

Authentic Leadership and its Relation to Nurses' Self- Efficacy

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Abstract: Background: Authentic leadership focuses on fairness and transparency to the staff, encourages open sharing of information, accepts nurses' inputs, and empowers them to be clear in developing their expertise and mastery which can have a positive influence on nurses' self-efficacy. **Purpose:** To identify the authentic leadership and its relation to nurses' self-efficacy. **Method:** Study design: A descriptive correlational design was utilized. **Setting:** The study was conducted in Ashmoun General Hospital in Ashmoun city at Menoufia Governorate. **Study sample:** It included two study groups. The first group was all nurse managers (75). The second group involved a simple random sample of 182 staff nurses from total number of 335 staff nurses. **Data collection instruments:** Two instruments were used to collect the data. Instrument 1: Authentic Leadership Questionnaire and instrument 2: General Self-Efficacy Scale. **Results:** Authentic leadership level was high from the studied nurse managers' perspective. While authentic leadership level was moderate from the studied staff nurses' perspective. The internalized moral perspective dimension had the highest percent score and the first rank among authentic leadership dimensions as perceived by the two study groups. Nurses' self-efficacy level was moderate among the studied staff nurses. **Conclusion:** There was a highly statistically significant positive correlation between all dimensions of authentic leadership and self-efficacy from the studied staff nurses' perspective. **Recommendations:** Establishing evidence-based research findings regarding effective leadership styles in practice. Conducting educational workshops for under and newly-graduated nurses in order to train them on improving self-efficacy and leadership skills.

Keywords: Authentic leadership, Nurses, Self-efficacy.

Introduction

Nurses are among the largest and most important labor forces responsible for

delivering health services in which nurse leaders and managers are

responsible for ensuring nurses follow established protocols and procedures that maintain patient safety and high-quality care. Nursing managers serve as role models in their health care organizations, and upholding ethical standards is of paramount importance. In addition, nursing managers' role has been expanded to be responsible for creating and maintaining a professional work environment for nurses and a safe environment for patients. Also, effective nursing managers pay attention to the relationship between themselves and nurses because staff performance has an essential role in determining the achievement of any healthcare organization, both positively and negatively. So, effective nursing leadership is pivotal in the provision of quality nursing care services and the overall success of the organization (Fadhilah et al., 2023).

In recent years, interest in authentic leadership style has been developed among researchers and emerged as a field that correlates work on ethical and transformational leadership in both practice, and academic literature. Authentic leadership (AL) is considered a core component to positively impact nurses' attitude and behavior. Authentic leaders act genuinely and honestly reflecting who they are as an individual, and they are self-aware of their strong and weak points, prioritize targets and mission of the organization, and perform in a manner consistent to their values and beliefs (Khalil & Siddiqui, 2019). Authentic leadership is a behavior that represents a leader who utilizes his ability in a good way. Whether by

positive psychology capacity, positive ethic, self-awareness, an appropriate behavior, a balance information processing, and a transparent relationship (Novitasari et al., 2020).

In addition, authentic leadership is a pattern of a leadership style that draws upon and promotes both positive and psychological capacities and a positive ethical climate between leaders working with subordinates enhancing positive self-development (Cabell, 2021). Authentic leaders possess distinguishing characteristics. It was determined that there are five essential qualities that authentic leaders must demonstrate: (a) understand their purpose, (b) practice solid values, (c) lead with and from the heart, (d) establish connected relationships, and (e) demonstrate self-discipline. Moreover, authentic leadership has four major dimensions: (a) self-awareness, (b) relational transparency, (c) balanced processing, and (d) internalized moral perspective (Ramirez, 2022).

A leader can develop their authentic leadership by focusing on seven areas: (a) become more self-aware of his/her strengths and weaknesses, (b) understand his/her personal values, passions and principles, (c) gain insight into their motivations, both intrinsic and extrinsic, (d) find and build a support team to help them stay focused, provide feedback and balanced perspective and earn the right to speak into the leader's life, (e) get personal through being balanced and consistent in all areas of their life and balancing effective leadership at work and maintaining a strong personal life, (f) stick to their roots by staying

grounded in holistic lives and spending time with family and close friends, physical exercise, and (g) inspire, empower those around them and create a culture of trust and loyalty. So, a nurse manager's discovery of his/her authentic leadership style will require not only honesty but courage. In essence, taking time to learn the authentic leadership style is a worthwhile journey that will create lasting impact (Braden, 2018).

As a style of leadership, authentic leadership that focuses on transparent and leader behavior and encourages open sharing of information required to make decisions while accepting followers' inputs can have a positive influence on motivating nurses and enhancing their capabilities to different tasks and/or activities in the term of enhancing their self-efficacy. Moreover, having a successful role model, such as an authentic leader, can serve as a form of a positive endeavor that helps increase the self-efficacy of nurses (Maraizu, 2022).

Self-efficacy (SE) is the belief one has that they can perform actions to manage future situations and achieve specific goals (Jasper, 2021). Self-efficacy relates to how a person perceives his or her ability to feel, think, motivate, and act upon to change particular behavior (Shorey & Lopez, 2021). Also, self-efficacy is described as the belief that the individual has regarding his/her personal capabilities to accomplish a task or achieve a specific goal (Al-Hamdan & Bani Issa, 2021). Moreover, nurses' self-efficacy refers to the belief of nurses that they have the ability to cope successfully with tasks, obligations, and challenges

related to their professional activities. Nurses use their professional abilities, professional attitudes, and confidence to demonstrate their professional knowledge to help patients to be treated effectively and achieve their health care goals (Wu et al., 2022).

Furthermore, self-efficacy has certain characteristics considered as factors that contribute to successes associated with innovations in health care organizations. These characteristics are confidence/self-empowerment, commitment, ability to meet challenges, innovative thinking, and facilitation (Kim, 2022). In addition, self-efficacy development is influenced by four factors, which include (1) performance accomplishments which referred to as mastery experiences, (2) social modeling or vicarious experiences, (3) social persuasion or verbal persuasion, and (4) environmental persuasion (Alanazi, 2022).

Finally, authentic leadership is resourceful in building staff nurses' self-efficacy as authentic leaders can impact on nurses' psychological capital by creating hope, bringing about optimism, and enhancing resilience in nurses through encouraging nurses to continuously find and develop new skills, providing them with regular constructive feedback, thus assisting nurses to identify their unique set of strength and weakness to improve their performance, solve their problems, increase their energy for their work to provide high standards of care and eventually improve nurses' self-efficacy (Abou Ramadan & Eid, 2020).

