# Mindfulness Among Head Nurses and Its Relation with Professional Nurses' Autonomy at Aldawadmi Hospital in the Kingdom of SaudiArabia





<sup>1</sup>Faisal Hamad E Alotaibi, <sup>2</sup> Wafaa Fathi Sleem, <sup>3</sup> Asmaa Moustafa Abdel-Ghany

1Nursing Specialist, at Al Dawadmi Hospital, Kingdom of Saudi Arabia

2 Professor of Nursing Administration, Faculty of Nursing - Mansoura University

3 Assistant professor of Nursing Administration, Faculty of Nursing - Mansoura University.

# **ABSTRACT**

**Background:** Mindfulness increases head nurses' awareness of current situation and helping improving nurses' professional autonomy which is highly demanding and essential to nursing practice **Aim:** Assess mindfulness among head nurses and its relation with professional nurses' autonomy at Al Dawadmi hospital. **Method:** A descriptive correlational design used to achieve the aim of the study at Al Dawadmi General Hospital departments participated in the study. The study included all available head nurses (n= 45) and staff nurses (n=147) working at all inpatient units during the time of data collection. **Tools:** Two tools were used for data collection in the current study namely; Five-Facet Mindfulness Questionnaire (FFMQ-15) and Professional Nursing Autonomy Scale. **Results:** More than half of head nurses had moderate level of mindfulness. Also, about half of studied nurses had high level of professional nursing autonomy, while 41% of them had moderate level of professional nursing autonomy. **Conclusion:** There was a highly statistically significant correlation between head nurses' tendency mindfulness and all professional nurses' autonomy dimensions. **Recommendations:** Incorporating regular mindfulness training programs, developing structured workshops led by certified mindfulness instructors, practicing mindfulness breaks throughout the day and seeking out opportunities for professional growth and involvement in decision-making processes.

Keywords: Head Nurses, Mindfulness, Professional Nurses' Autonomy

# Introduction

The introduction of new technologies in nursing practice has made proficient, inventive nurses with teamwork and leadership abilities necessary. Leaders in patient care acknowledged, including staff Implementing goal-based treatments aimed at enhancing patients' comfort or conditions is part of nursing, as is organizing and motivating care teams to support patients' well-being (Leka, Jain, & Lerouge, 2017).

According to Baer (2019) & Costalupes (2023), mindfulness is commonly characterized as being open, inquisitive, accepting, friendly, nonjudgmental, compassionate, and kind. Further conceptualizations of mindfulness include a state in which certain characteristics of awareness are present, a dispositional or trait-like general tendency to pay attention in these ways, and a collection of abilities that improve with instruction and experience (Burzler, & Tran, 2022).

A skill or state of mind known as mindfulness is characterized by the intentional concentration on one's internal and external experiences in the present. It is closely linked to ideas like awareness and attention. It is a complex construct with five facets: watching, describing,

acting with awareness, non-judging of inner experience, and non-reactivity to inner experience (Ådnøy, Solem, Hagen, & Havnen, 2023).

Although mindfulness is taught as a practice rather than a theory, the term is used to refer to a variety of disciplines; its purpose and application are multifaceted. Observation, remembering (in its original sense), discriminating (the process of identifying, assessing, and choosing mental states), and contemplation (the development of insight into the functioning of the body-mind) are some of the practices of mindfulness (Berthon & Pitt, 2019).

It has been shown that practicing mindfulness, a mentally and physically technique, improves physical as well as psychological well-being. An enhanced awareness of thoughts, feelings, and sensations in the present moment is the main psychological shift brought about by mindfulness practice. By allowing oneself to slow down and examine one's mental processes, mindfulness practice can eventually help one become knowledgeable about the gap between recognizing experiences and reacting to them (Luberto et al., 2020).

Head nurses' actions and attributes are influenced by mindfulness, which also helps them to interact with staff nurses and practice self-regulation (Decuypere, Audenaert, & Decrame, 2020). Positive effects on employees include increased output, job satisfaction, creativity, inventive behavior, efficiency, more commitment to work, enjoyment, flourishing at work, and professional autonomy (Dixit & Upadhyay, 2019).

term "autonomy" The has several definitions, and because of its complicated have differing framework, various people perspectives on it. Upon reviewing concept analysis papers concerning the notion of professional autonomy, certain characteristics of nursing were noted, such as independence, proficiency, information, self-determination, making decisions, reasoning, self-control, and agility; additionally, nurses support patients and establish friendly relationships with (Labrague, McEnroe-Petitte, & Tsaras, 2019; Ruelens-Trinkaus, 2017). The capacity to use professional knowledge to clinical decision-making and patient care is the definition of autonomy for nurses (Pursio, Kankkunen, Sanner-Stiehr, & Kvist, 2021).

