbe & Botha (2020)*, who conducted a study titled “Dimensions of reflective practice: A Teacher educator’s and Nurse Educator’s perspective. Reflective Practice”, and discovered that some experienced nurses embraced reflection as a means of continuous learning and professional development, others with similar years of experience showed little interest or enthusiasm towards reflective practices and suggests that the relationship between the number of years of experience and engagement with reflection is complex and influenced by individual differences.

The lack of a significant correlation between perception and personal data (such as age, experience, and training) indicates that other factors, potentially including individual attitudes, workplace culture, and intrinsic motivation, play a more critical role in shaping nurses' perceptions of reflective practice.

This view is supported by *Mahon & O'Neill, (2020)*, who make study titled “Through the Looking Glass: The Rabbit Hole of Reflective Practice” Despite the increase in knowledge with age, experience, and training, perception of reflective practice appears to be influenced more by factors beyond personal demographics. Research suggests that individual attitudes, workplace culture, and the availability of support systems play a more crucial role in shaping nurses' perceptions of reflective practice. These findings indicate that while knowledge can be quantified and correlated with measurable factors, perception is more subjective and influenced by the work environment and personal attitudes.

The findings of the study provide valuable insights into the importance of reflection in nursing practice and highlight any knowledge gaps that may exist among nursing personnel. This information can then be used to develop targeted training programs to enhance the practice of reflection among nursing staff.

Finally, this study contributes to the growing body of knowledge on the role of reflection in nursing practice and underscores the need for ongoing education and support in this area. Nursing personnel needs to engage in regular reflection to improve their practice and ultimately enhance patient care outcomes.

Conclusion:

Based on the findings of the research questions, it was concluded that; more than three-quarters of the study sample had an unsatisfactory knowledge level about reflection in nursing practice, moreover the majority of the studied sample had a positive perception of reflection. Moreover, there is no significant correlation between total knowledge and total perception of the study sample. Additionally, there is a significant direct correlation between knowledge age, and experience. Also, there is a significant direct correlation between knowledge and training while there is no significant correlation between perception and personal data.

Recommendations:

In light of the findings of the current study, the following recommendations can be suggested:

Educational Recommendations:

- Integrate structured reflection exercises and reflective writing assignments into the nursing curriculum to develop critical thinking and self-awareness skills from the outset of their training.
- Design workshops focusing on the importance of reflective practice for nursing students and educators to ensure they can effectively teach and model reflective practices.

- Encourage using digital tools and platforms like e-portfolios and reflective apps to facilitate regular and structured reflection among nursing students.
- Implement peer reflection groups for nursing students to encourage collaborative learning through sharing diverse perspectives, guided by structured activities and reflective discussions, fostering deeper insights and critical thinking.

Practice Recommendations:

- Design an in-service training program for nurses to engage in reflective practice, enabling them to process their experiences and learn from them in real-time.
- Establish reflective supervision and mentoring programs where experienced nurses guide less experienced staff through reflective processes, helping them to improve their practice through shared experiences and insights.
- Advocate for the inclusion of reflective practice in training programs for nurses especially new hiring nurses in the policies, both in-service and out-service, to create a culture where reflection is integral to professional development and quality care.
- Incorporate reflective practice into performance reviews and professional development plans, encouraging nurses to engage in continuous self-assessment and improvement.

Research Recommendations:

- Conduct descriptive studies to investigate the correlation between reflective practices among nurses and patient outcomes to provide empirical evidence of the benefits of reflection in nursing practice.
- Research the barriers that nurses face in engaging in reflective practice, such as time constraints, lack of resources, or insufficient training.
- Investigate the effectiveness of different reflection methods and tools (e.g., journaling, debriefing sessions, digital platforms) in enhancing nursing practice to identify the most effective strategies for implementing reflective practice.

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