Significance of the Study

Authentic leadership has been linked to a number of positive leaders, follower, and organizational outcomes, suggesting that it holds much promise for helping leaders, followers, and their organizations to more effectively address the multitude of ethical and performance challenges found in the 21st-century workplace (Gardner et al., 2022).

Based on the investigator's clinical experience, it appears logical that nurse managers' authentic leadership practices may influence positively on nurses' self-efficacy. Empirical evidence has emerged linking authentic leadership with positive patient and nurse outcome, building trust and positive relationships and creating health work environment. As a result, these may positively affect nurses' self-efficacy.

Additionally, personal experience and peer interaction in the different work places at different hospitals whether governmental or private ones, the investigator noticed that nurse managers leading with a high standard of ethics and morals and following authentic leadership style are highly inspiring and role models to their team members. Also, this creates a healthy work environment promoting nurses' self-awareness and so their self-efficacy that can be shown in improving patient's safety and outcomes. Therefore, the current study was conducted to identify authentic leadership and its relation to nurses' self-efficacy.

Purpose of the Study

The purpose of this study is to identify the authentic leadership and its relation to nurses' self-efficacy.

Research Questions

- 1) What are the levels of authentic leadership style?
- 2) What are the levels of nurses' self-efficacy?
- 3) What is the relationship between authentic leadership and nurses' self-efficacy?

Method

Research Design:

A descriptive correlational research design was utilized to attain the purpose of this study.

Setting

This study was carried out in Ashmoun General Hospital in Ashmoun city at Menoufia Governorate. The study was conducted at all hospital departments as out-patient clinics, inpatient departments (obstetrics, medical, surgical, pediatric, reception, and emergency departments) and critical care units (Adult ICU, CCU, pediatric ICU, neonatal ICU, cardiac catheterization unit, hemodialysis unit, and surgical operating unit).

Sampling:

Sampling technique

The subjects consisted of two groups working in the above-mentioned study setting during the time of the study. Group 1 included all nurse managers at the three levels of nurse managers (first-line, middle, and top levels). Group 2 consisted of staff nurses. A

simple random sample technique was used in the study to select staff nurses working in the above-mentioned study setting during the time of the study.

Sample size

Based on statistical administrative records of the hospital (2022), three hundred thirty-five nurses are working at Ashmoun General Hospital in Menoufia Governorate, distributed as 165 staff nurses in critical care units, 170 staff nurses in medical departments, while there are 75 nurse managers at three levels of nurse managers.

Two groups of study sample:

- **Group 1** included seventy -five nurse managers at three levels of nurse.
- **Group 2** included staff nurses who work in critical care units and inpatient units/ departments. Staff nurses' total number was 335 staff nurses. The number of nurses (sample size) to be selected was estimated using the following equation:

Formula of (Yamane 1976) is presented as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where :

n= sample size required

N = number of people in the population

e = allowable error (%); (e =0.05)

1= a constant value

The sample size has been calculated by the following equation (mentioned before)

Sample size= $335/1+335(0.0025) =182$ staff nurses.

So, the total sample size of staff nurses was 182 staff nurses from all critical care units and inpatient departments. During data collection procedure, staff nurses were randomly 97 staff nurses from critical care units with percent 53.3%, and 85 staff nurses from inpatient departments with percent 46.7 %.

Instruments for data collection

Data of the present study was collected by the investigator using two instruments: Authentic Leadership Questionnaire (ALQ) (Walumbwa et al., 2008), and General Self-Efficacy Scale (GSES) (Schwarzer & Jerusalem, 1995).

Instrument one: Authentic Leadership Questionnaire (ALQ):

It consisted of two parts as the followings:

- **Part one:** Personal characteristics of the nurse managers

It is a structured questionnaire designed by the investigator to obtain personal and work data of the nurse managers including age, gender, marital status, years of administrative experience, level of position, area of work, level of education, and whether a nurse manager had attended a training workshop about authentic leadership style.

- **Part two:** Authentic Leadership Questionnaire (ALQ)

It was developed by Walumbwa et al. (2008). It is aimed to assess authentic leadership levels among nurse managers from nurse managers' perspective, and also from the studied staff nurses' perspective. The questionnaire includes 16 items

which were classified into four dimensions (subscales): self-awareness (4items), internalized moral perspective (4items), balanced information processing (4items), and relational transparency (4 items).

Scoring system

The studied nurse managers and staff nurses' responses were rated in 5-points Likert scale: strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). The total score will be (16- 80). Levels of authentic leadership were represented statistically into < 60% as low levels, 60-<75% as moderate levels and \geq 75% as high levels. According to these values, the score (16-36) was considered a low level of authentic leadership, the score (37 -58) was considered a moderate level of authentic leadership, and the score (59-80) was considered a high level of authentic leadership.

Instrument two: General Self-Efficacy Scale (GSES):

It consisted of two parts as the followings:

- **Part one:** Personal characteristics of the staff nurses
It is a structured questionnaire designed by the investigator to obtain personal and work data of the staff nurses including age, gender, marital status, years of clinical experience, area of work, level of education, and whether a staff nurse had attended a training workshop regarding nurses' self-efficacy.
- **Part two:** Generalized Self-efficacy Scale (GSES)

It is a structured questionnaire that is the general belief in oneself to solve problems and reach goals and developed by Schwarzer & Jerusalem (1995) to assess general self-efficacy levels among studied staff nurses from the studied staff nurses' perspective. It consists of 10 items.

Scoring system

Staff nurses' responses were measured at 4-points Likert scale, which were: not at all true (1), hardly true (2), moderately true (3), and exactly true (4). The total score is calculated by finding the sum of all the 10 items. For the generalized self-efficacy scale, the total score ranges between (10- 40), with a higher score indicating more self-efficacy. Levels of staff nurses' self-efficacy were represented statistically into < 60% as low levels, 60-75% as moderate levels and > 75% as high levels. According to these values, the score was categorized into that an overall score between (10-20) was interpreted as a low self-efficacy, between (21-30) was taken as a moderate self-efficacy, and (31-40) was interpreted as a high self-efficacy (Dadipoor et al., 2021).