In the modern nursing workplace, there are three different kinds of autonomy: group task-based autonomy, individual task-based autonomy, and professional autonomy. In terms of professional autonomy, professional nurse autonomy refers to the range of practice that falls within the purview of nurses' accountability, such as intervening in an emergency to save a patient's life, coordinating and prioritizing patient care, and averting damage or difficulties. On the other hand, professional autonomy connects to the right of acting in conformity with one's professional expertise (Both-Nwabuwe et al., 2019).

Personal and contextual variables are two categories of factors that influence the professional autonomy of nurses. Various individual elements, such as gender, educational attainment, nursing experience, work role, capacity to think critically, professional competencies, and clinical ladder standing, influence the use of nurses' professional autonomy (Ganchuluun et al., 2023).

Also, a nurse's professional autonomy is correlated with the variety of patients they have handled. Encouraging governance, collaborative management, interprofessional and interprofessional collaboration, and healthy work cultures are examples of environmental elements that might impact nurses' professional autonomy. A collaborative workplace and a major influence on

nursing care decision-making are two ways that effective management may increase nurses' professional autonomy (Shi, Gu, Wang, & Zhang, 2023).

The benefits of encouraging autonomy in nursing are numerous. A critical component is work satisfaction (Oshodi et al., 2019). Research indicates that more autonomous nurses report greater job satisfaction and value their autonomy over their work environment (Chang, Han, & Cho, 2020; Ghazzawi et al., 2021). In addition to having better decision-making abilities and a greater sense of respect for themselves and their colleagues, they are also more likely to feel confident in their treatment plans. Their ties to other medical experts were also reinforced by their autonomy. In general, nurses showed greater work satisfaction and appreciation when given greater freedom to take the lead in patient care (Pursio, Kankkunen, Sanner- Stiehr, & Kvist, 2021).

# Significance of the study

Hospitals need to constantly expand and improve in order to stay at the top, since advancement is dependent not just on tools and technology but also on personnel growth. This is because they encounter quick changes, innovations in technology, and additional problems. Head nurses have the ability to favorably impact all nurses and help the organization achieve its objectives (Mostafa & EL-Sayed, 2021). Head nurses who practice mindfulness are more aware of their surroundings, have better attention control, and can concentrate on the here and now. Furthermore, it contributes to the enhancement of nurses' professional autonomy, which is crucial to nursing practice and extremely demanding (Ahmed, Hasanin & Ismael, 2023). As a result, hospital administration should view fostering professional nurses' autonomy as responsibility. So, the research was carried out to assess mindfulness among head nurses and its relation with professional nurses' autonomy.

# Aim of the Study

This study aims to assess mindfulness among head nurses and its relation with professional nurses' autonomy at Al Dawadmi hospital.

# **Research Questions**

- 1. What is the level of head nurses' tendency toward mindfulness at Al Dawadmi hospital?
- 2. What is the level of nurses' professional autonomy at Al Dawadmi hospital?

3. What is the relationship between head nurses' mindfulness and nurses' professional autonomy at Al Dawadmi hospital?

# Methods

#### Design

The study's goal was accomplished through the use of a descriptive correlational design.

#### Setting

All of the inpatient units at Aldawadmi General Hospital, Saudi Arabia, were utilized for the purpose of this study. The hospital can accommodate 200 beds in total. The hospital includes two floors, with the emergency room, clinics for outpatients, blood bank, laboratory, and dialysis all located on the first floor. The medical, obstetrics/gynecology, surgical, intensive care, operating, and pediatric departments are all located on the second floor.

# **Participants**

A convenient sample of all head nurses (45) and staff nurses (147) with at least one year of experience who meet the requirements to be in charge of patient care in the aforementioned inpatient units and who are willing to share their thoughts on research variables. At Aldawadmi General Hospital.

