The Relationship between Authentic Leadership and Psychological Well-being at Work for Staff Nurses

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Abstract

Background: Authentic leadership fosters self-development and psychological competencies by promoting internal morality, relational accountability, and it significantly predicts psychological well-being. **Aim:** To investigate the relationship between head nurses' authentic leadership and the psychological well-being at work for their staff nurses. **Design:** A descriptive correlational design was used in this study. **Setting:** This study was conducted at Kafr El-Sheikh university hospital. **Subjects:** The study included all head nurses and staff nurses, encompassing both genders and different levels of nursing education, from all departments. **Tools:** Two tools were used for data collection: Authentic Leadership Self-Assessment Questionnaire and The Index for Psychological Well-being at Work (IPWBW) questionnaire. **Results:** More than two-thirds of head nurses had a high level of authentic leadership. For staff nurses, nearly half demonstrated a high level of psychological well-being at work, and nearly half also showed a moderate level. **Conclusion:** There was a statistically significant positive correlation between authentic leadership and psychological well-being at work. **Recommendation:** Implement an authentic leadership educational program for all head nurses to increase their authentic leadership competencies; create a supportive working environment that enhances nurses' innovation; and conduct further studies about authentic leadership in nursing to examine its effects on nurse-related outcomes.

Keywords: *Authentic leadership, Head nurses, Psychological well-being, Staff nurses.*

I- Introduction:

Authentic leadership is a relatively new concept in nursing, with limited studies undertaken into its application in healthcare. Authentic leadership emphasizes the importance of the leader being true to their personal core values and developing honest relationships with team members, valuing their contributions, and behaving ethically and transparently **(Best, 2022).** Authentic leadership is a management style in which leaders collaborate with subordinates to promote effective self-development to foster and enhance psychological well-being and an ethical environment that promotes internal morality, self-awareness, balanced data processing, and relational accountability **(Alilyyani et al., 2022; Ali, 2024).**

Authentic leadership style consists of four aspects: self-awareness, balanced processing, relational transparency, and internalized moral perspective. The capability to discover and recognize one's personal talents and weaknesses is known as self-awareness. Balanced processing refers to the ability to objectively analyze external, self-relevant information and data while considering others' opinions before making decisions. Relational transparency is an open manner of self-disclosure and the development of relationships and trust with followers, which entails being straightforward about oneself and communicating both positive and negative aspects. Finally, internalized moral perspective entails a built-in structure of self-regulation that includes

adhering to ethical and moral standards in the face of potential group, social, or organizational pressure **(Abdelhamied et al., 2023).**

Psychological well-being can be defined as happiness, joy, and the presence of positive emotions in life, enabling individuals to strive toward developing their potential abilities. It is a multidimensional concept that encompasses physical and mental health, educational status, economic situation, material security, the attainment of independence and freedom, and the ability to participate in social life. Authentic leaders enhance the psychological well-being of employees and help them recover when faced with challenges, setbacks, and failures. Therefore, authentic leadership is considered one of the most important components in predicting psychological well-being. Authentic leaders are individuals who possess a strong sense of self-awareness, being conscious of their thoughts and behaviors. They know who they are, what they think, how they behave, and are deeply aware of their own values, ethics, and the capabilities of both themselves and others **(Kia & Ranjbaripoor, 2022).**

Staff nurses experience a lot of workplace stress, work overload, low salaries compared to their effort, rigid work schedules, and unbending leader relations. These perceived problems lead to increased work pressures, decreased patient quality care and safety, and low job satisfaction. Furthermore, they are highly predictive of turnover. Recognizing the potential for effective leadership to positively impact these issues, the researchers are eager to shed light on the association between authentic leadership and psychological well-being at work **(El-Sayed & Khaled, 2024)**.

II- Significance of the study:

The Future of Nursing 2020–2030 report's call for nurses to address health equity will set the profession's priorities for the next decade. Charting this path will require inclusive leadership led by those from historically marginalized backgrounds, who have the knowledge and experience to effectively partner with the communities they serve. This will also require active investment in the development of emerging and mid-career leaders to do the same **(Nikpour et al., 2022).**

In Egypt, A cross-sectional descriptive study was conducted at Kafir El-sheikh University hospitals to investigate authentic leadership effects on nurses' psychological distress and their turnover intention and found that authentic leadership style has a statistically significant negative relationship with psychological distress (r = -0.28), and turnover intention was found (r = -0.18) retrospectively. Whereas the results indicated that there is a statistically significant positive relationship between psychological distress and turnover intention (r = 0.52) **(Abousoliman & Hamed, 2024).**

Additionally, this research focuses on authentic leadership in the nursing profession, enhancing staff nurses' psychological well-being and improving the healthcare sector's effectiveness. Also, the relationship between authentic leadership and staff nurses' psychological well-being has rarely been addressed in leadership context.

