

## The Relation between Psychosocial Safety Climate and Work Engagement among Staff Nurses

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### Abstract

**Background:** Organizations can create conditions that allow employees to develop their own capacities and grow personally and professionally. Thus, by creating a psychosocial safety climate (PSC), PSC is important for both organizations and employees. **Aim:** the study aimed to assess the relation between psychosocial safety climate and work engagement among staff nurses. **Research Design:** A descriptive correlational research design was utilized. **Setting:** This study was carried out at medical university hospital which affiliated to El- Fayoum University hospitals. **Subjects:** the study subjects include 159 out of 270 of staff nurses. **Tools:** Data were collected by using two tools; psychosocial safety climate scale and work engagement scale. **Results:** Regarding psychosocial safety climate among the studied staff nurses in the study sample find that, more than half of the studied nurses (51.6% & 51.6% & 57.9%) had high management commitment, organizational communication and organizational participation. As well as more than half of them (54.1%) had low level of psychosocial safety climate. Also find that, two third of staff nurses (66.7%) had moderate level of work engagement. **Conclusion:** there was high statistically significant positive correlation between psychosocial safety climate and work engagement. **Recommendations:** nurse managers and administrators must adopt programs and interventions that increase work engagement such as professional development training and practice, providing social support to their staff.

**Key words:** Psychosocial safety climate, Staff Nurse, Work engagement.

### Introduction

Psychosocial safety climate (PSC) considered as a particular organizational climate that's an antecedent to working circumstances and the institutions able to produce work circumstances that keep staff develop their own abilities and develop universally and skillfully. Thus, through the producing of the PSC, the organization able to stimulate psychological health and safety of the staff and bring out safeguard for them against psychological risks also the PSC considered as a management approach which may increase the successfulness and work engagement of the employee (who,2022). Work engagement is a vital job-related psychological consequence that might be associated with understanding the PSC in the place of work. It is a cognitive-affective state characterized by vigor, dedication, and absorption. It is strongly related to employee well-being, job performance levels, and intention to stay with one's current employer and is considered a key outcome in interventions aimed at promoting worker well-

being. So managers show concern for and make worker well-being comes first, workers put their best efforts towards their work (Platania et al., 2022).

The construct of PSC can be defined as “the policies, practices and procedures aimed to protect the health and psychological safety of workers” This concept means that the organization is concerned with the prevention and management of psychosocial risks at work, then it creates a climate of trust and respect where employees perceive that management gives sufficient importance to their well-being for psychological well-being to be a priority so the employees who feel that their leader provide attentions to their mental state and successfulness they have the willingness to devote a lot of resources in work (Liu, 2023). Work engagement is defined as a ‘positive, fulfilling work-related state of mind’ and well-being at work that is ‘characterized by vigor, dedication, and absorption (Liona, & Yurniardi, 2020). Work engagement is

characterized by a high level of vigor and strong identification with one's work, it reflects how involved people are in the tasks that they have to do as part of their jobs and is closely related to their job performance (Sanlio, et al., 2023).

Psychosocial Safety Climate Domains includes the following: Management commitment: Refers to addressing issues related to the psychological health of employees promptly and efficiently identifying and resolving problems, management commitment involves taking swift actions to rectify issues impacting the psychosocial health of employees. Management priority occurs when an emphasis is placed on the psychological health and safety of employees over production goals. Organizational participation entails the active involvement of employees at all levels in raising awareness and safeguarding the psychological health and safety of the workforce. It involves collaborative efforts between management and employees in the safety process, achieved through engagement in consultations. Organizational communication provides a secure and effective channel for employees to voice their complaints, ensuring they feel safe even in unsatisfactory conditions (Dollard and Tessa Bailey, 2021).

### Significance of the study

In health care organizations, a positive atmosphere must be generated and maintained to provide the surrounding environment in which employees become able to administer worthy quality care. This atmosphere is vital to deliver a psychosocial, structure and administrative motivational tools to foster a need to purify nursing care. That mean that nurses need a safe, trusted, healthy environment and effective operating surroundings which enable them to keep patients become the priority and patients' requirements are met (Lateef et al., 2021). In healthcare settings with strong(PSC)work engagement among staff nurses , are generally higher with 50%to 60%of nurses affecting in supportive environments reporting high engagement. However in setting with lower (PSC) work engagement can drop significantly. In Europe often affecting 40%of studies have shown that about 40%of nurses fell only moderately

engaged in their work often due to poor (PSC) and high job demand

From a researchers point of view psychosocial safety climate is very important and helpful tool which can influence employees work engagement and organizational commitment through maintaining and improving their psychological well-being and ensuring quality of work life .also they pointing to a lake of attention to psycho-social safety climate in health organization. So, the present study will be conduct to identify the relation between, psychosocial safety climate and work engagement among staff nurses.

### Aim of the study

This study aimed to assess the relation between psychosocial safety climate and work engagement among staff nurses through:

- Assessing psychosocial safety climate as perceived by staff nurses.
- Assessing work engagement level among staff nurses.
- Finding out the relation between psychosocial safety climate and work engagement.