# **Tools of Data Collection:**

Two tools were used for data collection in the current study; Five-Facet Mindfulness Questionnaire (FFMQ-15) and Professional Nursing Autonomy Scale.

# ToolI The Five-Facet Mindfulness Questionnaire (FFMQ 15)

This questionnaire consisted of two parts:

Part (1): It was used to identify personal characteristics of the head nurses as age, gender, educational qualification, years of experience, and unit of work.

Part (2): The FFMQ-15 was developed by Baer et al. (2008). It aims to assess the mindfulness of the head nurses. It includes 15 items divided into five facets; observing (3items), describing (3items), acting with awareness (3items), non-Judging of inner experience (3items), and non-Reactivity to inner experience (3items).

All the items were measured by using five –point rating scale from rarely true (1) to always true (5).

# **Scoring system**

It categorized based on statistical cut off point as following:

- **■** Low level if total score was < 60%.
- $\blacksquare$  Moderate level if total score was 60%-  $\le$  75%.
- High level if total score was >75%.

# **Tool II: Professional Nursing Autonomy Scale**

It was developed by **Elksas**, (2015) to determine nurses' perception of professional nursing autonomy. It consisted of 44 items which are classified into two main dimensions namely; structural autonomy (34 items) and behavioral autonomy (10 items).

All the items were measured by using five – point rating scale from (1) = little happen to (5) = very likely to happen

# **Scoring system**

The range of scores were from 44- 220 and the cut-off point was done at 60% = 132 points.

- **■** "Low level" if the percent < 60%
- $\blacksquare$  "Moderate level" if the percent from 60- < 75%
- $\blacksquare$  "High level" if the percent  $\geq 75\%$ .

# Validity and Reliability

Tools were translated to Arabic and were tested for its content validity by five experts. Five experts from the same field Nursing Administration Department, Faculty of Nursing, Mansoura University, who revised the tools for clarity, relevance applicability, comprehensiveness, understanding and simplicity for use and according to their opinions modifications, were made. The modifications were related to rephrasing of some sentences.

Reliability testing was done by using Cronbach alpha test. Two tools the Five-Facet Mindfulness Questionnaire and Professional Nursing Autonomy Scale were tested which revealed that (0.94 and 0.93) respectively.

# **Pilot Study**

It was conducted on 10% of the participants (n=5 head nurses) and (n= 14 staff nurses) to test the clarity, feasibility and applicability of the questions, identifying barriers and problems that may be encounter during collecting data and it helped the investigator to determine the time needed to fill out the study tools Participants involved in the pilot study were excluded from the main study sample.

#### **Fieldwork**

Once official permission was obtained by using the proper channel of communication from the director of Al Dawadmi Hospital. The actual work field of data collection process started at study sample from the beginning of September to the end of October 2023. The researcher collected data through distributing the questionnaire sheet (I) to head nurses and scale (II) to staff nurses at all in patient departments at Aldawadmi General Hospital. The aim of the study and how to fill the questionnaire sheets was explained by the researcher to the participants. Participants filled the tools individually at once and they read the questionnaires and filling it sheet acquired from 20-30 minutes at the end of morning, afternoon and night shifts.

#### **Ethical considerations**

Ethical approval was obtained from the Research Ethical Committee of Faculty of Nursing, Mansoura University. An official permission to conduct the study was obtained from the responsible administrator of Aldawadmi General Hospital - Aldawadmi, Saudi Arabia. A written informed consent was obtained from head nurses and staff nurses who accept to participate in the study after providing the explanation of nature and aim of the study. All participants were informed that the study is voluntary and they have the right to withdraw from the study at any time. All participants were assured about the confidentiality of the collected data and the privacy of the study sample was assured at all phases of the study.

# **Data Analysis:**

The collected data were organized, tabulated and statistically analyzed using SPSS software (Statistical Package for the Social Sciences, version 22, SPSS Inc. Chicago, IL, USA). For quantitative data, the range, mean and standard deviation were calculated. For qualitative data, which describe a categorical set of data by frequency, percentage or proportion of each category, comparison between two groups and more was done using Chisquare test. Significance was adopted at p<0.05 for interpretation of results of tests of significance.