III- Aim of the study:

This study aimed to investigate the relationship between head nurses' authentic leadership and psychological well-being at work for their staff nurses through the following objectives.

1. Assess head nurses' authentic leadership.
2. Determine staff nurses' psychological well-being at work.
3. Find out the relationship between authentic leadership and staff nurses' psychological well-being.

IV- Research Question

Is there a relationship between authentic leadership and staff nurses' psychological well-being?

V- Subjects and Methods

Research design:

A descriptive correlational design was used in this study.

Setting:

The study was conducted at Kafr El-Sheikh university hospital, located in Kafr El-Sheikh governorate – Egypt.

Sample:

Study sample consisted of two groups:

First group: All head nurses of both genders and different levels in nursing education across all departments at Kafr El-Sheikh University Hospital were included in the study. The final sample size, after applying exclusion criteria, was (N=30).

Second group: All staff nurses both genders and different levels in nursing education across all departments at Kafr El-Sheikh University Hospital were included in the study. The final sample size, after applying exclusion criteria, was (N =300).

Inclusion criteria:

All head nurses and all staff nurses had at least six months of experience in the current hospital.

Exclusion criteria:

Head nurses and staff nurses who attended previous training about authentic leadership and psychological well-being were excluded.

Tools for data collection:

Two tools were utilized to collect data:

The First tool: Authentic Leadership Self-Assessment Questionnaire: It was developed by **Walumbwa et al. (2008)** and was adopted by researcher to assess authentic leadership for head nurses.

This tool consisted of two parts.

Part I: Personal data of head nurses: This section collected demographic and professional information including: gender, age, level of nursing education, daily working hours, attendance of previous training about authentic leadership, years of experience in the current hospital, and current work department.

Part II: Authentic Leadership Self-Assessment Questionnaire: This self-administered questionnaire was used to assess authentic leadership among head nurses. It comprises 16 items divided into four sub-scales**:** relational transparency (5 items), internalized moral perspective (4 items), balanced information processing (3 items), and **s**elf-awareness (4 items).

Scoring system: Subjects' responses were measured on a 5-point Likert scale for all items, with response categories ranging from (1) strongly disagree to (5) strongly agree. A total authentic leadership score was calculated by summing the scores of the 16 items across the four sub-scales. The grand total score for authentic leadership ranged between 0 and 48. The total score was calculated by summing the scores of all categories and then categorized as follows:

- High level >75% (> 36 points).

- Moderate level 50% - 75% (24-36 points).

- Low level <50% (< 24 points).

The second tool: The Index for Psychological Well-being at Work (IPWBW) questionnaire.

It was developed by **Dagenais-Desmarais and Savoie (2011***)* and was adopted by researchers.

This tool consisted of two parts.

Part 1: Personal data of staff nurses: This section collected demographic and professional information including: gender, age, level of education in nursing, daily working hours, attending previous training about psychological well-being and years of experience in current hospital and current work department.

Part 2: The Index for Psychological Well-being at Work (IPWBW) questionnaire: This self-administered questionnaire was used to assess staff nurses' psychological well-being at work. This tool comprises 25 items distributed across five dimensions, with each dimension consisting of five items. The dimensions are: interpersonal fit at work, thriving at work, feelings of competency at work, perceived recognition at work, and desire for involvement at work**.**

Scoring system: Subjects' responses were measured using a 5-point Likert scale for all items, with response categories ranging from (1) strongly disagree to (5) strongly agree. The grand total score for all three factors ranged between 0 and 75. The total score was calculated by summing the scores of all categories and then categorized as follows:

- High level >75% (> 56 points).

- Moderate level 50% - 75% (37-56 points).

- Low level <50% (< 37 points).

Validity of the study tools:

The first tool (Authentic Leadership Self-Assessment Questionnaire) and second tool (Index for Psychological Well-being at Work questionnaire) were translated into Arabic using the back-translation technique.