### Research Question:

Is there a relation between psychosocial safety climate and work engagement among staff nurses?

### Subjects and methods

#### Research Design:

A descriptive correlational design was used in this study. This design was used to determine the association between psychosocial safety climate and work engagement of staff nurses.

#### Research setting:

The study was conducted at Medical University hospital which is affiliated to El fayoum University Hospitals. It provides medical services for patients . It contains one building, five floors its total capacity (170) beds. Each floor has from one to three units. As shown in table (1).

**Table (1):** Description of the building

Floor Name	Units / department
First floor	(Laboratory, out patients clinics , administration offices, pharmacy
Second floor	(ICU, hemodialysis unit , endoscopy department
Third floor	(tropical department, general internal medicine department, neurology department)
Fourth floor	(chest department, Rheumatology Department)
Fifth floor	Psychiatry and Addiction department).

**Subjects:**

The subjects of this study were included 159 out of 270 staff nurses who worked in the aforementioned setting.

**Sample size:**

The sample size was calculated according to the following formula **Thompson, (2012)**.

$$N \times P (1- p)$$

$$n = [N-1(d^2/z^2)] + p(1-p)$$

N = population size (270)

d = the error rate is 0.05

z = the standard score corresponding to the significance level is 0.95 and is equal to 1.96

p = availability of property and neutral=0.50

So, sample size (n) = (159) (**Thompson, 2012**).

**Sampling technique:**

Staff nurses were selected by a simple random sampling technique.

**Tools of Data Collection:**

Two tools were used to collect data for the current study namely, psychosocial safety climate scale and work engagement scale.

**Tool I: Psychosocial Safety Climate Scale**

This tool consists of two parts as follows:

**Part 1:** This part aimed to collect information related to personal and job characteristics of the staff nurses including “unit name, age, gender, years of experience, academic qualifications, and marital status”

**Part 2:** Psychosocial Safety Climate (PSC-12) Scale;

This scale aimed to assess psychosocial safety climate as perceived by staff nurses. It was adapted from (**Hall et al., 2010**). It included (12 items) divided into 4 sub-scales as follows: Management Commitment (3items) Management Priority (3items) Organizational Communication (3items) Organizational Participation (3items)

**Scoring System:**

Each item response was measured on a five-points Likert scale, ranging from: (Strongly agree =5, Agree= 4, Neutral =3, Disagree =2, Strongly disagree=1). The scores of the items of each dimension and of the total scale were summed-up and the total divided by the corresponding number of the items, giving a mean score for the part. These were converted into percentage scores.

**Tool II: Utrecht Work Engagement Scale** (UWES: This scale aimed to assess work engagement level among staff nurses. It was adopted form (**Abdelrahman, 2019**) based on (**Schaufeli et al., 2006**). It included (17 items) divided into 3 subscales as follows: Vigor (6 items) Dedication (5 items) Absorption (6 items)

**Scoring System:**

Each item response was measured on a five points Likert scale, ranging from: (Strongly agree =5, Agree= 4, Neutral =3, Disagree =2, Strongly disagree=1). Reverse scoring was used for negatively stated items, so that a higher score indicates a higher level of work engagement.

Totals of each of the three dimensions were calculated, and the sums of scores were converted into percentage scores. For the categorical analysis of each dimension of work engagement:

- High level of work engagement  $\geq 75\%$
- Moderate level of work engagement 60%-75%
- Low level of work engagement  $< 60\%$

#### **Validity and reliability:**

The tools were assessed for validity by the original authors. These tools were translated back-to-back into the Arabic language by the researchers to achieve the criteria of trustworthiness; these tools were assessed and evaluated for face and content validity by a jury group that consisting of five professors and assistant professors of Nursing Administration and Psychiatry all group from Faculty of Nursing at Ain Shams University to ascertain the relevance, clarity, and completeness of the tools. Experts elicited responses that either agreed or disagreed with the face and content validity.

The reliability of the tools was assessed by measuring their internal consistency by determining the Cronbach alpha coefficient, to determine the extent to which the scale items were related to each other as indicated in the following table:

**Table (2):** Description of tools reliability:

Tools	No. of items	Alpha Cronbach
Psychosocial safety climate scale	12	0.938
Work engagement scale	17	0.929

#### **(II) Operational design:**

The operational design of this study included three phases namely: the preparatory phase, pilot study, and field work.

#### **Preparatory phase:**

This phase started at the beginning of November 2023 and was completed at the end of February 2024. In this phase, the researcher reviewed the national, international, current, and past related literature, and used textbooks, articles, journals, and the internet to be acquainted with the topic of the study, subjects of the study, and tools.

#### **Pilot study:**

The pilot study was conducted on 16 staff nurses who were selected randomly and represented about 10% of 159 staff nurses in the main study sample. The pilot study aimed to examine the applicability of the tool, and clarity of language, and assess the feasibility and suitability of the designated tools. It also served to estimate the time needed to fill in the forms by each study subject and identify potential obstacles and problems that may be encountered during data collection. The pilot study took two weeks in March 2024. It showed that the staff nurses took 20-25 minutes to fill in the scale sheets. Data obtained from the pilot study was analyzed, and no modifications were made. So, the study subjects who participated in the pilot were included in the main study sample.