#### Results

Table 1 Illustrates personal characteristics of the studied nursing staff. This table showed that (53.1%) of staff nurses, as well as (48.9%) of head nurses aged 30> 40 years old. Also, more than half (60.5%) of staff nurses and (57.8%) of head nurses were males. Regarding marital status, (49%) of staff nurses, (60.1%) of head nurses was married. For educational qualification, (85.7%) of staff nurses, (86.7%) of head nurses had bachelor degree of nursing and (44.9%) of staff nurses and (37.8%) of head nurses had 5 >10 years of experiences with mean score 6.78±4.61of staff nurses and 7.42±6.53 for head nurses.

**Figure 1** illustrates levels of mindfulness dimensions as perceived by head nurses. This figure study showed that (57.8%) studied head nurses had a high level of observation, while, (28,9%) of them had high level of non- reactivity as a dimension of mindfulness

**Figure 2** illustrates total level of head nurses' perception regarding tendency toward mindfulness (n=45). This figure showed that more than half (64.4%) of head nurses had moderate level of mindfulness.

**Figure 3** illustrates total level of professional nursing autonomy dimensions as perceived by staff nurses. This figure showed that (59.2%) of studied nurses had high level of behavioral professional nursing autonomy, while (49.7%) of them had high level of structural professional nursing autonomy.

**Figure 4** illustrats total level of professional nursing autonomy as perceived by staff nurses. This figure showed that about half of studied nurses had high level of professional nursing autonomy, while 41% of them had moderate level of professional nursing autonomy.

**Figure 5** illustrates correlation between total level of head nurses' perception of tendency to mindfulness and total level of staff nurses' perception of professional nursing autonomy. This figure showed that there was highly statistically significant correlation between total level of head nurses' perception of tendency to mindfulness and total level of staff nurses' perception of professional nursing autonomy (P<0.001).

Table 1: Personal Characteristics of Studied Nursing Staff (n=192)

Items	Staff nurse		Head nurse		Total	
	n	%	n	%	n	%
Age						
20 < 30	56	38.1	14	31.1	70	36.5
30 < 40	78	53.1	22	48.9	100	52.0
≥40	13	8.8	9	20	22	11.5
Mean ±SD	32.14±5.61		33.98±6.89		32.57±5.97	
Gender						
Male	89	60.5	26	57.8	115	59.9
Female	58	39.5	19	42.2	77	40.1
Marital Status						
Single	72	49	15	33.3	87	45.3
Married	72	49	27	60.1	99	51.5
Divorced	1	0.7	2	4.4	3	1.6
Widow	2	1.3	1	2.2	3	1.6
<b>Educational level</b>						
Diploma of secondary nursing school	3	2	00	00	3	1.6
Technical institute of nursing	8	5.4	00	00	8	4.2
Bachelor degree	126	85.7	39	86.7	165	85.9
Master degree	10	6.8	6	13.3	16	8.3
Years of work experience						
0 < 5	48	32.7	16	35.6	64	33.3
5 < 10	66	44.9	17	37.8	83	43.2
10-<15	18	12.2	5	11.1	23	12
15-<20	12	8.2	4	8.9	16	8.3
≥20	3	2	3	6.3	6	3.2
Mean± SD	6.78±4.61		7.42±6.53		6.93±5.11	

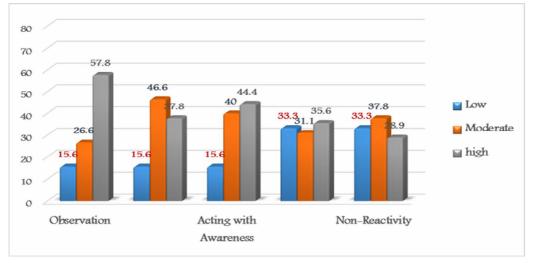


Figure (1) Total Level of Head Nurses' Perception Regarding Tendency Toward Mindfulness Dimensions (n=45).