Reliability of the study tools:

Table 1: Internal consistency (Cronbach's alpha) of the study tools.

Tool	Cronbach's alpha (α)	Interpretation	Source
Authentic Leadership Self-Assessment Questionnaire	**0.94**	Excellent	Walumbwa et al., (2008)
Psychological Well-being at Work Survey	**0.964**	Excellent	Dagenais-Desmarais and Savoie (2011)

Ethical considerations

Approval was obtained from the Scientific Research Ethical Committee at the Faculty of Nursing, Helwan University. Additionally, permission was secured from the hospital manager of Kafr El-Sheikh University Hospital prior to data collection. Study subjects were informed about the aim and importance of the study. Informed consent was obtained from participants after a full explanation of the study's nature and objectives. Anonymity and confidentiality were assured through data coding, and participants were informed of their right to withdraw from the study at any time. Ethical principles, values, cultures, and beliefs were respected throughout the data collection process.

Pilot study

A pilot study was conducted on 10% of the study sample (3 head nurses and 30 staff nurses) from Kafr El-Sheikh University Hospital, from the beginning of January 2024 to the end of January 2024. The pilot study aimed to confirm the clarity and applicability of the study tools and to estimate the time required for completing the questionnaires. Based on the pilot study, no modifications were made, and a final version was prepared for distribution to the nursing staff. Those participants were included in the study sample.

Field work

The actual fieldwork commenced at the beginning of February 2024 and was completed by the end of March 2024. The researcher personally collected data by meeting the head and staff nurses in each department. Before participants signed the informed consent, the researcher explained the aim and importance of the study. Data were collected daily from all hospital departments throughout the day. To ensure the absence of any missing data, the researcher checked the completeness of each completed questionnaire after its submission by the head and staff nurses. The time required for head nurses to complete the first tool ranged between 10-15 minutes, while it ranged between 15-20 minutes for staff nurses completing the second tool.

Administrative Item:

To carry out the study, an official letter was issued from the faculty of nursing at Helwan university explaining the aim of the study to the manager of Kafir-Sheikh university hospital to obtain their permission for data collection from head and staff nurses in their hospital.

Statistical design

The collected data were organized, tabulated, and statistically analyzed using SPSS software package 24. Qualitative data were described using frequency (n) and percentage (%). Quantitative data were described using range (minimum and maximum), mean, and standard deviation. Statistical significance was set at $p < 0.05$. Pearson's Coefficient Correlation was used to examine the relationship between authentic leadership and psychological well-being. Pearson's Coefficient Correlation was used to examine correlation between personal data and scores.

VI- Results:

Table (2): Personal data of the studied head nurses (N=30)

Personal data	No.	%
Age		
29-32	20	66.7
33-40	10	33.3
Mean±SD 32.1±2.9		
Daily working hours		
< 8	30	100.0
Years of Experience		
1-<5yrs	19	63.3
5-10yrs	11	36.7
Mean±SD 4.6±2.5		
Current work department		
In-patient	8	26.7
Out-patient	2	6.7

Intensive care units	8	26.7
Emergency	2	6.7
Dialysis	2	6.7
Neonate intensive care unit	2	6.7
Operations	6	20.0

As shown in Table 2, two thirds (66.7%) of the studied head nurses were less than 32 years old. Additionally, the table reveals that all participants worked less than 8 hours daily. Regarding years of experience, nearly two thirds (63.3%) of the study sample had less than 5 years of experience. While only (36.7%) of them had 5 to 10 years of experience.

