

## Effect of Toxic leadership on Nurses' Counterproductive Work Behavior and Psychological Immunity

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### Abstract

**Introduction:** Toxic leadership is a form of ineffective leadership and has been associated with counterproductive work behaviors and poor psychological immunity. **Aim:** Assess effect of toxic leadership on nurses' counterproductive work behavior and psychological immunity. **Study design:** Descriptive correlational research design was used. **Setting:** This study was conducted at Main Assiut University Hospital. **Subject and Method:** A Convenience sample of nurses working at Main Assiut University Hospital (196) nurse. **The data collected through three tools:-** Tool I: self-administered questionnaire which includes part:1 personal characteristics data, part:2 toxic leadership behaviors of nurse managers questionnaire, Tool II counterproductive work behaviors questionnaire and Tool III: psychological immunity scale. **Results:** The highest percentage of nurses report their manager has moderate level of toxic leadership; they have low level of counterproductive work behavior and have moderate level of psychological immunity. **Conclusion:** Toxic leadership has a positive significant correlation with counterproductive work behavior and has a negative correlation with psychological immunity and psychological immunity has a negative significant statistical correlation with counterproductive work behaviors. **Recommendations:** - Execute a training program for new leaders that covers managerial conduct, an ethical approach regulation, managing anxiety, efficient interpersonal interaction, and psychological immunity prior to the promotion process into leadership roles.

**Keywords:** Counterproductive Work Behavior, Nurses, Psychological Immunity & Toxic leadership.

### Introduction:

The harmful leadership behaviors identified in the workplace have been scientifically linked to numerous outcomes, including harming productivity and leading to the decline of employees' physical and mental well-being (Öztokatli, 2020). The common signs of a harmful work environment stemming from toxic leadership include adverse feeling states and fluctuations, harmful and unproductive behaviors, disengagement and withdrawal of employees both physically and emotionally, unethical work behaviors, and compromised psychological well-being and health (Karthikeyan, 2019).

Toxic leadership is a detrimental type of leadership which harms the followers of an organization and has adverse impacts on both the organization itself and its staff (Hadadian & Sayadpour, 2020). The toxic leadership style represents a category of harmful leadership styles that involve exploiting others to fulfill personal goals and interests. Additionally, it encompasses destructive, narcissistic, and authoritarian behaviors within its framework (Hassan & Ali, 2022).

Ultimately, a toxic leader falls under the umbrella of unethical leadership, potentially fostering unethical conduct and counterproductive work behavior among their followers (Pelletier et al., 2019).

Counterproductive work behavior in the context of nurses encompasses actions that run counter to the genuine interests of an organization. It is also described as purposeful negative conduct that could detrimentally affect an organization (Helle et al., 2019).

Psychological immunity assists individuals in navigating emotional conflicts and pressures, safeguarding them from emotional harm (Ali, 2019). It also fosters the development of appropriate behavior and enhances adaptation to evolving circumstances (Kaur & Som, 2020). And acts as a protective shield for the individual, offering resilience against challenges and crises (Al-Hamdan et al., 2021). Additionally psychological immunity is crucial for confronting crises, pressures, and negative emotions. It plays an essential role in fostering logical thinking, impulse control, and emotional management (Hassan, 2021).

### Significance of study:

It is thought that nurses who experience abuse at the hands of toxic managers are more likely to engage in counterproductive work behavior (Naeem et al., 2020). Based on the researcher's two years of training at Assiut University hospitals, it has been observed that when the nurses manager' not treat their staff with

fairness and also have harmful leadership styles this may have an effect on their psychological conditions. Then, nurses try to act counterproductively in an attempt to let out their frustration.

There are some international studies that were done for studying this topic titled as, The Effect of Toxic Leadership on Turnover Intention and Counterproductive Work Behavior in Indonesia Public Organizations (Hattab et al., 2022).

Also, there are some national studies that were done titled as: Effects of Toxic Leadership on Intensive Care Units Staff Nurses' Emotional Intelligence and Their Organizational Citizenship Behaviors (Abdallah & Mostafa, 2021).

Otherwise, there are no studies done in Upper Egypt about Effect of Toxic Leadership on Nurses' Counterproductive Work Behavior and Psychological Immunity. So, the current research aimed to assess effect of toxic leadership on nurses' counterproductive work behavior and psychological immunity.

#### **Aim of study:**

Assess effect of toxic leadership on nurses' counterproductive work behavior and psychological immunity.