#### **Ethical consideration**

Before conducting the study, the ethical approvals were obtained from the Scientific Research and Ethical Committee in the Faculty of Nursing Ain Shams University. **Ethical code:** 24.05.298. An informed consent was obtained from the participants to participate in the study after explaining the purpose of the study. Confidentiality of the information would be guaranteed through coding scales & they was informed that they have the rights to voluntarily participate and or withdrawn from the study at any time during data collection period without any harmful during the study period, and their collected responses used only for a study purpose.

#### **Administrative Design:**

To carry out the study, the necessary approvals were obtained. An official letter was issued from Dean of Faculty of Nursing, Ain

Shams University, to obtain permission from the hospital directors about conduction the study. The researcher met both hospital directors medical and nursing to explain aim of the study and get their approval to collect data and seek their support official.

### Fieldwork:

The fieldwork started after getting official permissions to conduct the study. It took three months starting at the beginning of March 2024 and completed at the end of May 2024. The researchers visited the study setting, met with the hospital's nursing directors to explain the study's aim, and got their approval and cooperation. The investigator introduced herself to staff nurses in the workplace to explain the aim and components of the tools, invited staff nurses to participate in data collection, and instructed them on how to fill them in.

Data was collected three days per week on the morning and afternoon shifts. The researchers collected about 13 to 15 sheets every week. Filled sheets were distributed to the participants at their workplace. Then the filled sheets were collected by the researcher on the same or next day. The filled sheets were handed back to the researchers to check each one to ensure its completion.

### III: Statistical analysis:

Data entry and statistical analysis were done by using (SPSS) version 26 computer software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables. Means and standard deviations for quantitative variables. Shapiro-Wilk Test and Kolmogorov-Smirnov Test were used to determine whether a variable follows a normal distribution, when normal distribution of the data could not be assumed, Pearson correlation test. Friedman test was used to compare between means. Cronbach alpha coefficient was calculated to assess the reliability of the scales used through examining their internal consistency. Pearson correlation was used to determine the correlation between study variables. Chi square was used to determine the differences categorical variables. Statistical significance was considered at p-value <0.001 and <0.05.

## Results

**Table (1):** represent that, more than half of the studied staff nurses (58.5%) had <30 years with Mean±SD 28.58±2.43 and less than three quarters of them (71.7%) were female and married. Also, more than two thirds of them (69.8%) had <10 years of experience at their unit of work.

**Figure (1):** demonstrates that nearly two thirds of staff nurses (66%) had bachelor and master degree and (34%) of them had diploma degree.

**Figure (2):** displayed that more than three quarters of staff nurses (88.1%) work in noncritical units and (11.9%) of them worked in critical care units

**Table (2):** shows that, more than half of the staff nurses (51.6%&51.6%&57.9%) had high management commitment, organizational communication and organizational participation. As well as more than half of them (54.1%) had low total psychosocial safety climate.

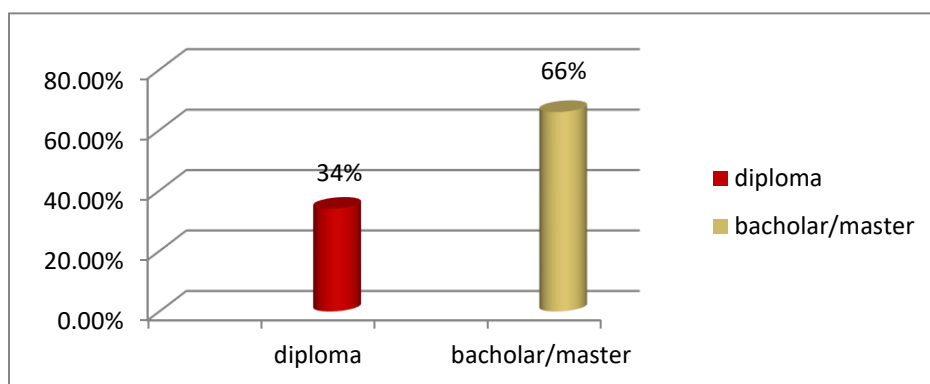
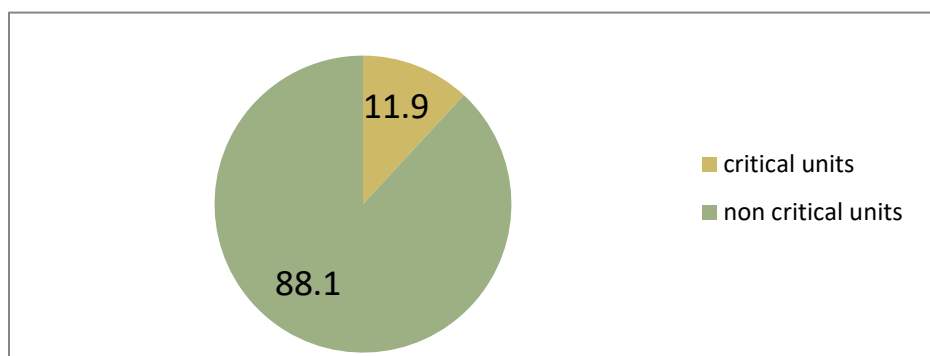
**Table (3):** Reveals that, more than one half of the studied staff nurses (55.3%) had moderate level of vigor and (29.6%) experiencing low level of vigor. In addition two thirds of them (66.7%) had moderate level of dedication and absorption. Also two thirds of them had moderate level of engagement