According to their current work department, the highest percentage of head nurses (26.7%) was found equally in both the Inpatient Departments and the Intensive Care Units. Conversely, the lowest percentage of head nurses (6.7%) was found equally in the Emergency Department, Dialysis Unit, Outpatient Department, and Neonatal Intensive Care Unit.
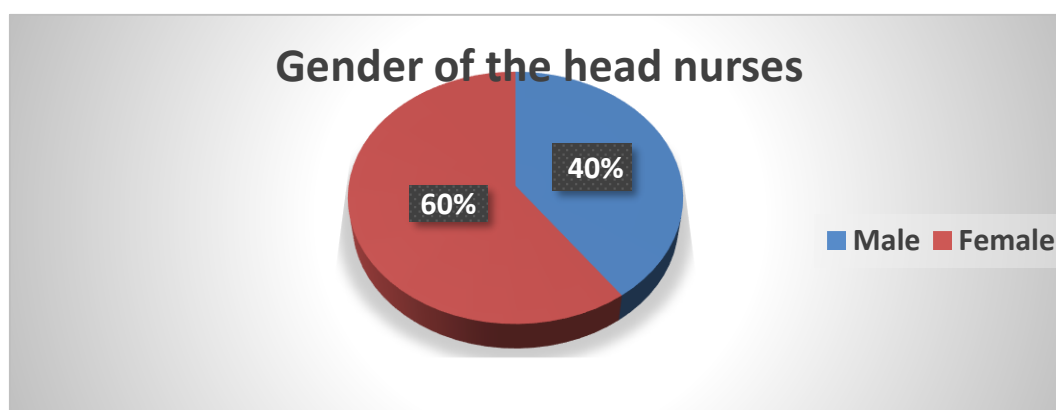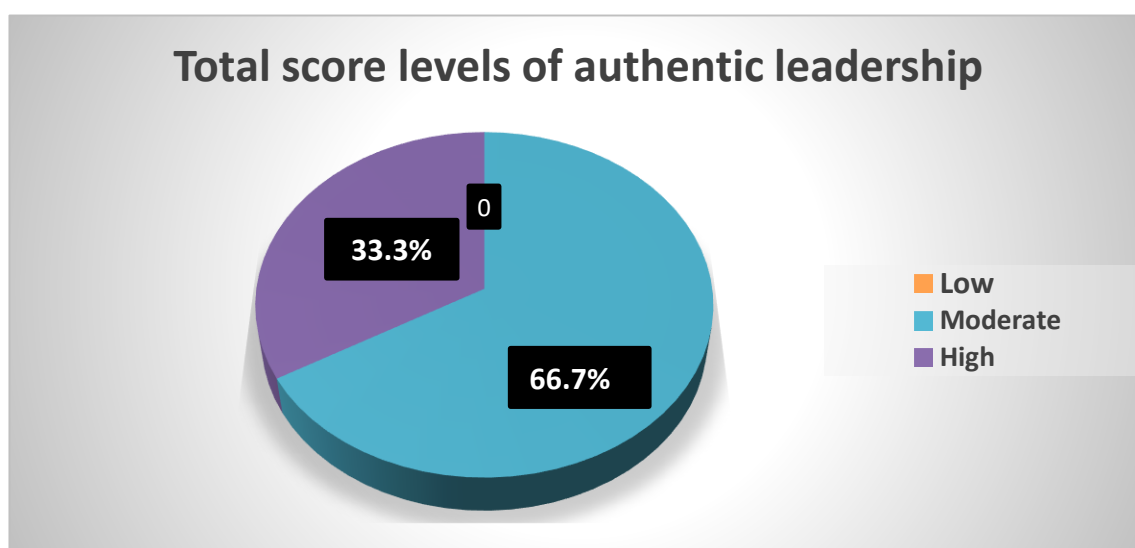

Figure (1): Percentage distribution of gender among the studied head nurses (N=30).

As shown in Figure 1, less than two thirds (60%) of head nurses were females, and 40% were males.

Figure(2): Total score levels of authentic leadership as perceived by the studied head nurses (N=30).

Figure 2 show that more than two-thirds (66.7%) of head nurses demonstrated a high level of authentic leadership, while one-third of them reported a moderate level of authentic leadership (33.3%).

Table (3): Personal data of the studied staff nurses (N=300).

Personal data	No.	%
Age		
20-25	137	45.6
26-30	163	54.4
Mean ±SD **25.5 ± 2.4**		
Daily working hours		
<8	32	10.7
8-12	268	89.3
Mean ±SD **10.1 ± 1.39**		
Years of experience		
1-<5yrs	250	83.3
5-10yrs	50	16.7
Mean ±SD **2.9±2.0**		
Current work departments		
In-patient	81	27
Out-patient	20	6.7
Intensive care units	79	26.3
Emergency	20	6.7
Dialysis	20	6.7
Neonate intensive care unit	19	6.3
Operations	61	20.3

As shown in Table 3, more than half (54.4%) of the studied staff nurses were in the 20–25 years age group. Additionally, the table reveals that the vast majority (89.3%) of the studied sample worked 8–12 hours daily. Conversely, only (10.7%) worked less than 8 hours daily.