Validity of instruments:

The instruments were translated into Arabic language and reviewed by a panel of five experts; three Professors in Nursing Administration at Faculty of Nursing/Menoufia University, one Professor in Nursing Administration at Faculty of Nursing/Ain-Shams University, and one Assistant Professor in Nursing Administration at Faculty of Nursing /Banha University to assess

the face and content validity. Minor modification and rephrasing of some statements were done at authentic leadership questionnaire based on the jury's opinions. The instruments were considered valid from the experts' perspective.

Instruments reliability

Reliability of the two instruments were tested by Cronbach's Alpha test as the instruments were translated into Arabic and minor modification were done. The reliability of authentic leadership questionnaire was $\alpha = 0.957$ from nurse managers' perspective, while it was $\alpha = 0.980$ from staff nurses' perspective as illustrated in table I which considered very reliable. All dimensions of the authentic leadership questionnaire also have high internal consistency and reliability of general self-efficacy scale was $\alpha = 0.960$ which considered very reliable.

Ethical Consideration

An approval was obtained from Ethical and Research Committee of the Faculty of Nursing /Menoufia University. Written approval was submitted to the dean of nursing collage, and an official permission was obtained from the director of Ashmoun General Hospital to carry out the study and an oral informed consent was gained from the study sample. The studied nurse managers and staff nurses were informed that participation in the study is voluntary. The respondents were assured that their data will be treated as strictly confidential and their anonymity were maintained. Additionally, each participant was notified about the right

to accept or refuse to participate in the study.

Pilot study

After reviewing the instruments by the experts, the investigator conducted a pilot study before using the final questionnaire. The purpose of the pilot study was to ascertain clarity, relevance, applicability of the study instrument and to determine obstacles that may be encountered during data collection. It was also helpful to estimate the time needed to fill the study instrument. The pilot study was carried out on 8 nurse managers and 19 staff nurses which presented (10%) of sample size. No modification was done, so sample of the pilot study was included in the study. Nurse Managers required at least 20-25 minutes to complete authentic leadership self-Assessment questionnaire, while staff nurses required at least 30-40 minutes to complete authentic Leadership questionnaire, from their perspective, and general self-efficacy scale.

Data collection Procedure

An official letter was sent from the Dean of the Faculty of Nursing containing title and explaining the purpose and methods of data collection to the director of studied setting. Then a list of all nurses working in Ashmoun General Hospital was prepared. Each staff nurse was marked with a specific number (from 1 to 335). Using the ideal bowl method, the investigator assigned a number to each member of the staff nurses in a consecutive manner, writing the numbers on separate pieces of paper. These pieces were folded in the same way and

mixed in the container. Finally, samples were taken randomly from the box by randomly selecting folded pieces of paper with replacement so that each staff nurse had an equal chance of being included in the study (182 staff nurses).

Moreover, a short briefing was conducted to orient the respondents to the objectives, possible risks and benefits of the study to gain their cooperation to participate in the study. After explanation of the purpose and nature of the study, nurses who fulfilled the inclusion criteria were invited to participate in the study. Thereafter, data was collected through that all questionnaires were distributed, completed and collected from the hospital departments and units.

Data was collected in a period of two months and half, from the beginning of September 2022 until the mid of November 2022 in the morning, afternoon and night shifts with average four-five days/ week. The average number of filled instruments was 5-7 per day. Completed questionnaires were entered into an electronic database that was password-protected. Hard copies of the survey questionnaires were kept in a locked cupboard of the investigator.

Statistical analysis

Data were fed to the computer and analyzed using IBM SPSS (Statistical Package for Social Science) statistical software package version 20.0. Graphics were done using Excel program. Qualitative data were described using number and percent, and presented in the form of frequency distribution tables. Quantitative data

were described using range (minimum and maximum), mean, standard deviation, median. Significance of the obtained results was judged at the 5% level. However, if an expected value of any cell in the table was less than 5. Level of significance was set as P value <0.05 for all significant tests. The used tests were Chi-square test (χ^2) to compare between different groups, Fisher Exact (FE) to calculate the exact p-value, Spearman coefficient (rs) to correlate between two distributed abnormally quantitative variables, and Cronbach's Alpha to assess reliability statistics.

Results

Figure (1): shows the percentage distribution of authentic leadership levels from the studied nurse managers' perspective. This figure revealed that the highest percent (66.7%) of authentic leadership from the studied nurse managers' perspective was observed at the high level, followed by a moderate level of AL (33.3%).

Table (1): illustrates the ranking of total score of authentic leadership dimensions as perceived by the studied nurse managers. This table showed that the highest total score (72.67 ± 12.32) was observed in the internalized moral perspective dimension that was stated in the first rank among AL dimensions. While the lowest total score (64.67 ± 12.65) was found in the relational transparency that was observed at the last rank among authentic leadership dimensions.

Figure (2): shows the percentage distribution of authentic leadership levels from the studied staff nurses'

perspective. This figure revealed that the highest percent (68.1%) of authentic leadership from the studied staff nurses' perspective was observed at a moderate level, followed by a high level (26.4%). While the lowest percent (5.5%) was observed in a low level of authentic leadership.

Table (2): illustrates the ranking of the total score of authentic leadership dimensions from the studied staff nurses' perspective. This table showed that the highest total score (63.19 ± 15.92) was observed in the internalized moral perspective dimension and at the first rank among AL dimensions. While the lowest total score (52.95 ± 19.89) was observed in the relational transparency dimension and at the last rank among authentic leadership dimensions.

Figure (3): illustrates the percentage distribution of nurses' self-efficacy levels as perceived by the studied staff nurses. It showed that the highest percent (54.4%) of the studied staff nurses' self-efficacy was observed at a moderate level, followed by a high level (37.9 %). On the other hand, the lowest percent (7.7 %) was observed at a low level of studied staff nurses' self-efficacy.

Table (3): clarifies the correlation between authentic leadership and nurses' self-efficacy as perceived by the studied staff nurses. This table demonstrated that there was a highly statistically significant positive correlation between all dimensions of authentic leadership and nurses' self-efficacy ($r_s = 0.594$, $p < 0.001$) from the studied staff nurses' perspective at Ashmoun General Hospital.

Table (4): represents the relation between the studied nurse managers' personal characteristics and authentic leadership levels from the studied nurse managers' perspective. This table showed that there was a statistically significant relation between the studied nurse managers' personal characteristics and authentic leadership from the studied nurse managers' perspective regarding age ($p = 0.001$), marital status ($p = 0.012$), educational level ($p < 0.001$), area of their work ($p = 0.018$), and previous attendance of a training workshop about authentic leadership ($p = 0.002$).