**Table (4):** demonstrates that, there was statistically significant relation between the total studied psychosocial safety climate and age of staff nurses. While, there was no statistically significant relation between the total studied psychosocial safety climate and their gender, marital status, nursing qualification and years of experience.

**Table (5):** clears that, there was highly statistically significant positive correlation between the studied nurses' psychosocial safety climate and their work engagement Furthermore, there was positive correlation between the studied nurses' work engagement and their qualification.

**Table (1):** Personal and job characteristics of the studied staff nurses in the study sample (n=159)

Personal and Job characteristics	Frequency	Percent
Age:		
<30	93	58.5
30-	36	22.6
35+	30	18.9
Gender:		
Male	45	28.3
Female	114	71.7
Marital status:		
Married	105	66.0
Unmarried	54	34.0
Experience years:		
<10	111	69.8
10+	48	30.2

**Figure (1):** Distribution of the studied staff nurses in the study sample by qualification**Figure (2):** Distribution of the studied staff nurses in the study sample according to their work unit.**Table (2):** Psychosocial safety climate as perceived by studied staff nurses in the study sample (n=159)

Dimensions of psychosocial safety climate-High (60%+):	Frequency	Percent
Management commitment	82	51.6
Management priority	74	46.5
Organizational communication	82	51.6
Organizational participation	92	57.9
<b>Total psychological safety climate</b>		
High	73	45.9
Low	86	54.1

**Table (3):** Total work engagement level among the studied staff nurses in the study sample (n=159)

Dimensions of work engagement	High		Moderate		Low	
	No.	%	No.	%	No.	%
Vigor	24	15.1	88	55.3	47	29.6
Dedication	34	21.4	106	66.7	19	11.9
Absorption	37	23.3	106	66.7	16	10.1
<b>Total work engagement</b>	34	21.4	106	66.7	19	11.9

**Table (4):** Relations between studied staff nurses' perception of total psychosocial safety climate and their characteristics (n=159)

Personal and job characteristics	Psychosocial safety climate				X2 test	p-value
	High		Low			
	No.	%	No.	%		
Age:						
<30	46	49.5	47	50.5	6.64	0.04*
30-	10	27.8	26	72.2		
35+	17	56.7	13	43.3		
Gender:						
Male	26	57.8	19	42.2	3.56	0.06
Female	47	41.2	67	58.8		
Marital status:						
Married	48	45.7	57	54.3	0.01	0.4
Unmarried	25	46.3	29	53.7		
Nursing qualification:						
Secondary nursing diploma	25	46.3	29	53.7	0.01	0.94
Bachelor/master	48	45.7	57	54.3		
Work unit:						
Critical care units	6	31.6	13	68.4	1.785	0.182
Non critical care units	67	47.9	73	52.1		
Experience years:						
<10	49	44.1	62	55.9	0.46	0.50
10+	24	50.0	24	50.0		

(\*) Statistically significant at  $p < 0.05$ **Table (5):** Correlation between nurses' scores of work engagement and psychosocial safety climate and their characteristics (n=159)

Characteristics	Spearman's rank correlation coefficient	
	Psychosocial safety climate	Work engagement
Work engagement	0.694**	—
Age	0.051	0.087
Qualification	0.115	0.167*
Experience years	0.084	0.116

(\*) Statistically significant at  $p < 0.05$ (\*\*) Highly statistically significant at  $p < 0.01$ 

## Discussion

Organizations can create conditions that allow employees to develop their own capacities and grow personally and professionally by creating a psychosocial safety climate (PSC), which promote psychological health and safety of employees and provide protection against psychological risks, as indicated by (Miller, 2023). PSC can act as a resource to stimulate the intrinsic and extrinsic motivation of employees, leading to more work

engagement. In times work engagement is viewed as a workplace approach designed to ensure that employees are committed to the organization's goals and values, motivated to contribute to organizational success and simultaneously to enhance their own sense of well-being (Sypniewska, et al., 2023).

The present study aimed to assess the relation between the psychosocial safety climate and work engagement among staff nurses. The

result of the study indicates that there was high statistically significant positive correlation between psychosocial safety climate and work engagement among staff nurses which clarifies the relationship and answer the research question.