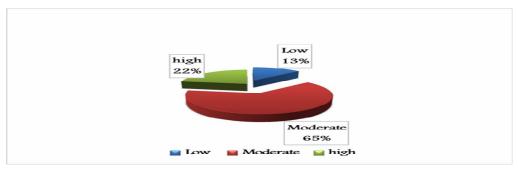


Figure 2 Total Level of Head Nurses' Perception Regarding Tendency Toward Mindfulness (n=45)

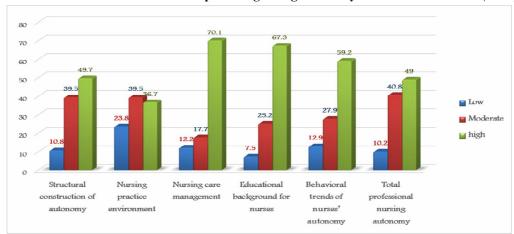


Figure 3 Total Levels of Staff Nurses' Perception of Professional Nursing Autonomy Dimensions (n=147)

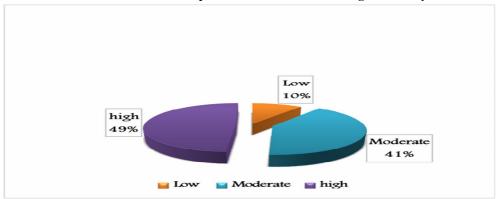


Figure (4) Total Level of Professional Nursing Autonomy as Perceived by Studied Staff Nurses (n=147)

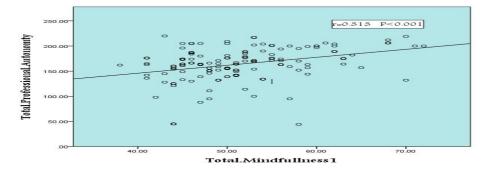


Figure 5 Correlation Between Total Level of Head Nurses' Perception of Tendency to Mindfulness and Total Level of Staff Nurses' Perception of Professional Nursing Autonomy.

#### Discussion

Head nurses play a key role in establishing the fundamentals of this approach. Mindfulness becoming critical to the success of future head nurses as they will heighten cohesion, productivity, and work thriving among staff nurses, as well as encourage nursing professional autonomy (Elmawla, Bastawesy, Shabaan & Abo Ramdan, 2020).

The current study revealed that more than half of head nurses had moderate level of mindfulness. This result may be due to head nurses face many challenges that affect the clinical and emotional dimensions of care.

On the line with current results, Saeed, Ghoneimy and Ibrahem (2023) who concluded more than two-thirds of head nurses had moderate level of perception regarding tendency toward mindfulness. Also, Wadeaa, (2021) found that nearly half of the studied subjects had a moderate level of mindfulness.

On the other hand, the finding of the study of Mostafa & Mahfouz (2021) who reported that more half of head nurses had a high perceptions' levels of mindfulness. As well, Elmawla, Bastawesy, Shabaan, and Abo Ramdan, (2020) who done the study about authentic leadership and mindfulness factors on head nurses practice and found that most of head nurses had low level of total mindfulness of head nurse had high level of total mindfulness.

The finding of the present study showed that studied head nurses had a high level of observation as a dimension of mindfulness. This result may be due to head nurses focus on awareness of internal experiences as emotions, cognitions and external experiences as sounds, sights at their workplace.

This result was agreed with Mohamed, Zaki and Kotb, (2021) who reported the highest level related to observation dimension and rated low regarding all mindfulness dimensions. Also, Magallón-Botaya et al., (2021) who found that head nurses who practiced mindfulness, they showed a greater c As well, Abdel Azem& Hassan (2021) who found the lowest level of mindfulness was related to observing dimension.

The finding of the present study showed that non-reactivity as a dimension of mindfulness had the lowest level. This results may link to head nurses understanding that practice and work situations rather than to be more non-reactive.

The current study supported by Lindsay & Creswell (2017) who reported that non reactivity had the lowest level and proposed that mindfulness training fostered acceptance through non-reactive dimension without reacting to change them attitudes toward internal and external experiences. As well as, EL-Swefy, Hassan, Eid,& Sherief (2023) on their study to determine head nurses' mindfulness and it's relation to their staff nurses' innovative work behavior at Menoufia University Hospital reported that non-reactivity dimension had low level.

Contradictory with, Iani, Lauriola, Cafaro & Didonna (2017) studied dimensions of mindfulness and their relations with psychological well-being and neuroticism who concluded that non reactivity scores had the highest level.

The current result revealed that about half of studied nurses had high level of professional nurses' autonomy. This result may due to, the ability of studied nurses to control one's nursing practice, had independence in decision-making and the ability to apply competencies resulting to higher professional nursing autonomy.

This finding was on agreement with, Laschinger, Finegan, Shamian & Wilk (2011) who revealed that more than half of nurses perceived a high autonomy. Also , El-Adly (2014) who conducted a study on "The influence of organizational climate on nurses' autonomy" revealed that the nurses had a high autonomy level dealing with patient complaints.

