

The Effect of Toxic Leadership Management Training Program on the Counterproductive Work Behavior among Nursing Personnel

Shaimaa Salah Abo Shama Othman¹, Gehan Mohamed Ahmed Moustafa²,
Waffaa El Sayed Hassan Helal³

¹Assistant lecturer of Nursing Administration, Faculty of Nursing, Helwan University, Egypt.

²Professor of Nursing Administration, Faculty of Nursing, Helwan University, Egypt.

³Assistant Professor of Nursing Administration, Faculty of Nursing, Helwan University, Egypt.

DOI: <https://doi.org/10.5281/zenodo.13911715>

Published Date: 10-October-2024

Abstract: Background: Toxic leadership is a combination of self-centered attitudes and behaviors that negatively affect employees and lead them to engage in counterproductive work behaviors which also affect patients' outcomes.

Aim: This study aimed at exploring the effect of toxic leadership management training program on counterproductive work behavior among nursing personnel.

Methods: The study was conducted at all available department at Badr University Hospital which is affiliated to Helwan University. A pretest- posttest one group quasi-experimental design was used in this study. The subjects of this study included all nursing personnel (107) who are working at the pre mentioned setting at the time of data collection. The data were collected by using two tools namely; Toxic leadership scale and Counterproductive work behavior questionnaire.

Results: There was a highly statistically significant decline in nursing personnel' perception of toxic leadership level in the post and follow up phases $P=0.000$ as compared to the pre-intervention phase. In addition to that, there was a highly statistically significant decline in nursing personnel' counterproductive work behavior in the post and follow up phases $P=0.000$ as compared to the pre-intervention phase.

Conclusion: Implementing a toxic leadership management training program for nursing personnel was effective to reduce their counterproductive work behavior. Based on the study findings, it recommended: provide nurses with training programs focused on how to deal with toxic leadership and counterproductive work behavior. Develop and communicate clear policies regarding acceptable behavior and workplace standards. Encourage and support ethical leadership within the organization. Leaders should demonstrate integrity, fairness, and professionalism, setting a positive example for all staff members.

Keywords: Counterproductive Work Behavior, Toxic Leadership Management, and Training Program.

1. INTRODUCTION

Toxic leadership negatively impacts organizational effectiveness, leading to decreased job satisfaction, production and engagement (Gupta & Chawla, 2024). In addition to, toxic leadership is destructive to members of a team and the overall workplace. Also, the leader's toxic behavior can influence employees' attitudes and actions. The nurses' mindset may change from a constructive to destructive approach when leaders display intimidating behavior toward subordinates (Bani-Melhem et al., 2020).

Toxic leadership is defined as a form of supervision where a nursing manager organized, systematic and persistent destructive behaviors over nurses. Toxic leadership can negatively affect not only the nurses but also the whole hospital (Mokhtar et al., 2024). Also, toxic leadership is dub by specific behaviors and characteristics include: abusive and demeaning behavior, authoritarianism and micromanagement, lack of empathy and emotional intelligence, poor communication, favoritism and unfair treatment, fail to acknowledge mistakes, resistance to feedback and criticism and lack of integrity and ethical behavior (Sherifdeen & Godwin, 2024).

Toxic leadership is a multidimensional structure that includes five dimensions: Self-Promoting behaviors, Abusive Supervision, Unpredictability, Narcissism and Authoritarian Leadership. Self-Promoting behaviors are the attempts to present own self to others as an accomplished, capable, smart, and talented person. Self-promotion can be done through face-to-face conversation, on blogs or social media platforms, in public speeches, or through self-mannerisms, posture, speech, or dress. Abusive Supervision is the subordinates' perceptions of the extent to which supervisors engage in the sustained exhibition of hostile verbal and nonverbal behaviors (Hassan et al., 2024).