In relation to years of experience, more than three quarters (83.3%) of the studied staff nurses had less than 5 years of experience. Conversely, less than one-fifth (16.7%) had between 5 and 10 years of experience. According to their current work department, the highest number of staff nurses (27%) were from the Inpatient Departments, while only (6.3%) were from the Neonatal Intensive Care Unit.
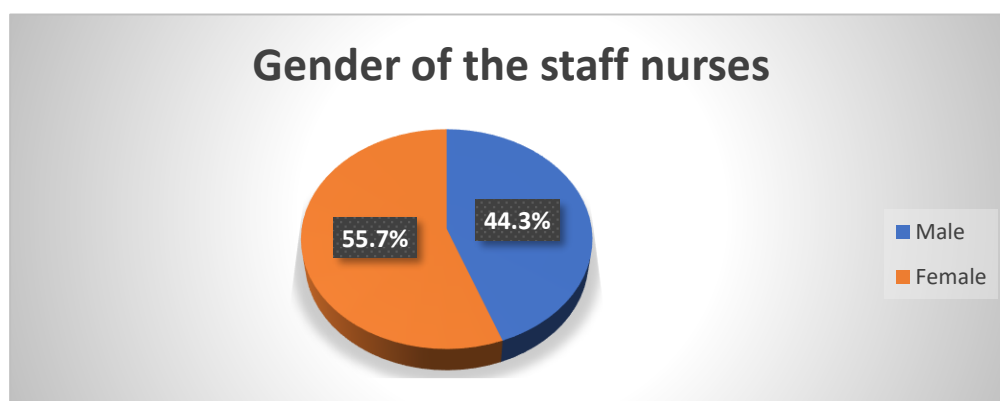
Figure (3): Percentage distribution of gender among the studied staff nurses (N=300).

As shown in Figure 4, more than half (55.7%) of the studied staff nurses were female nurses, and (44.3%) were male nurses.
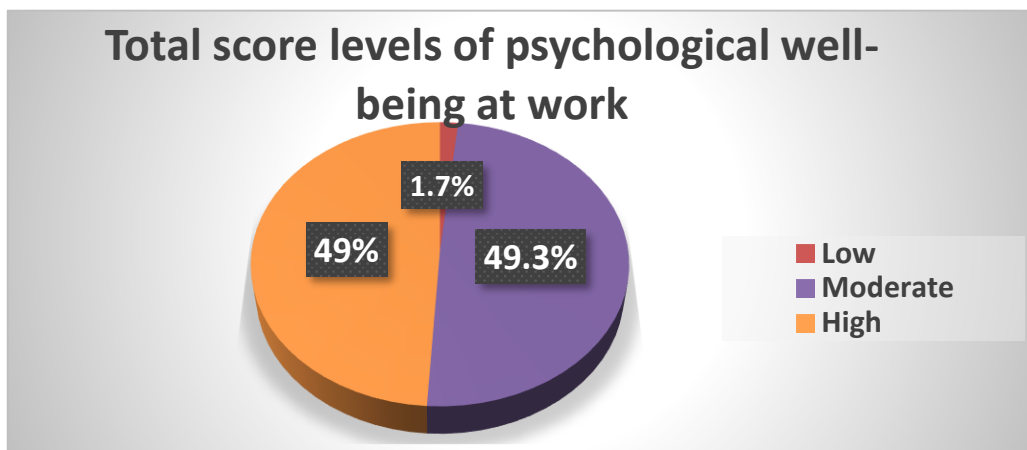
Figure (4): Total score levels of psychological well-being at work as perceived by the studied staff nurses (N=300).

Figure 4 show that nearly half of staff nurses (49% and 49.3%) demonstrated a high level of psychological well-being at work and a moderate level, respectively. On the other hand, only (1.7%) of staff nurses reported a low level of psychological well-being at work.

Table (4): Correlation between authentic leadership and psychological well-being at work.

Scores	Authentic leadership	
Psychological wellbeing at work	R	P
	0.14	0.049*

*Significant at p-value<0.05   *r: Pearson correlation coefficient

Figure (5): Correlation between authentic leadership and psychological well-being at work.

Table 4 and Figure 5 show that there was a statistically significant positive correlation between authentic leadership and psychological well-being at work (r =0.14, p =0.049).