Table (5): illustrates the relation between the studied staff nurses' personal characteristics and authentic leadership levels from the studied staff nurses' perspective. This table demonstrated that there was a statistically significant relation between the studied staff nurses' personal characteristics and authentic leadership levels from the studied staff nurses' perspective regarding only the studied staff nurses' level of education ($p = 0.011$), area of their work ($p = 0.047$), and previous attendance of a training workshop about nurses' self-efficacy ($p = 0.012$).

Table (6): reflects the relation between the studied staff nurses' personal characteristics and their self-efficacy levels. This table stated that there was no a statistically significant relation between the studied staff nurses' personal characteristics and total score of their self-efficacy except both the studied staff nurses' educational level ($p = 0.022$), and previous attendance of a training workshop about nurses' self-efficacy ($p = 0.006$).

Figure (1): Percentage Distribution of Authentic Leadership Levels from the Studied Nurse Managers' Perspective (n =75)

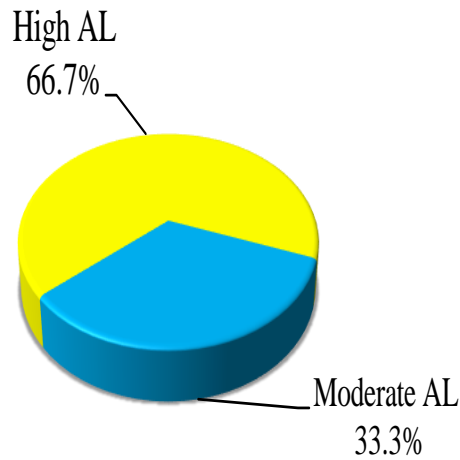
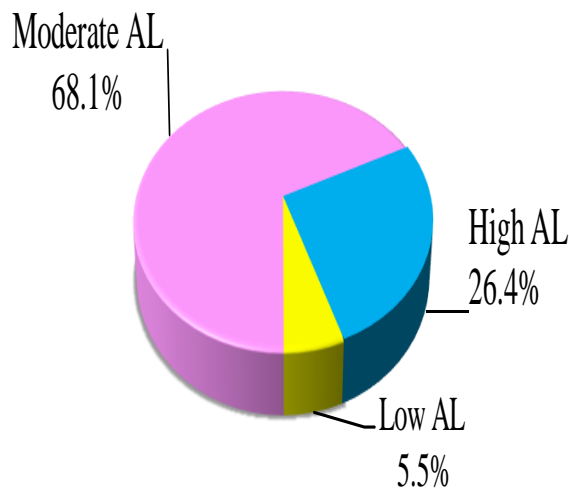


Table (1): Ranking of the Total Score of Authentic Leadership Dimensions as Perceived by the Studied Nurse Managers (n = 75)

| Authentic Leadership (AL) Dimensions | Min. – Max. | Mean ± SD. | Median | Total Score | Ranking |
|--------------------------------------|-------------------|---------------------|-------------|----------------------|---------|
| ▪ Self-awareness | 10.0 – 19.0 | 15.27 ± 1.93 | 15.0 | 70.42 ± 12.08 | 3 |
| ▪ Internalized moral perspective | 10.0 – 20.0 | 15.63 ± 1.97 | 16.0 | 72.67 ± 12.32 | 1 |
| ▪ Balanced information processing | 8.0 – 20.0 | 15.45 ± 2.42 | 16.0 | 71.58 ± 15.15 | 2 |
| ▪ Relational transparency | 8.0 – 20.0 | 14.35 ± 2.02 | 14.0 | 64.67 ± 12.65 | 4 |

SD: Standard deviation

Figure (2): Percentage Distribution of Authentic Leadership Levels from the Studied Staff Nurses' Perspective (N =182)



Staff Nurses' Perspective (N =182)

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Table (2): Ranking of the Total Score of Authentic Leadership Dimensions from the Studied Staff Nurses' Perspective (n =182)

| Authentic Leadership (AL) Dimensions | Min.–Max. | Mean ± SD. | Median | Total Score | Ranking |
|--------------------------------------|-------------------|---------------------|-------------|----------------------|----------|
| ▪ Self-awareness | 4.0 – 19.0 | 13.29 ± 2.82 | 14.0 | 58.07 ± 17.63 | 2 |
| ▪ Internalized moral perspective | 4.0 – 20.0 | 14.11 ± 2.55 | 14.0 | 63.19 ± 15.92 | 1 |
| ▪ Balanced information processing | 4.0 – 20.0 | 12.76 ± 3.46 | 13.0 | 54.74 ± 21.62 | 3 |
| ▪ Relational transparency | 4.0 – 20.0 | 12.47 ± 3.18 | 13.0 | 52.95 ± 19.89 | 4 |

Figure (3): Percentage Distribution of Nurses' Self-Efficacy Levels as Perceived by the Studied Staff Nurses (n = 182)

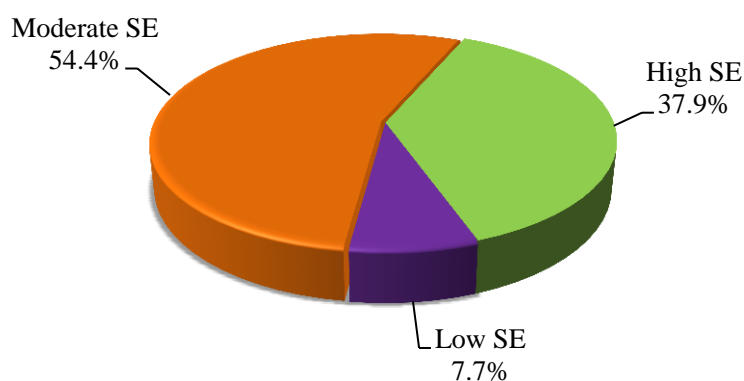


Table (3): Correlation between Authentic Leadership and Nurses' Self-Efficacy as Perceived by the Studied Staff Nurses (n = 182)

| Authentic Leadership (AL) | Self-efficacy (SE) | |
|---------------------------------|--------------------|--------------------|
| | rs | p |
| Self-awareness | 0.554** | <0.001** |
| Internalized moral perspective | 0.454** | <0.001** |
| Balanced information processing | 0.518** | <0.001** |
| Relational transparency | 0.410** | <0.001** |
| Total | 0.594** | <0.001** |