#### **Research questions**

- Q1.**What is the level of toxic leadership exhibited by nurse managers?
- Q2.**What is the nurses' counterproductive work behaviors level?
- Q3.**What is the nurses' psychological immunity level?
- Q4.**What's the effect of toxic leadership on counterproductive work behavior among nurses?
- Q5.**What's the effect of toxic leadership on psychological immunity among nurses?

#### **Subject and Method**

**Technical design:** This design involved the research design, setting, subject, sample and data collection tools.

**Research Design:** Descriptive correlational research design was used.

#### **Setting:**

This study was conducted at Main Assiut University Hospital (general surgical departments, general internal medicine departments and intensive critical care unit, intensive anesthesia care unit and general intensive care unit)

#### **Subject:**

Nurses working at Main Assiut University Hospital.

#### **Sample:**

A Convenience sample of all nurses working in general surgical & internal medicine departments and intensive care units at Main Assiut University Hospital at time of study conduction with total number (no196=nurses) following distribution:

Departments	Numbers
General internal medicine departments	35
General surgical departments	45
Intensive critical care unit	40
Intensive anesthesia care unit	38
General intensive care unit	38
<b>Total</b>	<b>196</b>

#### **Inclusion Criteria:**

- Nurses available during the period of data collection who working in general surgical departments, general internal medicine departments, and intensive critical care unit, anesthesia care unit, and general intensive care unit at Main Assiut University Hospital.

#### **Exclusion Criteria:**

- Nurses who are on extended leave during the study period (e.g., maternity leave, sick leave).

#### **Data collection tools:**

Three tools were used for data collection:

#### **Tool I: Self-Administered questionnaire sheet:**

It was composed of two parts as follow:

#### **First part: Personal characteristics data sheet:**

Developed by the researcher and included (department, years of experience, age, gender, marital status and educational qualification).

#### **Second part: Toxic Leadership Behaviors of Nurse Managers Questionnaire:**

Developed by (Labrague et al., 2020) and it was intended to gauge nurses' opinions regarding the toxic leadership of nurse managers. Consisted of thirty items divided into four categories as follow; Category one intemperate behavior involved fifteen items, Category two narcissistic behavior involved nine items, Category three self-promoting behavior involved three items and Category four humiliating behavior involved three items.

#### **Scoring system:**

Nurses' replies were scored on a three-point Likert scale, with one denoting disagreement, two neutrality, and three agreements. The range of points of nurses' replies assigned to their nurse managers' toxic leadership behaviors was 30 to 90. Based on the total number of points, it can be deduced that the behaviors of the nurse managers' toxic leadership can be classified as practically nontoxic (30–65 points or <60%), moderately toxic (66–75 points or 60% to 75%) and highly toxic (76–90 points or > 75%).

#### **Tool II: Counterproductive Work Behaviors Questionnaire:**

Developed by (Spector et al., 2006) and was utilized to gauge counterproductive work behaviors of nurses in their work environment. It composed of thirty two items divided into five categories specifically; category one abuse toward others involved seventeen items); category two production deviance involved

three items; category three sabotage involved three items); category four theft involved five items and category five withdrawal involved four items.

**Scoring system:**

Nurses' replies were assessed on five-points Likert rating scale ranged from one never; two once or twice; three once or twice per month; four once or twice per week and five every day for negative items and vice versa for positive items. The range of the overall score was (32-160). The scores fell into three categories: low (32-108 points or <60%), moderate (109-128 points or >60 % to 75%) and high (129-160 points or >75%).

**Tool III: Psychological Immunity scale:**

Adopted from (Elsayed & Taha, 2023) and was used to measure the mental resistance and coping capacity of the individual. It contains thirty seven items divided into three Sub-domains which are one containment involved 8 items, two adaptive confrontation involved seventeen items, and three self-regulation involved twelve items. Items are easy statements that the participants needed to reply on a 5-point Likert scale as the following five completely describe me, four describe me too much, three describe me to some extent, two describe me too little, one doesn't describe me at all. All items represented the positive aspects of psychological immunity except items no (six, twelve, thirty two, thirty four, and thirty seven) have negative meaning of psychological immunity so the scoring system was reversed in these items.

**Scoring system:** The total score of the scale =185. Responses were converted into psychological immunity subtype: Minimal (score < 92 or < 50%), Moderate (score 92-138 or 50% -75%), or Severe (score >138 or >75%), all subscales can therefore vary between 37 and 185.