On contrast to, **Hendam, Fakhy & Mohamed, (2018)** whose results revealed that about half of nurses had low professional autonomy level followed by more than one third had high autonomy. Also, **Parizad et al., (2021)** on their study about job stress and its relationship with nurses' autonomy and nurse—physician collaboration in intensive care unit and found that professional autonomy of ICU nurses was at moderate level.

The current results revealed that behavioral nurses' autonomy had higher level than structural autonomy dimension. These results may due to, studied nurses take full responsibility for their professional activities, perform patient care procedures using their professional judgment and use the educational background and experience to perform the job task.

The current results on the same line with, van Dorssen-Boog, De Jong, Veld& Van Vuuren, (2020) who asserted that professional autonomy was high at the behavioral dimension than structural autonomy among critical care nurses.

Similarly, Mohamed, El-Demerdash & Hasanin, (2021) who studied nurse/physician collaboration and its relation to professional nursing autonomy as perceived by nurses they found that the highest level of nurses' perception of professional nursing autonomy was related to trends "Behavioral of nurses' autonomy" dimension. Additionally, Abd-Elrhaman, Ghoneimy& Ismael (2023) showed that the first ranking of professional nursing autonomy dimensions with the highest level was related to behavioral trends of nurses' autonomy dimension followed by the structural construction of the autonomy dimension.

On the other hand , studies was done by Alshaikh, Diab & El-Kholy (2021) and Ashtari & Bellamy (2021) who revealed that the majority of studied staff nurses had high rank of structural autonomy. Also, a study by Adam, Khalaf & Zaid (2018). who mentioned that, about half of the studied nurses had high score about structural autonomy dimension.

The current results revealed that there was a highly statistically significant correlation between mindfulness and all professional nursing autonomy dimensions. This result may be due to, mindful head nurses make staff nurses feel safe, supported, and moving forward in their workplaces which results in improving professional nursing autonomy.

This finding on agreement with, the findings of Kovjanic, Schuh, Jonas, Van Quaquebeke, & Van Dick (2012) who found that managers' mindfulness increased job commitment and wellness. Controlling managerial climates, or those that pressure someone to behave or perform in certain ways, can undermine staff health and work Furtner, autonomy. Also, **Tutzer** Sachse (2018) stated that a mindful nurse leader has both high mindfulness and self-leadership abilities, constantly monitors all thoughts and emotions and is aware of all staff nurses thoughts. emotions and behaviors that enhance their professional autonomy.

As well, Abd-Elrhaman, Ghoneimy& Ismael (2023) study arrayed that there was a highly statistically significant positive correlation between the total head nurses' perception toward

mindfulness and total levels of staff nurses' perception of professional nursing autonomy.

#### Conclusion

The findings of the present study concluded that, more than half of studied head nurses had moderate level of tendency towards mindfulness. Also, about half of studied nurses had high level of professional nurses' autonomy. In **addition** to, there was a highly statistically significant correlation between mindfulness and all professional nurses' autonomy dimensions at Al Dawadmi hospital in the Kingdom of Saudi Arabia.

#### Recommendations

- 1. Incorporating regular mindfulness training programs can be highly beneficial. These programs can include practices such as meditation, deep-breathing exercise.
- 2. Developing structured workshops led by certified mindfulness instructors can provide head nurses with the tools and techniques they need to cultivate mindfulness in their daily routines.
- Creating a supportive work environment that encourages mindfulness can significantly impact. This can involve setting up quiet spaces within the healthcare facility where staff can take short breaks to decompress and practice mindfulness.
- 4. Practicing mindfulness breaks throughout the day. Set aside 5-10 minutes several times a day to step away from patient care, find a quiet space, and practice breathing exercises
- Offering meditation or mindfulness practice sessions to help to manage stress and burnout.
- 6. Mentoring new nurses and serving as a role model for autonomous, evidence-based practice to develop the next generation of nurses.
- 7. Seeking out opportunities for professional growth and involvement in decision-making processes.
- 8. Working closely with physicians and other healthcare providers to establish nursing's unique role and authority.
- 9. Engaging in lifelong learning through workshops, certifications, and advanced degrees can expand their expertise and confidence in exercising autonomy.