r_s : Spearman coefficient

** : Highly Statistically significant at $p \leq 0.001$

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Table (4): Relation between the Studied Nurse Managers' Personal Characteristics and Authentic Leadership Levels from the Studied Nurse Managers' Perspective (n = 75)

| Authentic leadership Personal characteristics items | Authentic leadership levels | | | | | | χ^2 | p |
|---|-----------------------------|-----|-------------------|------|---------------|------|----------|--------------|
| | Low (n = 0) | | Moderate (n = 25) | | High (n = 50) | | | |
| | No. | % | No. | % | No. | % | | |
| Age | | | | | | | | |
| ▪ < 30 years old | 0 | 0.0 | 4 | 16.0 | 11 | 22.0 | 14.784* | p = 0.001** |
| ▪ 30 < 40 years | 0 | 0.0 | 10 | 40.0 | 36 | 72.0 | | |
| ▪ 40 < 50 years | 0 | 0.0 | 6 | 24.0 | 2 | 4.0 | | |
| ▪ ≥50 years | 0 | 0.0 | 5 | 20.0 | 1 | 2.0 | | |
| Gender | | | | | | | | |
| ▪ Male | 0 | 0.0 | 3 | 12.0 | 4 | 8.0 | 0.315 | FE p = 0.680 |
| ▪ Female | 0 | 0.0 | 22 | 88.0 | 46 | 92.0 | | |
| Marital status | | | | | | | | |
| ▪ Married | 0 | 0.0 | 13 | 52.0 | 40 | 80.0 | 6.304* | 0.012* |
| ▪ Unmarried | 0 | 0.0 | 12 | 48.0 | 10 | 20.0 | | |
| Educational level | | | | | | | | |
| ▪ Nursing school diploma | 0 | 0.0 | 3 | 12.0 | 1 | 2.0 | 18.815* | p = <0.001** |
| ▪ Associate degree in Nursing | 0 | 0.0 | 14 | 56.0 | 8 | 16.0 | | |
| ▪ Bachelor's degree in Nursing | 0 | 0.0 | 6 | 24.0 | 36 | 72.0 | | |
| ▪ Post-graduate studies | 0 | 0.0 | 2 | 8.0 | 5 | 10.0 | | |
| Position Level | | | | | | | | |
| ▪ Head Nurse | 0 | 0.0 | 24 | 96.0 | 44 | 88.0 | 1.164 | p = 0.769 |
| ▪ Nursing Supervisor | 0 | 0.0 | 1 | 4.0 | 5 | 10.0 | | |
| ▪ Nursing Director | 0 | 0.0 | 0 | 0.0 | 1 | 2.0 | | |
| Years of administrative experience | | | | | | | | |
| ▪ 1 < 5 years | 0 | 0.0 | 8 | 32.0 | 20 | 40.0 | 0.874 | 0.646 |
| ▪ 5 < 10 years | 0 | 0.0 | 8 | 32.0 | 17 | 34.0 | | |
| ▪ ≥ 10 years | 0 | 0.0 | 9 | 36.0 | 13 | 26.0 | | |
| Area of work | | | | | | | | |
| ▪ Department | 0 | 0.0 | 14 | 56.0 | 14 | 28.0 | 5.585* | 0.018* |
| ▪ Critical care unit | 0 | 0.0 | 11 | 44.0 | 36 | 72.0 | | |
| Previously attended a training workshop about authentic leadership | | | | | | | | |
| ▪ Yes | 0 | 0.0 | 8 | 32.0 | 35 | 70.0 | 9.838* | 0.002* |
| ▪ No | 0 | 0.0 | 17 | 68.0 | 15 | 30.0 | | |

χ^2 : Chi square test

*: Statistically significant at $p \leq 0.05$

FE: Fisher Exact

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Table (5): Relation between the Studied Staff Nurses' Personal Characteristics and Authentic Leadership Levels from the Studied Staff Nurses' Perspective (n = 182)

| Authentic leadership Personal characteristics items | Authentic leadership levels | | | | | | χ^2 | p |
|--|-----------------------------|-------|-----------------------|------|------------------|------|----------|------------|
| | Low (n = 10) | | Moderate (n = 124) | | High (n = 48) | | | |
| | No. | % | No. | % | No. | % | | |
| Age | | | | | | | | |
| ▪ < 25 years old | 3 | 30.0 | 47 | 37.9 | 18 | 37.5 | 10.671 | p = 0.165 |
| ▪ 25 < 35 years | 4 | 40.0 | 54 | 43.5 | 20 | 41.6 | | |
| ▪ 35 < 45 years | 2 | 20.0 | 16 | 12.9 | 6 | 12.5 | | |
| ▪ 45 < 55 years | 0 | 0.0 | 7 | 5.7 | 1 | 2.1 | | |
| ▪ ≥55 years | 1 | 10.0 | 0 | 0.0 | 3 | 6.3 | | |
| Gender | | | | | | | | |
| ▪ Male | 1 | 10.0 | 33 | 26.6 | 7 | 14.6 | 3.821 | 0.148 |
| ▪ Female | 9 | 90.0 | 91 | 73.4 | 41 | 85.4 | | |
| Marital status | | | | | | | | |
| ▪ Married | 6 | 60.0 | 85 | 68.5 | 33 | 68.8 | 0.323 | 0.851 |
| ▪ Unmarried | 4 | 40.0 | 39 | 31.5 | 15 | 31.2 | | |
| Educational level | | | | | | | | |
| ▪ Nursing school diploma | 4 | 40.0 | 12 | 9.7 | 5 | 10.4 | 15.032* | p = 0.011* |
| ▪ Associate degree in Nursing | 4 | 40.0 | 90 | 72.6 | 26 | 54.2 | | |
| ▪ Bachelor's degree in Nursing | 2 | 20.0 | 21 | 16.9 | 14 | 29.1 | | |
| ▪ Post –graduate studies | 0 | 0.0 | 1 | 0.8 | 3 | 6.3 | | |
| Years of experience | | | | | | | | |
| ▪ 1 < 5 years | 3 | 30.0 | 55 | 44.4 | 19 | 39.6 | 4.569 | p = 0.326 |
| ▪ 5 < 10 years | 2 | 20.0 | 45 | 36.2 | 18 | 37.5 | | |
| ▪ ≥10 years | 5 | 50.0 | 24 | 19.4 | 11 | 22.9 | | |
| Area of work | | | | | | | | |
| ▪ Department | 8 | 80.0 | 59 | 47.6 | 18 | 37.5 | 6.126* | 0.047* |
| ▪ Critical care unit | 2 | 20.0 | 65 | 52.4 | 30 | 62.5 | | |
| Previously attended a training workshop about nurses' self-efficacy | | | | | | | | |
| ▪ Yes | 0 | 0.0 | 42 | 33.9 | 23 | 47.9 | 8.852* | 0.012* |
| ▪ No | 10 | 100.0 | 82 | 66.1 | 25 | 52.1 | | |