**Administrative design:**

In order to gather the data required for the pilot study and the current study, official approval was obtained from the Dean of the Assiut University Faculty of Nursing, the Director of the Main Assiut University Hospital, the Nursing Director, and the nurses in the departments involved in the study.

**Operational design:**

**Preparatory phase:** The research proposal was finalized following a review of relevant academic literatures, conducted from the beginning to the end of January 2024. It was done to translate the research tool into Arabic.

**Ethical considerations:**

The Assiut University Faculty of Nursing's Ethical Committee approved the research proposal, dated on 23/1/2024 and committee number (1120240747). Participants in the study were asked to sign a consent

form; they also have the right to withdraw from the study at any time or refuse to participate without giving a reason; confidentiality and anonymity were guaranteed; this was accomplished by taking study participants' privacy into consideration when gathering data; and the study adhered to standard ethical guidelines for clinical research.

**Face validity:**

Four professors from the nursing administration department's teaching staff and one professor from the psychiatric and mental health department's teaching staff at the Assiut University Faculty of Nursing reviewed the study tools.

**Content validity:**

Was used to verify the importance, clearance, and accountability of each study tool item. The results of the conformity factor analysis test were  $\geq 1.6$  for every study tool item. Thus, every item in the research instruments was verified.

**Reliability:**

The reliability of the study tools was evaluated through the utilization of the Cronbach's Alpha Coefficient Test, which proved to be effective. The result was ( $\alpha=0.94$ ) for toxic leadership and it was ( $\alpha=0.94$ ) for counterproductive work behaviors and it was ( $\alpha=0.89$ ) for psychological immunity. This suggests that study tools are very reliable.

**Pilot study:**

Was conducted in order to evaluate the study tools' applicability, clarity, understandability, and reliability. Additionally to recognize potential issues that might arise throughout the real data collection. It was applied to 10% of the total sample of 20 nurses from various hospital units and was completed in one week (the final week of February 2024). The nurses who took part in the pilot study were added to the study sample after the data from the study was examined and the study instruments were left unchanged.

**Data collection:**

The participating nurses were given the study tools, which were self-administered questionnaires. Each participant in the study took roughly thirty minutes to complete the questionnaires. The entire period of data collection, from March 2024 to June 2024, lasted roughly three months.

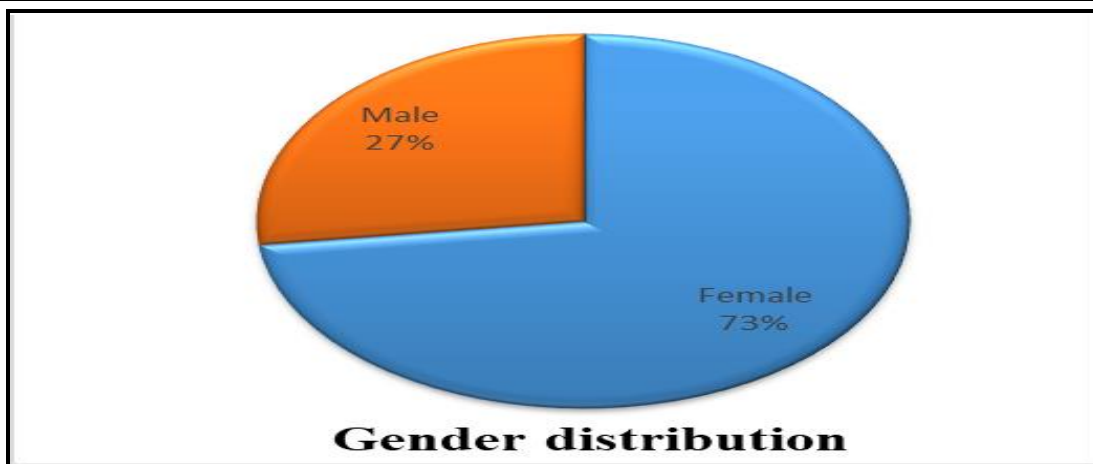
**Statistical design:**

Data entry and statistical analysis was done using SPSS 27.0 Statistical Software Package. Data were presented using descriptive statistics in the form of frequencies, percentages, mean, standard deviation, paired t- test, and a nova test and Pearson's correlation. Statistical significance was considered at P-value  $\leq 0.05$ .