The most of current study sample were staff nurses with young age and had less than 10 years of experience at their unit of work. This result reflect that health organization have shortage of older healthcare provider who correlated positively with perceived psychosocial safety climate (**Al-Surimi, et al., 2021**). Younger nurses, who have less years of experience, often report lower perceived levels of psychosocial safety climate and work engagement particularly in high stress environment like health care (**Zhang, et al., 2024**) & (**Tomaszeweka, et al., 2024**).

From the researcher point of view, that shortage may be due to older nurses usually leave the country to other countries because offer higher salaries than those offered in Egypt. Older nurses may also seek to prioritize personal and family time, after many year of full-time work they might choose to reduce their hours or leave work force and do carer shift.

The highest percentage of current studied sample were female and married, this was expected due to female prefer nursing study than males and the main core of nursing occupation is feminists who married after completion of their study. Thus, according to **Buchan and Catton (2020)**, around 90% of the nursing workforce worldwide consists of female nurse. This result comparable to study carried out **Pericak, et al., (2020)** titled what influences work engagement among registered nurses, which show that most of study sample were female.

Also the current findings indicated that two thirds of staff nurses had bachelor/master degree. This finding reflecting the tendency of staff nurse to pursue university education and get higher qualifications and postgraduate degrees. This point is good indicator as nurses with higher educational qualifications tend to have a better psychosocial safety climate and

they exhibit lower level of distress and higher work engagement (**Zahng & Zahng, 2023**).

These results harmonized with **Abdi, et al., (2023)** who found that over two thirds of staff nurses were female, and more than half of them were married and held a bachelor's degree in a study titled developing a model for predicting safety performance of nurses based on psychosocial safety climate and role of job demands and resources, job satisfaction, and emotional exhaustion as mediators.

As well as more than three quarters (88.1%) of the present study sample were work in non-critical care units and only (11.9%) in critical care units. This clear differences in percentage of staff nurses according to their work unit would certainly have positive impact on level of perceived psychosocial safety climate and work engagement, as psychosocial tend to be higher among who work in non-critical units (**Peradejordi & Valls, 2023**), as they generally experience a more favourable psychosocial work environment with better relationships and support of management (**liepinaitiene, 2024**), in contrast those work in critical units, often perceived as low due to work conditions and job demands (**Malinowska, et al., 2024**).

The present study assessed psychosocial safety climate as perceived by studied staff nurses, the results showed that more than half of them had high management commitment, organizational communication and organizational participation, but also, more than half of them had low level of total psychosocial safety climate. This is a bad indicator as, it mean that, there a lack of clear culture work climate about the importance of nurses' psychosocial health in the hospital, the most of managers' attention is directly focused toward the employees' physical health for the purpose of carrying out their tasks. Which would certainly led to lack of satisfaction, low work engagement and increase burnout among staff nurses which act as challenges to management (**Teoh, et al., 2021**).

The results were supported by study conducted in Italy entitled Psychosocial safety climate (PSC) at Middle Management level in



the Healthcare Sector: which indicate an overall low perception of psychological safety climate among Italian healthcare workers at the middle management level **Fattori, et al., (2022)**, also current results similar with **Lateef, et al., (2021)** who found that nursing staff had high level of management commitment. When the study findings were inconsistent with **Lintanga & Rathakrishnan, (2024)** in Malaysia entitled, the impact of psychosocial safety climate on public sector job satisfaction: the moderating role of organizational climate, reported that participants had moderate perception level for both management commitment, organizational participation, also they have moderate level of psychosocial safety climate

As regard to work engagement, the current study found that, more than half of the studied staff nurses had moderate level of vigor, but (29.6%) experiencing low level of vigor. which was a signal that a significant portion of workforce is experiencing fatigue, emotional and physical exhaustion. In addition two thirds of them had moderate level of dedication and absorption. Also two third of them had moderate level of work engagement. That may be due to the demanding, stressful, yet structured nature of nursing, most of nurses are able to maintain an adequate level of engagement but struggle to reach high levels of vigor and dedication due to exhaustion, workload and limited professional growth. Any way this finding is satisfy, it mean that, most of staff able to cope with stressful situations in their work place, patient provided care with good quality, and organization achieved well degree of success and stability (**Cebrera, et al., 2023**).

The results a dread with a study conducted by **Mahgob, et al., (2024)** in Egypt ,a study entitled Staff Nurses' Perception Regarding Toxic Leadership Behavior of Head Nurses and it's Relation to their Work Engagement, who clarified that staff nurses had moderate level of work engagement that along with **Al-Fifi, (2020)** entitled a consistent levels and factors influencing work engagement among nurses in Najran hospitals, who reported that nearly half of the studied nurses had average level of dedication dimension. Also the results congruent with **Sulistyo & Suhartini,**

**(2019)** who applied a study entitled the role of work engagement in moderating the impact of job characteristics, perceived organizational support, and Self-efficacy on job satisfaction in Indonesia and stated that most of the studied participants had moderate level of work engagement as regard vigour dimension.