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Table (6): Relation between the Studied Staff Nurses' Personal Characteristics and their Self-Efficacy Levels (n = 182).

| Self-efficacy Personal characteristics items | Staff nurses' self -efficacy levels | | | | | | χ^2 | p |
|--|-------------------------------------|------|----------------------|------|------------------|------|----------|---------------|
| | Low (n = 14) | | Moderate (n = 99) | | High (n = 69) | | | |
| | No. | % | No. | % | No. | % | | |
| Age | | | | | | | | |
| ▪ < 25 years old | 6 | 42.9 | 39 | 39.4 | 23 | 33.3 | 4.479 | p = 0.809 |
| ▪ 25 < 35 years | 5 | 35.7 | 43 | 43.4 | 30 | 43.5 | | |
| ▪ 35 < 45 years | 2 | 14.3 | 12 | 12.2 | 10 | 14.5 | | |
| ▪ 45 < 55 years | 0 | 0.0 | 4 | 4.0 | 4 | 5.8 | | |
| ▪ ≥55 years | 1 | 7.1 | 1 | 1.0 | 2 | 2.9 | | |
| Gender | | | | | | | | |
| ▪ Male | 1 | 7.1 | 23 | 23.2 | 17 | 24.6 | 2.103 | 0.349 |
| ▪ Female | 13 | 92.9 | 76 | 76.8 | 52 | 75.4 | | |
| Marital status | | | | | | | | |
| ▪ Married | 9 | 64.3 | 66 | 66.7 | 49 | 71.0 | 0.457 | 0.796 |
| ▪ Unmarried | 5 | 35.7 | 33 | 33.3 | 20 | 29.0 | | |
| Educational level | | | | | | | | |
| ▪ Nursing school diploma | 4 | 28.6 | 9 | 9.1 | 8 | 11.6 | 13.296* | p = 0.022* |
| ▪ Associate degree in Nursing | 6 | 42.8 | 75 | 75.8 | 39 | 56.5 | | |
| ▪ Bachelor's degree in Nursing | 4 | 28.6 | 13 | 13.1 | 20 | 29.0 | | |
| ▪ Post –graduate studies | 0 | 0.0 | 2 | 2.0 | 2 | 2.9 | | |
| Years of experience | | | | | | | | |
| ▪ 1 < 5 years | 6 | 42.9 | 43 | 43.4 | 28 | 40.6 | 2.558 | 0.634 |
| ▪ 5 < 10 years | 3 | 21.4 | 37 | 37.4 | 25 | 36.2 | | |
| ▪ ≥10 years | 5 | 35.7 | 19 | 19.2 | 16 | 23.2 | | |
| Area of work | | | | | | | | |
| ▪ Department | 10 | 71.4 | 43 | 43.4 | 32 | 46.4 | 3.866 | 0.145 |
| ▪ Critical care unit | 4 | 28.6 | 56 | 56.6 | 37 | 53.6 | | |
| Previously attended a training workshop about nurses' self-efficacy | | | | | | | | |
| ▪ Yes | 1 | 7.1 | 31 | 31.3 | 33 | 47.8 | 10.222* | 0.006* |
| ▪ No | 13 | 92.9 | 68 | 68.7 | 36 | 52.2 | | |

Discussion

Nursing is one example of a service profession where it is critically important to have authentic leadership. Authentic leaders not only have the ability to make a positive impact in an unstable work environment, but they can also create sustainable performance outcomes. For nurses, authentic leadership enables trustful relations between leaders and followers, promotes interpersonal

collaboration between peers, and reduces the frequency of adverse patient outcomes. Authentic leadership promotes the overall well-being of nursing staff and the atmosphere of the work environment by positively impacting self-efficacy of staff nurses (Marques-Quinteiro et al.,2021). Authentic leaders lead by example and, therefore, serve as role models for their followers, so that subordinates of

authentic leaders will learn from their leaders by observing and emulating their work-related attitudes and behaviors. Such observational learning subsequently is expected to have a positive impact on staff nurses' self-efficacy (Chughtai, 2018).

The findings of the current study revealed a high level of authentic leadership from the studied nurse managers' perspective. From the investigator's point of view, this might be due to increasing nurse managers' awareness of leadership styles including authentic leadership and its effect on improving quality of staff nurse performance. Additionally, from clinical observation, this may return to that the vast majority of nurse managers working in the studied setting had bachelor's degree in nursing and a number of them hold master's and doctoral degrees.

The result of the present study is consistent with Bryan & Vitello-Cicciu (2022) who found that the study nurse managers perceived themselves to demonstrate moderate to high levels of authentic leadership. Furthermore, the result of the present study is in the same line with Jaworski et al. (2022) who stated that there was a high level of authentic leadership skills that allowed nurse managers to create a positive work environment.

On the other hand, the current study finding is contradicted with Pradipto et al. (2018) who found that authentic leadership level was moderate, and also did not play a significant role to nurses' silence. Also, the current result is contradictory to the result of Farid et al. (2020) who showed that there was a moderate authentic leadership

level among managers of the study, and a positive significant correlation between authentic leadership and cognitive-based trust.

Regarding authentic leadership dimensions as perceived by the studied nurse managers, the results showed that the highest percent score was observed in the internalized moral perspective dimension that was stated in the first rank among authentic leadership dimensions. While the lowest percent score was found in the relational transparency dimension that was observed at the last rank among authentic leadership dimensions. From the investigator's point of view, this result may be because the studied nurse managers have a strong level of professional practice and are motivated by internal ethical values and use them to self-regulate their action, suggesting congruence with their beliefs and actions, leading by example, and being able to make decisions based on core values. Also, nurse managers may prefer to avoid oversharing to maintain their image and control over their staff. At the same line, the result of current study is congruent with Olsen et al. (2021) who found that internalized moral perspective obtained the highest mean score, and relational transparency obtained the lowest mean score among older generation nursing managers. Additionally, Bryan & Vitello-Cicciu (2022) supported the current finding. Their study found that internalized moral perspective dimension of authentic leadership behavior of nurse managers rated the highest among the four subscales, and relational transparency dimension rated the lowest among the four subscales.