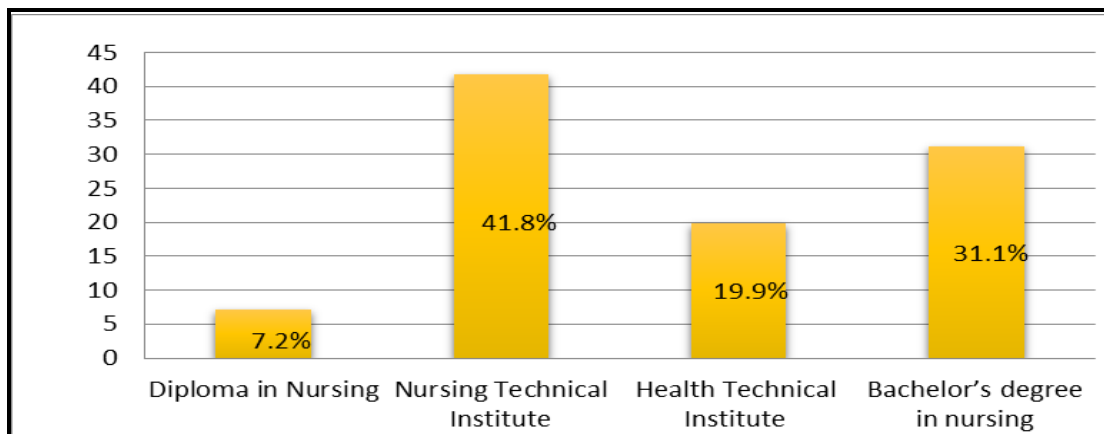
**Results:**

**Table (1): Distribution of personal characteristics data of the studied nurses in the selected departments at Main Assiut University Hospital (n=196)**

Personal characteristics data	No. (196)	%
<b>Departments:</b>		
General internal medicine departments	45	<b>23.0</b>
General surgical departments	35	17.8
Intensive critical care unit	38	19.4
Intensive anesthesia care unit	38	19.4
General intensive care unit	40	20.4
<b>Age: (years)</b>		
< 25 years	87	44.4
25 years to <35years	93	<b>47.4</b>
35 years to < 45 years	16	8.2
<b>Years of experience:</b>		
< 5 years	4	2.0
5 years to < 10 years	63	32.1
10 years to < 15 years	122	<b>62.2</b>
15 years and above	7	3.6
<b>Marital status:</b>		
Married	81	41.3
Single	105	<b>53.6</b>
Divorced	4	2.0
Widow	6	3.1



**Figure (1): Distribution of gender of the studied nurses in the selected departments at Main Assiut University Hospital (n=196)**



**Figure (2): Distribution of educational qualifications of the studied nurses in the selected departments at Main Assiut University Hospital (n=196)**

**Table (2): Mean scores of toxic leadership behaviors dimensions as perceived by the studied nurses in the selected departments at Main Assiut University Hospital (n=196)**

Toxic leadership behaviors dimensions	General internal medicine departments	General surgical departments	Intensive critical care unit	Intensive anesthesia care unit	General intensive care unit	P-value
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	
<b>Intemperate behavior</b>	25.53±7.32	25.31±8.47	<b>30.00±8.20</b>	25.28±9.52	25.15±8.11	<b>0.049*</b>
<b>Narcissistic behavior</b>	17.00±4.77	15.91±5.35	18.97±4.78	17.10±6.04	15.87±4.88	0.066
<b>Self-promoting behavior</b>	5.42±1.78	5.25±2.31	5.73±2.18	5.34±1.31	5.30±1.96	0.870
<b>Humiliating behavior</b>	5.55±1.98	4.77±2.08	5.92±2.11	5.89±2.33	5.32±1.96	0.120
<b>Total toxic leadership behaviors</b>	53.51±13.77	51.25±16.33	<b>60.63±15.53</b>	53.63±17.83	51.65±15.77	0.074

**Table (3): Mean score of Counterproductive Work Behaviors dimensions as perceived by the studied nurses in the selected departments at Main Assiut University Hospital (n=196)**