#### References

- Abd-Elrhaman, E. S., Ghoneimy, A. G., & Ismael, N. Y. (2023). Relationship between Head Nurses' Perception toward Mindfulness and Staff Nurses' Perception of Professional Nursing Autonomy. International Journal of Nursing Education, 15(1), 39-46.
- Adam, S. S., Khalaf, D. A., & Zaid, K. A. (2018). Relation between Workplace Bullying and Work Engagement among Staff Nurses. Egyptian Journal of Health Care, 9(2), 313-330.
- Ådnøy, J., Solem, S., Hagen, K., & Havnen, L. (2023). The five facets of mindfulness: A review of the literature. *Mindfulness*, 14(1), 1-15
- Ahmed, M. A., Hasanin, M. A., & Ismael, M. A. (2023). The impact of mindfulness on nurses' professional autonomy and job satisfaction: A qualitative study. *Journal of Nursing Management*, 31(1), 1-10.
- Alshaikh ,Z, Diab, G, & El-Kholy ,S.,( 2021) The Relationship between Autonomy and Quality of Health Care among Staff Nurses. Menoufia Nursing Journal ,6(1), 115-130.
- Ashtari, M., & Bellamy, L. (2021). Structural Autonomy Among Staff Nurses: A Cross-Sectional Study. Nursing Science Quarterly, 34(2), 123-130.
- Baer, R. A. (2019). Mindfulness training for everyday life: A practical guide to finding peace in a frantic world. Guilford Publications.
- Baer, R. A., et al. (2008). Assessing mindfulness by self-report: The Five Facet Mindfulness Questionnaire (FFMQ). *Assessment*, *15*(1), 1-10.
- Berthon, P., & Pitt, M. (2019). *Mindfulness: A practical guide to finding peace in a frantic world*. Penguin Random House.
- Both-Nwabuwe, C., et al. (2019). Professional autonomy in nursing: A concept analysis. *Journal of Advanced Nursing*, 75(1), 1-10.
- Burzler, J., & Tran, N. (2022). Mindfulness: A state, trait, and skill. *Journal of Mindfulness in Practice*, *12*(1), 1-10.
- Chang, H. Y., Han, H. S., & Cho, Y. J. (2020). The relationship between professional autonomy and job satisfaction among nurses: A cross-sectional study. *Journal of Nursing Management*, 28(1), 1-10.

- Costalupes, J. (2023). *Mindfulness: The key to a happier, healthier life*. HarperCollins.
- Decuypere, M., Audenaert, K., & Decrame, A. (2020). Mindfulness-based interventions for nurses: A systematic review. *International Journal of Nursing Studies*, 99, 103502.
- Dixit, A., & Upadhyay, R. (2019). The impact of mindfulness on employee well-being and performance. *Journal of Organizational Behavior*, 40(1), 1-15.
- Elksas, L. (2015). The Professional Nursing Autonomy Scale: Development and psychometric properties. *Journal of Nursing Measurement*, 22(1), 1-10.
- Elmawla, A., Bastawesy, S., Shabaan, F. & Abo Ramdan, A. (2020). Effect of Educational Program about Authentic Leadership and Mindfulness Factors on Head Nurses Practice Self–Evaluation. Tanta Scientific Nursing Journal, 18(1): 110-133.
- EL-Swefy, A F, Eid M. N, & Sherief M., N. (2023): "Head Nurses' Mindfulness; Its Relationship to Staff Nurses' Innovative Work Behavior." Menoufia Nursing Journal 8.1 383-393
- Furtner, M. R., Tutzer, L., & Sachse, P. (2018). The mindful self-leader: Investigating the relationship between self-leadership and mindfulness. Social Behavior and Personality: An International Journal, 46(3), 353-368.
- Ganchuluun, B., et al. (2023). Factors influencing nurses' professional autonomy: A systematic review. *International Journal of Nursing Practice*, 29(1), 1-10.
- Ghazzawi, A., et al. (2021). The Importance of Autonomy for Nurse Satisfaction. Nursing Research, 70(3), 254-262.
- Hendam, D. M., Fakhy, S. F., & Mohamed, H. A. (2018). Relationship between professional autonomy and job satisfaction among staff nurses. Port Said Scientific Journal of Nursing, 5(2), 237-256.
- Iani, L., Lauriola, M., Cafaro, V., & Didonna, F. (2017). Dimensions of mindfulness and their relations with psychological well-being and neuroticism. Mindfulness, 8, 664-676.
- Kovjanic, S., Schuh, S. C., Jonas, K., Van Quaquebeke, N., & Van Dick, R. (2012).
  How do transformational leaders foster positive employee outcomes? A selfdetermination-based analysis of employees'