In contrast, the results of the present study are contradicted with Stone (2021) who presented that the relational transparency dimension of authentic leadership was the highest mean among authentic leadership dimensions. As relational transparency of authentic leadership increased knowledge and awareness among nurse managers working in a faith-based, medium-sized, nonprofit teaching hospital. Additionally, in disagreement with the present result, Jaworski et al. (2022) demonstrated that relational transparency had the highest mean.

Moreover, concerning authentic leadership from the studied staff nurses' perspective. The findings of the current study illustrated a moderate level of authentic leadership from the studied staff nurses' perspective. From the investigator's point of view, this might be due to increasing nurse managers' awareness of authentic leadership style, and its positive impact on improving staff nurse performance and patients' outcome. Also, it may be related to increasing internalized moral perspective aspect of staff nurses' nurse managers that enable nurses know where their nurse managers stand on controversial issues. As well, that result may be attributed to nurses' perception that their nurse managers can list their three greatest strengths as a nurse leader, nurse managers' very careful listening to the ideas of nurses before making decisions, and that nurse managers rarely present a "false" front to nurses. All of these qualities could enhance staff nurses' perception of their nurse managers' authentic leadership style.

The result of the present study is in the same line Kim et al. (2022) who presented that the subordinates evaluated their leaders' authentic leadership as moderate. In addition, the result of the current study is supported by Mrayyan et al. (2023) who showed that the mean score of authentic leadership was moderate resulting in improving safety climate views. Similarly, a study conducted by Fadhillah et al. (2023) illustrated that authentic leadership implemented within the scope of work and owned by the leader was moderate from the staff perspective.

In contrast, the current study finding is inconsistent with Kim et al. (2023b) who revealed that the study participants stated their leaders as having a high level of authentic leadership. Correspondingly, the result of the present study is not supported by Kim et al. (2023a) who demonstrated that studied staff members stated that they were working for a highly authentic leader due to the positive and significant relationship between authentic self-expression and trust from subordinates.

Concerning authentic leadership dimensions from the studied staff nurses' perspective, the results showed that the highest percent score was observed in the internalized moral perspective dimension that was revealed at the first rank among of authentic leadership dimensions. While the lowest percent score was observed in the relational transparency dimension that was observed at the last rank among of authentic leadership dimensions. From the investigator's point of view, these results may be

because staff nurses as nurses may know where their nurse managers stand on controversial issues, and thought that their nurse managers didn't allow group pressure to control them, and their morals guide them what to do as leaders suggesting congruence with their beliefs and actions. While nurse manager neutrally shared their feelings with them as nurses, and admitted their mistakes to nurses. As nurse managers may avoid to be oversharing their feelings and thoughts to maintain their control over their staff and prestige.

This result is supported by Ramirez (2022) who stated that internalized moral perspective dimension had the highest mean score and the first rank among authentic leadership dimensions. Additionally, the results of the present study are congruent with Cardenas (2022) who demonstrated that internalize moral perspective had the highest mean score and the first rank among authentic leadership dimensions. Furthermore, the result of the present study is consistent with Mrayyan et al. (2023) who demonstrated that relational transparency subscale of authentic leadership had the lowest mean score.

In contrary, the result of the present study is in disagreement with Stackston (2021) who stated that the lowest mean score was found in self-awareness dimension. Also, the current study finding is not supported by Ramirez (2022) who found that the self-awareness had the lowest mean score. Moreover, the result of the present study is inconsistent with Mrayyan et al. (2023) who demonstrated that the highest subscale

mean score was observed in self-awareness dimension of authentic leadership.

Concerning nurses' self-efficacy, the finding of the current study found that more than half of the studied staff nurses had a moderate self-efficacy level. And more than one-third of them had a high self-efficacy level. While only the minority of them had a low self-efficacy level. From the investigator's point of view, this finding could be attributed to that staff nurses are gaining experience to manage problems from different situations they exposed at workplace especially with increasing years of experience and other life experiences. Also, fair and peaceful workplace organizational culture and semi-professional attitudes of the nurses as most nurses had a technical associate nursing degree may be reasons for moderate self-efficacy level. As well, this may regard to other environmental factors including workplace stress, emotional fatigue and rapidly changing health care environment.

The present result is confirmed by Batika (2022) who showed that the majority of staff nurses had a moderate self-efficacy level. And, a little more than a quarter of them found to have a high self-efficacy level. Correspondingly, the outcome of the current study is supported by Chicoine et al. (2023) who found that the studied nurses had a moderate self-efficacy before conducting the program. As well, a cross-sectional study by Jiang et al. (2023) demonstrated a moderate mean score of self-control and self-efficacy of the study sample.

In contrary, the current finding is not supported by Bierhup (2022) who stated a low mean score of general self-efficacy. Moreover, the present result is not supported by Orakci et al. (2023) who demonstrated that the study nurses had a high self-efficacy level be stated to increase the quality of patient care. Similarly, the current result also is not confirmed by Caliendo et al. (2023) who revealed that the study participants had a very high self-efficacy.

In the light of the current study's findings, it can be concluded that there was a highly statistically significant positive correlation between all dimensions of authentic leadership and nurses' self-efficacy from the studied staff nurses' perspective. From the investigator's point of view, this may regard to increasing nurse managers' authentic practices that create an environment in which staff nurses become able to perform well, manage problem they faced and affect their productivity positively. So, it is in turn leading to greater levels of staff nurses' self-efficacy and reflected on the quality of patient care provided, and success of the overall of any health care organization.

This result is in agreement with Bryan & Vitello-Cicciu (2022) who found that authentic leadership was positively and significantly related to self-efficacy. As well, the current study is supported by Maya et al. (2022) who illustrated that authentic leadership had a statistically significant effect on psychological capital and self-efficacy. Additionally, Gelaidan et al. (2023) reported a positive significant relation

between Servant and authentic leadership and creative self-efficacy.

In contrary with the finding of present study, a study by Pradipto et al. (2018) showed several interesting findings in the study, one of which is the finding of authentic leadership. It illustrated that authentic leadership is negatively correlated with self-efficacy, and there was no correlation among authentic leadership and self-efficacy or other study variables. This finding means that in Binus University the higher the superior authentic leadership, the lower the self-efficacy of the staff.