Counterproductive Work Behaviors Dimensions	General internal medicine departments	General surgical departments	Intensive critical care unit	Intensive anesthesia care unit	General intensive care unit	P-Value
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	
<b>Abuse</b>	26.95±13.48	<b>31.34±15.86</b>	25.81±11.47	21.47±9.99	24.90±12.19	<b>0.024*</b>
<b>Production deviance</b>	5.60±3.366	5.57±3.64	4.65±3.20	3.50±1.08	4.32±1.96	<b>0.005*</b>
<b>Sabotage</b>	5.06±3.07	5.31±3.48	4.44±2.78	3.21±.81	4.00±1.78	<b>0.003*</b>
<b>Theft</b>	8.08±4.79	8.37±4.82	7.07±3.94	5.76±2.77	6.40±3.22	<b>0.022*</b>
<b>Withdrawal</b>	7.13±3.85	8.11±5.25	7.44±4.038	5.10±1.72	5.92±2.64	<b>0.003*</b>
<b>Total Counterproductive Work Behaviors</b>	52.84±25.62	<b>58.71±29.67</b>	49.44±23.64	39.05±13.60	45.55±19.94	<b>0.005*</b>

**Table (4): Mean scores of psychological immunity dimensions as perceived by the studied nurses in the selected departments at Main Assiut University Hospital (n=196)**

Psychological immunity dimensions	General internal medicine departments	General surgical departments	Intensive critical care unit	Intensive anesthesia care unit	General intensive care unit	P-value
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	
<b>Adaptive confrontation</b>	47.11±14.03	<b>53.11±11.45</b>	45.84±16.20	52.10±16.16	<b>53.77±17.50</b>	0.066
<b>Containment</b>	20.82±6.85	24.20±5.91	19.10±6.91	22.50±6.81	24.17±10.26	<b>0.010*</b>
<b>Self -regulation</b>	33.02±9.91	40.17±9.17	31.97±11.58	37.0789±11.30506	39.50±14.25	<b>0.003*</b>
<b>Total psychological immunity</b>	100.97±28.50	117.48±22.81	96.92±30.80	111.68±31.73	<b>117.45±37.63</b>	<b>0.010*</b>



Figure (3): Distribution of toxic leadership levels as perceived by the studied nurse in the selected departments at Main Assiut University Hospital (n=196)

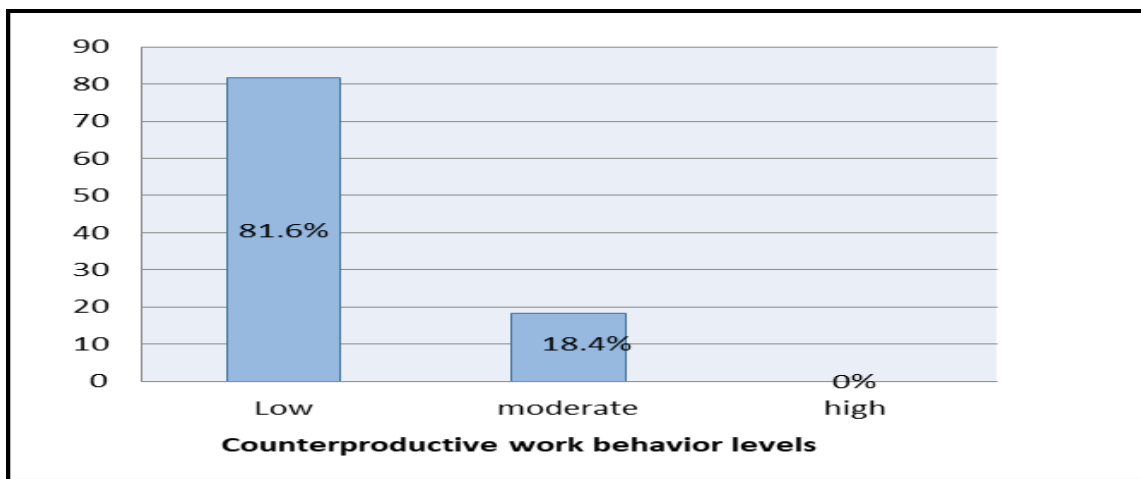


Figure (4): Distribution of Counterproductive work behaviors levels as perceived by the studied nurses in the selected departments at Main Assiut University Hospital (n=196)