VII- Discussion:

Authentic leadership has emerged as one of the most crucial leadership approaches given recent societal changes globally. Modern organizations require leaders who possess high ethical standards, are aware of their abilities, and are fair in their decision-making process, thereby fostering integrity in the workplace **(Shurab et al., 2024).** The psychological health and job happiness of staff nurses are significantly improved by real leadership among head nurses. Better results in healthcare settings can be achieved by real leaders who cultivate a supportive and moral work atmosphere that improves the psychological well-being and general job satisfaction of their workforce *(Lindsay& Mathieson, 2022).*

Demographic Characteristics of Head Nurses. In relation to the gender of the studied head nurses, the present study showed that less than two-thirds of head nurses were females. Similarly, these results are consistent with those of **Aboelenein & Mostafa (2023),** who conducted a study entitled 'Effect of educational program about authentic leadership for head nurses on staff Nurses' resilience and innovation behavior' and found that most of the head nurses were female. From the researchers' point of view, this result can be explained due to due to the fact that the nursing profession is largely female-dominated.

Regarding the age of the studied head nurses, the current study revealed that two-thirds of head nurses were aged between 29 and 32 years. These results are consistent with **Elmawla et al. (2020),** who conducted a study entitled 'Effect of educational program about authentic leadership and mindfulness factors on head nurses' practice self–evaluation' and reported that more than half of the head nurses were aged ≤30 years.

Regarding the educational level of the studied head nurses, the present study indicated that more than half had a master's degree in nursing. These results were incongruent with the findings of **Shurab et al. (2024),** whose study reported that less than half of the nurse managers studied had a diploma degree.

Concerning the years of experience, the present study revealed that two-thirds of head nurses had experience ranging from 1 to 5 years. Furthermore, over one-quarter of these head nurses were from inpatient departments and intensive care units. In contrast, **Elmawla et al. (2020)** found a broader experience range for head nurses (1-17 years, with a mean of 5.04 ± 3.895 years), and reported that less than half were employed in medical departments.

Overall, the present study's results are inconsistent with the demographic findings of **Abdelhamied et al. (2023),** whose study, entitled 'Effect of Authentic Leadership Training Program for Head Nurses on Nurses Innovative Work Behaviors at Minia University Hospitals,' reported that 30.9% of head nurses were aged between 30 and less than 35 years, with a mean age of 34.9 ± 5.7 years. Regarding gender, 61.7% in their sample of head nurses were male, and 30.9% had 1 to 5 years of experience. In terms of educational qualification, all (100%) had a bachelor's degree, and concerning marital status, 90.1% were married. Regarding their workplace, 43.2% worked in Pediatric and Gynecology University Hospital .

Demographic Characteristics of Staff Nurses. In relation to the gender of the studied staff nurses, the present study revealed that more than half of studies staff nurses were females. These results go along with Abousoliman and Hamed (2024), who applied a study entitled "Effect of authentic leadership on Nurses' psychological distress and turnover intention" and reported that more than half of the studied nurses were female .

Regarding the age of the staff nurses, the current study showed that more than half of the staff nurses were aged from 20 to 25 years. However, this finding was inconsistent with that of **Elhosany and Helal (2020),** whose study, entitled 'The relationship between psychological well-being and work motivation among staff nurses in

governmental hospitals in Port Said,' reported that less than one half of the staff nurses were in the age group ranging from 20 to less than 30 years.

Concerning the years of experience, the present study stated that a large majority of the staff nurses had less than 5 years of experience. While **Abdelhamied et al. (2023)** also reported that a proportion of staff nurses had 1 to 5 years of experience, their finding that less than half fell into this category suggests a different distribution of experience levels compared to the current study.

Correlation Between Authentic Leadership and Psychological Well-being

Regarding the correlation between authentic leadership and psychological well-being at work, the current study indicated that there was a statistically significant positive correlation between authentic leadership and psychological well-being at work**.** This finding is consistent with **Choi (2021)**, who, in a study entitled 'Effect of chief executive officer's sustainable leadership styles on organization members' psychological well-being and organizational citizenship behavior,' found that authentic leadership styles had statistically significant positive effects on employees' psychological well-being

In addition, these results are consistent with the findings of **Naiboğlu and Bilgivar (2021).** In their study entitled 'The effect of authentic leadership on organizational communication: The mediating role of psychological well-being,' they found that authentic leadership strongly affects organizational communication. They also determined that psychological well-being has a partial mediating role in the significant positive effect of authentic leadership on organizational communication. From the researchers' point of view, head nurses who practice authenticity create a work culture that values respect, fairness, and collaboration, which can reduce workplace stress and enhance overall well-being among staff nurses. Authentic leadership is linked to increased job satisfaction. When staff nurses perceive their head nurses as authentic, they are more likely to feel satisfied with their job, which correlates with better psychological well-being.