In the light of the present study, the finding of the current study demonstrated that there was a statistically significant relation between the studied nurse managers' personal characteristics and authentic leadership from the studied nurse managers' perspective regarding age, marital status, educational level, area of their work, and previous attendance of a training workshop about authentic leadership. From the investigator's point of view, the older the nurse manager was, the higher they rated themselves on authentic leadership. Also, nurse managers with a higher degree of education could be more oriented about leadership styles and characteristics of each type and they have more sense of self. While regarding to marital status of the nurse manager, this may attribute to that nurse managers who are married may feel themselves more empowered and have more successful life challenges that may increase their self-awareness and self-confidence.

Furthermore, studied nurse managers in critical care units showed to be more

authentic than those of departments. This may regard to more stressful work area and work load at intensive care units (ICU) that necessitate the leader to be more authentic to their staff to avoid staff burnout and turnover and ensure amore quality of nursing care. Also, it may attribute to most of nurse managers at ICU had higher education levels and some of them has master degrees. As well, it is expected that attendance of a training workshop about authentic leadership can have a positive impact on leadership style as nurse managers are expected to know more about themselves and proper leadership styles.

The current finding is in agreement with Stone (2021) who stated that age was a significant predictor of authentic leadership. Specifically, age was associated with transparency, internal moral perspective, balanced processing, and self-awareness. Similarly, the present result is supported by Ramirez (2022) who presented that there was a significant relationship between age, educational level, and authentic leadership.

In contrary, the findings of the present study in not supported by Söderlund & Wennerholm (2021) who stated that there was a significant relation between leaders' gender and their authentic leadership. As well, the present study findings are inconsistent with Mrayyan et al. (2023) who reported that there was no significant correlation between age and authentic leadership, while gender had a significant relation with authentic leadership, with female gender increased authentic leadership perceptions.

Moreover, the finding of the current study illustrated that there was a statistically significant relation between the studied staff nurses' personal characteristics and authentic leadership levels from the studied staff nurses' perspective regarding only studied staff nurses' level of education, area of their work, and previous attendance of a training workshop about nurses' self-efficacy. From the investigator's point of view, staff nurses with higher degree of education may be more oriented about leadership styles and characteristics of each type and so they have more sense of their leaders. Also, most of the studied staff nurses had technical degree that may affect their perception of their leaders.

In addition, staff nurses of critical care units stated their nurse managers to have authentic leadership higher than staff nurses at departments where situations are more familiar. As, staff nurses working in critical units faced more critical situation which improve their problem-solving abilities enabling them to be socially intelligent. This may regard to overload working and more stressful environment at critical units that require more qualified leaders with proper leadership styles. Furthermore, attending a training workshop about nurses' self-efficacy could help any nursing staff to be more honest with and more oriented of themselves, their strengths and weaknesses and it may offer ways to improvement to enhance their social competencies. This in turn may affect staff nurses' perception about different ways to manage different problem, which could affect the staff's assessment of their leaders' style.

The current study findings are in the same line with Cardenas (2022) who demonstrated that staff nurses rating of their nurse managers' authentic leadership style was significantly correlated to staff level of education. Additionally, the present study findings are consistent with Mrayyan et al. (2023) who stated that there was a significant relationship between authentic leadership and education, hospital type, work unit and tenure.

On the other hand, the result of the present study is inconsistent with Stackston (2021) who found that there was no relationship between the staff's rating of their leaders' authentic Leadership, the leader's gender, as well as staff's gender, generation, ethnicity, marital status, and education level. As well, the findings of the present study in not supported by Rego et al. (2018) who stated that there was no significant relationship between education level of nurses and authentic leadership of leaders.

As well, the result of the current study revealed that there was no a statistically significant relation between the studied staff nurses' personal characteristics and total score of their self-efficacy except both staff nurses' educational level, and previous attendance of a training workshop about nurses' self-efficacy. From the investigator's point of view, this may regard to that education plays an important role in nurses' capabilities and skills whether on personal or professional level, and currently there are many new trends topics involved at nursing education that enhance nurses' self-efficacy greatly. As well as, it is expected that attendance of a training

workshop of self-efficacy could enhance and improve general self-efficacy of staff nurses. As it may be considered as a platform and chance for all nurses to enhance their competencies and skills, while discovering and improving their weakness and problems.

In congruent with the present finding, a study by Ageiz et al. (2021) revealed a statistically significant difference between nurses' self-efficacy and their educational level. Similarly, the current study finding is supported by Al-Hamdan & Bani Issa (2021) who found that the years of experience were not significantly correlated with general self-efficacy. Moreover, the present finding is in the same line with Orakci et al. (2023) who reported that self-efficacy did not significantly differentiate by gender.

On the other hand, the result of the present study is contradicted with Batika (2022) who showed that there were no statistically significant differences between the studied staff nurses' self-efficacy and their educational level. While staff nurses' experience and their area of work had a highly statistically significant difference with their self-efficacy. Furthermore, a study adopted by Caliendo et al. (2023) found that there was a significant relation between gender and general self-efficacy, with females were less self-efficacious.

Conclusion

In the light of the current study results, it can be concluded that the highest percent of the studied nurse managers had a high level of authentic leadership from their perspective. As well, from

the studied staff nurses' perspective, the highest percent of the studied staff nurses perceived a moderate level of authentic leadership. Furthermore, the highest percent of the studied staff nurses had a moderate self-efficacy level. Finally, there was a highly statistically significant positive correlation between all dimensions of authentic leadership and nurses' self-efficacy from the studied staff nurses' perspective at Ashmoun General Hospital.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

I. At practical level:

- Establishing evidence-based research findings regarding effective leadership styles in practice.
- Training of newly-graduated nurse managers in terms of behaviors and ethical standards in management, leadership and self-efficacy before upgrading to leadership roles.

II. At educational level:

- New trends of effective leadership styles such as authentic leadership, and factors enhancing nurses' self-efficacy should be included in the nursing curricula.
- Conducting educational workshops for under and newly graduated nurses in order to train them on improving self-efficacy and leadership skills.

III. At research level:

- Replication of the study with all healthcare professionals from different hospitals in different regions

of the country and in different health care sectors to ascertain generalizability of the findings and prove useful for increasing the external validity of this study.

- Future study on the impact of empowering leadership, transformational leadership on nurses' self-efficacy and career success in order to determine whether authentic leadership uniquely contributes to nurses' self-efficacy above and beyond these leadership styles.

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