While the present study results incongruence with **Ghazawy, et al., (2021)** who reported that work engagement was relatively high among more than half of nurses. Also results were not in a cross-sectional study from Saudi Arabia, carried out by **Alkorashy & Alanazi, (2023)** who examine personal and job-related factors influencing the work engagement of hospital nurses, and stated that the participating nurses exhibited high level of dedication dimension, that agree with **Al Badi, et al., (2023)** who conducted a study about work engagement and job performance among nurses in the public healthcare sector in the United Arab Emirates, and stated that most of nurses had high level of work engagement regarding vigour dimension

Pertaining to studied staff nurses' factors affecting their perceived psychosocial safety climate, the present study bivariate analysis illustrated that, there was statistically significant relation between their age and total psychosocial safety climate and its dimensions which are management commitment, management priority, organizational communication and organizational participation. This is quite expected since those older nurses are anticipated to perceived (PSC) more than younger age due to older nurses often have greeter exposure to work place dynamics which enhance their understanding of psychosocial safety climate (**Nyberg,et al.,2024**).

These findings paralld to **Formazin, et al., (2022)**. In study entitled psychosocial safety climate, who clarified that there was statistically significant relationship between age of staff and their perceptions of psychosocial safety climate. When the findings were in consistent with **Ali, et al., (2021)** who introduced study in south Australia entitled refugees at work: the preventative role of psychosocial safety climate against workplace harassment, discrimination

and psychological distress, showed that there was no statistically significant relation between psychosocial safety climate and age of studied sample.

Concerning relations between studied staff nurses' total work engagement and their personal characteristics, bivariate analyses could not show that, there was statistically significant relation between the total studied work engagement and any of their personal characteristics, while Spearman's rank correlation coefficient pointed to there was statistically significant positive correlation between the studied nurses' work engagement and their qualification. And multivariate analysis identified qualification as positive predictor of work engagement. This finding shows disparity in work engagement between high educated nurses and diploma nurses, this disparity highlights the importance of education advancement in nursing for improving overall work engagement. As high educated nurses benefit from their better organization support which enhances their engagement, conversely, diploma nurses may face limitations in professional development and support, potentially keep them having lower engagement than high educated nurses (Aydogdu, 2024).

Similar association was addressed by Mahgob, et al., (2024) who found positive statistical relation, between work engagement and educational level of the studied staff, also the result was congruent with a study performed by Diogo, et al., (2023) who found a statistically significant relationship between work engagement and professional qualifications within the multiple linear regression model. In addition a study conducted by Mamdouh, et al., (2024) Ain –Shams entitled relationship between work design characteristics and work engagement among staff nurses, who also found highly significant relation between work engagement and nursing qualification.

This result was incongruent with a study performed by Lai, et al., (2020) addressing transformational leadership and job performance: the mediating role of work engagement, reported that, there was no significant association between work

engagement and education level. Also present result not agree with a study conducted by Çemberci, et al., (2022) in Malaysia entitled the relationship of work engagement with job experience, marital status and having children among flexible workers after the covid-19 pandemic, the study indicates that there was no significant relationship between total work engagement and nursing qualifications.

This study underscores the importance of nurturing a supportive psychosocial safety climate to drive higher level of nurse engagement. As results demonstrated that there was highly statistically significant positive correlation between staff nurses' total score of psychosocial safety climate and work engagement. Thus, a higher level of psychosocial safety climate is expected to be associated with more work engagement, which provides an answer to main research question. This result cleared that, when work environment is psycho-socially supported, nurses feel safe and protected, be more likely to feel energized and engaged in their work. Supportive climate reduces mental fatigue and stress which are common barriers to work engagement.

In agreement with this result, Bourgoin Boucher, et al., (2024) in Canada who conducted study entitled mechanisms explaining the longitudinal effect of psychosocial safety climate on work engagement and emotional exhaustion among education and healthcare professionals during the covid-19 pandemic, explored a relationship and significant positive correlation mediated by job demands and resources between psychosocial safety climate and work engagement. Furthermore, there study conducted by Yuan, et al., (2024) in China entitled how does psychosocial safety climate cross-level influence work engagement and job burnout: the roles of organization-based self-esteem and psychological detachment which revealed that there was a significant positive relationship between psychosocial safety climate and work engagement among nurses.

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## Conclusion

According to the study's findings, more than half of studied staff nurses perceived low level of total psychosocial safety climate, while

two thirds of them had moderate level of work engagement. In addition there was highly statistically significant positive correlation between total psychosocial safety climate and work engagement among studied staff nurses.

### Recommendations

**In the light of the results of this study the following recommendations are suggested:**

- Nurse managers should articulating a clear vision, goals and standers for health and safety of their staff.

- Hospital management should place psychosocial well -being of staff nurses in the same line with organization goals.

- Nurse Managers and administrators should adopt programs and interventions that increase work engagement such as professional development training .

### Further researches are suggested as:

- Assess psychosocial safety climate level among staff nurses and its relation to patient safety culture.

- Evaluate psychosocial safety climate among staff nurses and its relation to career satisfaction .