Additionally, **Bannay & Hadi (2021)** in a study entitled 'Authentic leadership and psychological well-being at the workplace: Exploring the mediating role of perceived job security,' illustrated that authentic leadership has an impact on the psychological well-being of nurses. They also found that the mediator variable (perceived job security) affects psychological well-being. This research highlighted that the concept of authentic leadership in healthcare enables nurses to have more job security and consequently improves their psychological well-being, underscoring that leaders must demonstrate authentic leadership by being confident, optimistic, hopeful, and adaptable.

Inconsistent Findings Related to Demographics

On the other hand, the present study revealed that there was no statistically significant correlation between head nurses' age, years of experience**,** gender, department, and their authentic leadership. These findings were inconsistent with **Aboelenein and Mostafa (2023)**, who concluded that there was a statistically significant correlation between head nurses' age, level of education, and years of experience and total authentic leadership.

From the researcher's point of view, the significant correlations observed in some studies (e.g., Aboelenein and Mostafa, 2023) between demographic factors and authentic leadership might be explained by the fact that older head nurses with more training and experience often develop more refined judgment. These leaders can inspire team members, establish a positive work atmosphere, and create meaningful work, thereby influencing authentic leadership, nursing behavior, and work outcomes.

Additionally, the current study revealed no statistically significant association between staff nurses' age, years of experience, gender, daily work hours, department, level of education, and their psychological well-being

at work. These findings were contradicted by **Teo et al. (2023)**, who, in a study entitled 'Authentic leadership and psychological well-being of nurses: A mediated moderation model,' stated that there was a positive association between psychological well-being and gender, and a negative association with supervisory position.

As regards the work department, the current study indicated that more than one quarter of staff nurses worked at inpatient departments. In contrast, **Ali (2024)** conducted a study entitled 'Authentic Leadership as a mediator in the relationship between Psychological Contract Breach and Organizational Cynicism among nurses,' and reported that more than half of their sample worked at critical care units. From the researchers' point of view, the high proportion of nurses in critical care units in Ali's study can be explained by the inherently stressful conditions these units operate under, which may contribute to the development of distress among nurses.

Overall, the present study's results were inconsistent with the demographic findings of **Shurab et al. (2024),** whose study reported that 40.7% of their nurses were aged less than 35 years, with a mean age of 38.32 ± 4.89 years. Additionally, 66.4% of them were single. Regarding their qualifications, 50.4% had a technical nursing diploma. Furthermore, 46.9% had between 5 and 10 years of experience, with a mean of 9.45 ± 2.07 years.

VIII- Conclusion:

The study results concluded that:

More than two-thirds of head nurses had a high level of authentic leadership, while one third of them reported a moderate level of authentic leadership. Nearly half of staff nurses had a high level of psychological well-being at work and moderate level respectively. Additionally, there was a statistically significant positive correlation between authentic leadership and psychological well-being at work.

IX- Recommendation:

Based on the current study findings, the following recommendations were suggested:

I- Healthcare organizations:

1. Implement an authentic leadership educational program and workshops for all head nurses to increase their competencies regarding their authentic leadership.
2. Encourage hospital administrators to reform their hospital policy to emphasize authentic leadership coaching behaviors as an effective approach to support head nurses in a variety of positions.

II- Head nurses:

1. Meet regularly with staff nurses to discuss, solve their problems and help them to express their feelings and needs.
2. Monitor of the workplace psychological well-being among staff nurses to avoid its exacerbating effects.
3. Create a supportive working environment that enhances nurse's innovation by enough resources, and time that help in building relationships, and increasing communication.
4. Head nurses should train to be more realistic in their judgments and decisions about themselves and their work in the present moment by blocking past and future thoughts to gain subordinates trust and respect.

III- Further studies:

1. Replication of similar study with a larger sample size.
2. Conduct studies of authentic leadership in nursing and examine its effects on outcomes related to nurses.
3. Investigate how authentic leadership influences the organization and its employees.

X- Reference

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