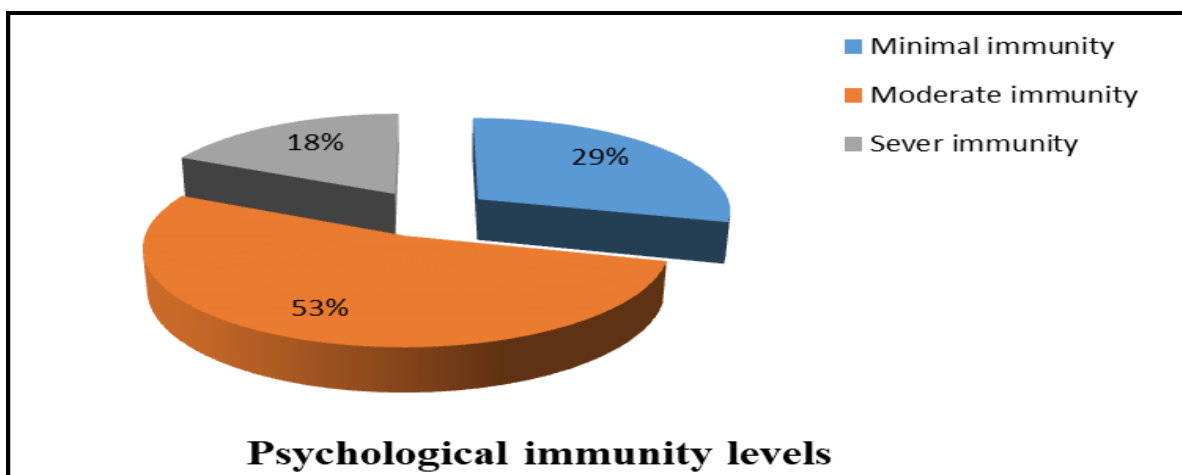


Figure (5): Distribution of psychological immunity levels as perceived by the studied nurses in the selected departments at Main Assiut University Hospital (n=196)

**Table (5): Correlation of toxic leadership, counterproductive work behaviors with psychological immunity as perceived by the studied nurses in the selected departments at Main Assiut University Hospital (n=196)**

Variables		Toxic leadership	Counterproductive work behaviors	Psychological immunity
Toxic leadership	r- value			
	p- value			
Counterproductive work behaviors	r- value	.162*		
	p- value	.023		
Psychological immunity	r- value	-.096	-.164*	
	p- value	.182	.022	

*P-value <0.05**Pearson's correlation*

**Table (1):** Illustrates that less than two thirds of studied nurses having years of experience from 10- <15 years. More than half of them was single and nearly to half of them aged range between 25 - < 35 years and less than one quarter of them work in internal medicine departments.

**Figure (1):** Illustrates that nearly to three quarters of studied nurses are females and more than one quarter of them was male.

**Figure (2):** Shows that less than half of studied nurses have nursing technical institute, less than one third of them have bachelor's degree in nursing and the minority of them have health technical institute, diploma in nursing.

**Table (2):** Illustrates that the highest mean score regarding to toxic leadership dimensions is related to intemperate behavior in intensive critical care unit (**30.00±8.20**) with total mean score of toxic leadership dimensions (**60.63±15.53**). Also there is a statistically significant difference between intemperate behavior dimension and the selected departments (**0.049\***).

**Table (3):** Illustrates that the highest mean score regarding counterproductive work behaviors dimensions is related to abuse in general surgical departments (**31.34±15.86**) with total mean score of counterproductive work behaviors dimensions (**58.71±29.67**). Also there is a statistically significant difference between counterproductive work behaviors dimensions and the selected departments (**0.002\***, **0.003\***, **0.003\***, **0.005\***, **0.005\*** and **0.024\***) respectively.

**Table (4):** Illustrates that the highest mean score regarding psychological immunity dimensions is related to adaptive confrontation in general intensive care unit (**53.77±17.50**) following by general surgical department (**53.11±11.45**) and the highest total mean score for all psychological immunity dimensions in general intensive care unit (**117.45±37.63**). Also there is a statistically significant difference between self-regulation dimension, containment dimension and the selected departments (**0.003\*** & **0.003\***) respectively.

**Figure (3):** Illustrates that the highest percentage of nurses report their manager has moderately toxic level of leadership.

**Figure (4):** Illustrates that the highest percentage of nurses have low levels of counterproductive work behaviors.

**Figure (5):** Illustrates that the highest percentage of nurses have moderate level of psychological immunity.

**Table (5):** Illustrates that toxic leadership has a positive statistically significant correlation with counterproductive work behaviors (**r = .162\***, **p = .023**) and has a negative correlation with psychological immunity (**r = -.096**, **p = .182**), which is not statistically significant. On the other hand, psychological immunity has a negative significant statistical correlation with counterproductive work behaviors (**r = -.164**, **p = .022**).