- Assess relation between psychosocial safety climate and level of professional efficacy of staff nurses.

### References

- Abd Elrahman, Y.M. (2019):** Workplace Spirituality Versus Work Engagement among Faculty Staff Members and Their Assistants Master Thesis, Faculty of Nursing ,Ain Shams University.pp,61;63
- Abdi, F., Jahangiri, M., Kamalinia, M., Cousins, R., & Mokarami, H. (2023).** Developing a model for predicting safety performance of nurses based on psychosocial safety climate and role of job demands and resources, job satisfaction, and emotional exhaustion as mediators. *BMC psychology*, 11(1), 187.
- Al Badi, F.M., Cherian, J., Farouk, S., & Al Nahyan, M. (2023).** Work engagement and job performance among nurses in the public

healthcare sector in the United Arab Emirates. *Journal of Asia Business Studies*, 17(5), 1019-1041.

**Al-Fifi, H.J. (2020).** Levels and factors influencing work engagement among nurses in Najran hospitals.

**Ali, F., Terrah, A., Wu, C., Ali, L., & Wu, H. (2021).** Antecedents and consequences of user engagement in smartphone travel apps. *Journal of Hospitality and Tourism Technology*, 12(2), 355-371

**Alkorashy, H., & Alanazi, M. (2023).** Personal and job-related factors influencing the work engagement of hospital nurses: a cross-sectional study from Saudi Arabia. In *Healthcare* (Vol. 11, No. 4, p. 572). MDPI.

**Al-Surimi, K., Alhayek, Z., Edvardsson, D., Al-Khateeb, B., & Shaheen, N. (2021).** Person-centered-care climate in a tertiary hospital: staff perspective. *Risk Management and Healthcare Policy*, 4269-4279.

**Aydogdu, A.L.F. (2024).** Nurses' perceptions of nursing management: A metaphorical analysis. *Collegian*.

**Bourgoin Boucher, K., Ivers, H., & Biron, C. (2024).** Mechanisms Explaining the Longitudinal Effect of Psychosocial Safety Climate on Work Engagement and Emotional Exhaustion among Education and Healthcare Professionals during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health*, doi: 10.3390/ijerph21060698

**Buchan, J., & Catton, H. (2020).** COVID-19 and the international supply of nurses.

**Cabrera-Aguilar, E., Zevallos-Francia, M., Morales-García, M., Ramírez-Coronel, A.A., Morales-García, S.B., Sairitupa-Sanchez, L.Z., & Morales-García, W.C. (2023).** Resilience and stress as predictors of work engagement: the mediating role of self-efficacy in nurses. *Frontiers in Psychiatry*, 14, 1202048.

- Çemberci, M., Civelek, M.E., Ertemel, A.V., & Cömert, P.N. (2022).** The relationship of work engagement with job experience, marital status and having children among flexible workers after the Covid-19 pandemic. *PLOS ONE*, doi: 10.1371/journal.pone.0276784
- Diogo, Almeida., Carminda, Morais., Alexandra, Costa. (2023).** Work Engagement in Portugal's National Continues Care Network Professionals. *European Journal of Business and Management Research*, doi: 10.24018/ejbmr.2023.8.4.2068
- Dollard, M.F., & Bailey, T. (2021).** Building psychosocial safety climate in turbulent times: The case of COVID-19. *Journal of Applied Psychology*, 106(7), 951.
- Fattori, A., Comotti, L., Bordini, Maureen, F., Dollard., Matteo, Bonzini. (2022).** Psychosocial safety climate (PSC) at middle management level in the healthcare sector: A contribution to the Italian validation of psychosocial safety climate-4. *Frontiers in Psychology*, doi: 10.3389/fpsyg.2022.1046286
- Formazin, M., Ertel, M., Kersten, N., & Nübling, M. (2022).** Psychosocial Safety Climate. *Zeitschrift Fur Arbeits-und Organisations psychologie*, doi: 10.1026/0932-4089/a000379
- Ghazawy, E.R., Mahfouz, E.M., Mohammed, E.S., & Refaei, S.A. (2021).** Nurses' work engagement and its impact on the job outcomes. *International Journal of Healthcare Management*, 14(2), 320-327.
- Hall, G.B., Dollard, M.F., & Coward, J. (2010).** Psychosocial safety climate: Development of the PSC-12. *International Journal of Stress Management*, 17(4), 353
- Lai, F.Y., Tang, H.C., Lu, S.C., Lee, Y.C., & Lin, C.C. (2020).** Transformational leadership and job performance: The mediating role of work engagement. *Sage Open*, 10(1), 2158244019899085.
- Lateef, S.F., Mohamed, F.R., & Hossny, E.K. (2021).** The Relationship between Quality of Work Life, Psycho-Social Safety Climate and Nursing Staff Work Engagement and Organizational Commitment. *Assiut Scientific Nursing Journal*, 9(24.0), 18-29.
- Liepinaitiene, A., Jotautis, V., & Kiguolyte, M. (2024).** The Psychosocial Workplace Atmosphere Experienced by Nurses in General Practice: Lithuanian Nurses Cases. doi: 10.47363/jwhmr/2024(3)113.
- Lintanga, A.J.B.J., & Rathakrishnan, B. (2024).** The impact of psychosocial safety climate on public sector job satisfaction: the moderating role of organizational climate. *BMC psychology*, 12(1), 38.
- Liona, R.C., & Yurniardi, M.S. (2020).** The contribution of work engagement and job satisfaction to workers' psychological well-being. *Humanitas*, 17(2), 94.
- Liu, X., Huang, Y., Kim, J., & Na, S. (2023).** How ethical leadership cultivates innovative work behaviors in employees? Psychological safety, work engagement and openness to experience. *Sustainability*, 15(4), 3452.
- Mahgob, A.N.H., Mohammed Abdallah Adam, S., & Mohamed El-sayed, S. (2024).** Staff Nurses' Perception Regarding Toxic Leadership Behavior of Head Nurses and it's Relation to their Work Engagement. *Egyptian Journal of Health Care*, 15(1), 511-524.
- Malinowska-Lipień, I., Put, D., Maluchnik, M., Gabryś, T., Kózka, M., Gajda, K., ... & Squires, A. (2024).** Influence of the work environment of nurses on the 30-day mortality of patients hospitalized in Polish hospitals. cross-sectional studies. *BMC nursing*, 23(1), 117.
- Mamdouh Ahmed, N., Mostafa Shazly, M., & Mohamed Abdrabou, H. (2024).** Relationship between Work Design Characteristics and Work Engagement among Staff Nurses. *Egyptian Journal of Health Care*, 15(1), 1074-1086.