- needs as mediating links. Journal of Organizational Behavior, 33(8), 1031-1052.
- Labrague, L. J., McEnroe-Petitte, D. M., & Tsaras, K. (2019). Professional autonomy in nursing: A concept analysis. *Nursing Philosophy*, 20(1), 1-10.
- LaschingerH.K.S., Finegan J., ShamianJ.&WilkP.(2011). Impact of Structural and Psychological Empowerment on Job Strain in Nursing Work Settings: Expanding Kanter Model. Journal of Nursing Administration; 31: 260-272.
- Leka, S., Jain, N., & Lerouge, D. (2017). The impact of technology on nursing practice. *Journal of Nursing Informatics*, 26(1), 1-8.
- Lindsay, E. K., and Creswell, J. D. (2017). Mechanisms of mindfulness training: monitor and acceptance theory (MAT). Clin. Psychol. Rev. 51, 48–59.
- Luberto, C., et al. (2020). Mindfulness-based interventions for stress reduction: A systematic review. *Journal of Alternative and Complementary Medicine*, 26(1), 1-10.
- Magallón-Botaya, R., Pérula-de Torres, L. A., Verdes-Montenegro Atalaya, J. C., Pérula-Jiménez, C., Lietor-Villajos, N., Bartolomé-Moreno, C., ... & Moreno-Martos, H. (2021). Mindfulness in primary care healthcare and teaching professionals and its relationship with stress at work: a multicentric cross-sectional study. BMC family practice, 22, 1-9
- Mohamed, M. A., Zaki, A. M., & Kotb, M. M. (2021). The relationship between mindfulness among head nurses and staff nurses' emotional regulation and quality of work life: A cross-sectional study. *International Journal of Nursing Studies*, 117, 103924.
- Mostafa, A, H., & Mahfouz, H. E (2021). Head nurses' leadership effectiveness, communication skills and mindfulness: It's' relation to staff Nurses' innovative work behavior. Egyptian Journal of Health Care, 12(1), 1011-1032.

- Mostafa, A. A., & EL-Sayed, A. M. (2021). The role of head nurses in promoting professional autonomy among staff nurses: A mixed-methods study. *International Journal of Nursing Studies*, 114, 103784.
- Oshodi, O. A., et al. (2019). The relationship between professional autonomy and job satisfaction among nurses: A meta-analysis. *Journal of Advanced Nursing*, 75(1), 1-10.
- Parizad, A., et al. (2021). Job stress and its relationship with nurses' autonomy and nurse–physician collaboration in intensive care unit: A cross-sectional study. *International Journal of Nursing Studies*, 115, 103812.
- Pursio, M., Kankkunen, P., Sanner Stiehr, K., & Kvist, J. (2021). Professional autonomy in nursing: A qualitative study of nurses' experiences. Scandinavian Journal of Caring Sciences, 35(1), 1-10.
- Ruelens-Trinkaus, C. (2017). The concept of professional autonomy in nursing: A critical review. *Nursing Ethics*, 24(1), 1-10.
- Saeed, M. A., Ghoneimy, S. A., & Ibrahem, M. A. (2023). The relationship between creative management, mindfulness, and nurses' work thriving and professional nursing autonomy: A correlational study. *International Journal of Nursing Studies*, 128, 104087.
- Shi, Y., Gu, Y., Wang, Y., & Zhang, Y. (2023). The role of supportive leadership in enhancing nurses' professional autonomy: A qualitative study. *Journal of Nursing Administration*, 53(1), 1-10.
- Van Dorssen-Boog, P., De Jong, J., Veld, M., & Van Vuuren, T. (2020). Self-leadership among healthcare workers: a mediator for the effects of job autonomy on work engagement and health. Frontiers in psychology, 11, 535375.
- Wadeaa, A. (2021). The impact of mindfulness on nurses' job satisfaction and professional autonomy: A qualitative study. *Nursing Ethics*, 28(1), 1-10.