### Discussion:

As revealed from the current study, nearly to three quarters of studied nurses were females and less than half of them were had nursing technical institute and about more than half of them were single and about less than two thirds of them having years of experience 10-<15 years nearly to half of them aged range between 25 - < 35 years and less than one quarter of them work in internal medicine departments (**table, 1 and figure, 1&2**). The researcher thinks this might be because of nursing was traditionally a female-dominated profession globally, with women making up most of the workforce, subjects were single could be related to the demanding nature of nursing work, which often includes long hours, shift work, and emotional stress. These factors may influence personal life decisions, such as delaying marriage.

The results of the current study showed that the highest mean score regarding toxic leadership dimensions was related to intemperate behavior in intensive critical care unit. Furthermore, there was a statistically significant difference between

intemperate behavior dimension and the selected departments (**table, 2**). From the researcher's perspective, this may be attributable to the stressful working environment of intensive care units, the unpredictable nature of situations, and the fluctuating nature of patients' conditions, which necessitate prompt action and unilateral decision-making, rendering them susceptible to being toxic leaders.

The study's results were consistent with those of **Abdallah & Mostafa, (2021)** they found that the highest mean of toxic leadership behavior was in intensive critical care unit.

The finding was contradicted those of **Abou Ramadan & Eid, (2021)** they stated that all toxic leadership dimensions and the nurses' work unit showed a statistically significant relationship. Furthermore, the finding was contradicted the results of **Ozkan et al., (2022)** who demonstrated nurses' opinions of toxic leadership behaviors were not affected by the units in which they worked in.

The results of the current study showed the highest mean score regarding counterproductive work behaviors dimensions was related to abuse in general surgical departments (**table, 3**). From the researcher's perspective, this may be because of general surgical departments often operate under intense pressure due to the critical nature of the work, including high-stakes surgeries and complex cases. This constant high stress can lead to an increase in the likelihood of abusive behaviors. Employees may perceive abuse as having a lower risk of detection or punishment than other counterproductive behaviors like sabotage, theft, or property damage. Abusive actions may be dismissed as personality conflicts or difficult communication styles, allowing individuals to engage in such behaviors more freely.

The finding aligned with **Saad & Abdelwahab, (2022)** who reported that the nurses in their study exhibited abusive behaviors toward others.

The results of the current study showed the highest mean score regarding psychological immunity dimensions were related to adaptive confrontation in general intensive care unit (**table, 4**). From the researcher's perspective this may be because the demanding nature of intensive care environments necessitates strong conflict resolution skills and effective stress management. The constant exposure to critical situations fosters resilience and adaptability, leading to higher scores in adaptive confrontation.

The finding contradicted **Elsayed & Taha, (2023)** who revealed that most participants in their study exhibited low psychological immunity scores in the adaptive confrontation dimension.

The results of the current study showed the highest percentage of nurses reported their manager had

moderately toxic level of leadership (**Figure, 3**). From the researcher's perspective this may be because leaders in health care often have diverse leadership styles and personalities, which can result in varying degrees of toxic behavior. Some leaders may exhibit more severe toxic traits, such as micromanagement or emotional volatility, while others may demonstrate more subtle forms, such as lack of communication or favoritism. These differences in leadership approaches contribute to the varying perceptions of toxic behavior. Nurses with different personality traits or coping mechanisms may perceive the same leadership behaviors differently.

The results were consistent with those of **Shipl et al., (2021)** who discovered that staff nurses thought there was a generally mildly toxic leadership environment.

Also, the results of the study corresponded with **Özkan et al., (2022)** who noted that nurses were exposed to moderate degree of toxic leadership.

Additionally, the results aligned with a study by **Ofei et al., (2023)** that revealed nurses frequently rated their nurse managers as having moderately toxic leadership styles.

The results contradicted those of **Abo Salih et al., (2023)** who mentioned that almost the nursing staff under study had a high sense of toxic leadership in general.

Moreover this result was inconsistent with **Alsomaidae & Khalid, (2023)** they revealed that nurse reported their manager had a high degree of toxicity in the workplace. Additionally inconsistent with **Mahgob et al., (2024)** they showed that, less than two-thirds of the studied nurses had reported their manager had a low level toxic leadership.