- Miller, J. (2023).** The Impact of Psychosocial Safety Climate on Mental Health Stigma Discrimination and Psychological Health: A Scoping Review.
- Nyberg, A., Olofsson, B., Fagerdahl, A., et al. (2024).** Longer work experience and age associated with safety attitudes in operating room nurses: An online cross-sectional study. *BMJ Open Quality* , 13(1) ,e002182.
- Peradejordi-Torres, R.M., & Valls-Matarín, J. (2023).** Perception of the safety culture in a critical area. *Enfermería Intensiva* (English ed.), 34(3), 148-155.
- Platania, S., Morando, M., Caruso, A., & Scuderi, V.E. (2022).** The effect of psychosocial safety climate on engagement and psychological distress: A multilevel study on the healthcare sector. *Safety*, 8(3), 62.
- Şanlıöz, E., Sağbaş, M., & Sürücü, L. (2023).** The mediating role of perceived organizational support in the impact of work engagement on job performance. *Hospital topics*, 101(4), 305-318.
- Schaufeli, W., Bakker, A. and Salanova, M. (2006).** Measurement of work engagement with a short questionnaire A cross national study .*Education and Psychological Measurement*
- Schulte-Braucks, J., & Dormann, C. (2019).** The impact of psychosocial safety climate on Health impairment and motivation pathways: a diary study on illegitimate tasks, appreciation, worries, and engagement among German nurses. *Psychosocial Safety Climate: A New Work Stress Theory*, 305-324.
- Sulisty, A.R., & Suhartini, S. (2019).** The role of work engagement in moderating the impact of job characteristics, perceived organizational support, and self-efficacy on job satisfaction.
- Sypniewska, B., Baran, M., & Klos, M. (2023).** Work engagement and employee satisfaction in the practice of sustainable human resource management–based on the study of Polish employees. *International Entrepreneurship and Management Journal*, 19(3), 1069-1100.
- Teoh, K.B., Kee, D.M.H., & Akhtar, N. (2021).** How does psychosocial safety climate affect burnout among malaysian educators during the covid-19 pandemic?. *Asia-Pacific Social Science Review*, 21(4), 23.
- Thompson (2012).** Sampling 3rd edition by John Wiley & Sons pp: 59-60.
- Tomaszewska K, Kowalczyk K and Majchrowicz B (2024)** Correlations between well-being of nurses and psychosocial working conditions – a descriptive cross-sectional study. *Front. Public Health* 12:1443015.doi: 10.3389/fpubh.2024.1443015
- World Health Organization. (2022).** WHO guidelines on mental health at work. World Health Organization.
- Yuan, T., Ren, H., Yin, X., Liang, L., Fei, J., Liu, X., ... & Li, H. (2024).** How does psychosocial safety climate cross-level influence work engagement and job burnout: the roles of organization-based self-esteem and psychological detachment. *BMC Nursing*, doi: 10.1186/ s12912-024-01935-8.
- Zhang, J., Zhang, L. (2023).** How does psychosocial safety climate cross –level influence work engagement and burnout: The roles of organization –based self – esteem and psychological detachment *BMC Nursing*, 22(1),45.
- Zhang, X., Zhang ,C., Gou, J., & Lee, S.Y. (2024).** The influence of psychosocial work environment personal perceived health and job crafting on nurses well-being :a cross sectional survey study. *BMC Nursing* , 23(1).373.