According to the results of the current study, the majority of nurses exhibit low-level counterproductive work behaviors (**Figure, 4**). From the researcher's perspective this because of the nature of nursing, which was focused on improving patient outcomes, might inherently discourage behaviors that could negatively impact the workplace or patient care. Thus, a combination of personal and environmental factors likely contributes to the low levels of perceived counterproductive work behavior among nurses.

The finding was consistent with the study with **Hashish, (2020); Ebrahim & Eldeep, (2020)** they mentioned that there was little counterproductive work behavior among the nurses under study. Additionally consistent with **Hassan & Ali, (2022)** who stated that a low level of generally counterproductive work behavior was perceived by all staff nurses.

But the finding was inconsistent with **Ebrahim & Eldeep, (2020)** who mentioned that more than half of the nurses in the study exhibited moderately



counterproductive work behaviors.

Also the finding was in contradiction with **Saad et al., (2022)** who noted that the surveyed nurses displayed a high level of counterproductive behaviors in the workplace.

The current study's findings indicate that the majority of nurses have a moderate level of psychological immunity (**Figure, 5**). From the researcher's perspective nurses frequently encounter high-stress situations, including dealing with toxic manager, dealing with critically ill patients, emergencies, and complex medical decisions. The constant exposure to such stressors can overwhelm their coping mechanisms, leading to a moderate degree of psychological immunity.

The finding of the current study was consistent with **Qusay, (2018)** whose research results were reached that there was a moderate level in the total degree of psychological immunity. Also finding of the current study was inconsistent with **Ahmed, (2019); Halim & Sherry, (2021)** they mentioned that study subjects had high level of psychological immunity.

As evidenced by the present study, toxic leadership exhibits a significant positive correlation with counterproductive work behaviors and a negative correlation with psychological immunity (**table, 5**). From the researcher's point of view positive correlation with CWBs reflects how toxic leadership can provoke negative responses from employees, while the negative correlation with psychological immunity highlights the detrimental impact on employees' mental resilience and well-being.

The finding was consistent with **Walker & Watkins, (2020); Aydinay et al., (2021)** noted that there exists a significant positive correlation between toxic leadership and counterproductive behaviors among employees.

Moreover other researchers **Kayani & Alasan, (2021)** they came to the conclusion that counterproductive work behaviors among nurses in Pakistani public hospitals are significantly and favorably impacted by toxic leadership. Additionally the results aligned with those of **Koç et al., (2022)** who discovered that counterproductive work behaviors among nurses were significantly positively impacted by toxic leadership. Additionally, those researchers reported physical, emotional, and psychological effects on health workers, including nurses, who encountered toxic leadership.

The results of this study were similar to those of the study conducted by **Abbas et al., (2022)** they had a studied and have identified that leadership style influences psychological wellbeing of employees. Also the finding was consistent with **Zhang et al., (2022)** they mentioned consequences of toxic behaviors in terms of poor psychological health. Also

the finding was consistent with **Bracarense et al., (2022)** they mentioned that psychological suffering can result from leaders' failure to provide a supportive workplace for their employees.

Also the finding was consistent with **Labrague's, (2023)** who discovered a strong and favorable correlation between unproductive work practices and toxic leadership. Beside that the finding was consistent with **Hasan & Ibrahim, (2024)** they found the employees who work under the leadership of a toxic leader may suffer from increased levels of stress and even mental health problems such as anxiety or depression.

### Conclusion:

The highest percentage of nurses reported that their manager had a moderately toxic level of leadership. In terms of the level of counterproductive work behavior, the highest percentage of nurses exhibited low levels of such behavior. The highest percentage of nurses had a moderate level of psychological immunity when it came to psychological immunity levels.

Toxic leadership has a positive significant correlation with counterproductive work behaviors and has a negative correlation with psychological immunity. Psychological immunity has a negative significant statistical correlation with counterproductive work behaviors.

### In the light of the study results, the following recommendations are suggested:

- Establish an appropriate system for staff nurses to provide feedback on the conduct of their supervisors, as this could aid in the identification of toxic leaders.
- Implement coaching and counseling interventions for nurses who exhibit early signs of counterproductive work behavior.
- Execute a training program for new leaders that covers managerial conduct, an ethical approach regulation, managing anxiety, efficient interpersonal interaction, and psychological immunity prior to the promotion process into leadership roles.
- Offering nurses the chance to take part in decisions pertaining to their jobs.
- Create and carry out regular in-service training courses to improve the psychological immunity of nurses.

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