Unpredictability occur when the individuals who exhibited behaviors such as anger, irritability, reflecting negative mood in their tone of voice, unbalanced behavior, and dealing with followers according to their mood. Besides, unpredictability occurs when it is impossible to predict the behavior of a leader (Diab & Hassan, 2023), Narcissism is one of personality disorders that includes grandiosity, arrogance, feelings of self-importance, unlimited power, entitlement, inability to accept criticism, and lack of empathy (Norouzinik et al., 2021), also, Authoritarian leadership is one style of destructive leadership, that a leader stresses obedience to authority, exercises discipline, and asserts control over followers. And it is based on demanding unquestioned following and imposing strict workplace discipline (Wang et al., 2022).

Counterproductive work behavior (CWB) defined as any intentional employee behavior that negatively impacts the organization and its members. It is considered employee behavior that does not align with the organization's goals. Also, counterproductive work behavior refers to purposeful behaviors that harm organizations or their members, which can lead to financial losses and affect employees' psychological well-being and morale (Ibrahim et al., 2023).

Counterproductive work behavior have five dimensions includes abuse toward others, production deviance, sabotage, theft, and withdrawal. Abuse toward others is the most frequent form of CWB. This dimension consists of harmful behaviors toward others such as making threats and nasty comments, ignoring them, or undermining their ability to work effectively. Production deviance refers to purposeful failure to complete tasks correctly, production deviance violate the norms delineating the quality and quantity of work (Permata & Soeling, 2022).

Sabotage refers to destroying physical property that belongs to the employer. Any intended behavior exhibited by employee to inflict a production or profit loss for the organization could be termed as sabotage. Employee theft is classified as criminal and it is one of the costliest forms of CWB. Lastly, withdrawal concerns behaviors that limit the working time to less than is determined by the organization where absence, arriving late or leaving early, and taking longer breaks than authorized are various forms of withdrawal (Gülçin & Demir, 2023).

The manifestations of a toxic organization resulting from toxic leadership are negative emotional moods and mood swings as(anger, frustration, pessimism and aggression) unproductive and meaningless work; destructive and counterproductive conduct; employee physical and emotional disengagement and withdrawal (as absenteeism, lack of contribution and turnover); unethical, deviant conduct as (theft, fraud and sabotage); low team morale and work satisfaction, low organizational loyalty, general life dissatisfaction. Finally, a toxic leader is a subcategory of unethical leadership that can lead to unethical behavior as Counterproductive work behavior on the part of followers (Mekawy & Ismail, 2022).

Significance of the study

Toxic leadership is usually associated with poisonous characteristics impacting subordinates due to their destructive and dysfunctional traits. The leaders impose a continuous poisonous effect on subordinates, groups and organizations as well. According to a study conducted in Pakistan on about 355 nurses serving in the public sector, it revealed that there is a positive relationship between toxic leadership and counterproductive work behavior, as toxic driving affects 88.2% of the opposite work behavior (Kayani & Alasan, 2021).The researcher noticed that the leaders has the negative impact on the performance of the staff. This problem appeared clearly between the leaders and their followers in the clinical department in the hospital which affected the performance of the team member who are the followers for toxic leaders in which they depressed and didn't work and had intention to leave their work place and their career.

Aim of the study

The study aimed at exploring the effect of Toxic Leadership Management Training Program on Counterproductive Work Behavior among nursing personnel.

Research hypothesis:

Implement the toxic leadership management training program will affect nursing personnel counterproductive work behavior.

2. SUBJECTS AND METHODS**Research design**

A pretest- posttest one group quasi-experimental design used in this study.

Study setting

The study was conducted at all available departments at Badr hospital which is affiliated to Helwan University. The hospital provides different services as (Nursing office; in- patient; Out-patient, Intensive care units for adults and pediatric and neonate, Dialysis, and Emergency department.

Study subject

Subjects of this study were composed of all nursing personnel who were available at the time of data collection in the selected hospital and who agree to participate in the study and had experience with at least one year in the present work place. The total number of nurses who were available and accepted to participate in the study was (n=107).

Sample Size:

The total number of nurses who were available and accepted to participate in the study was (n=107).

Type of sampling:

Convenience sample was used to select the study subject.

Tools of data collection**Two tools was used to collect necessary data:****Tool (1): Toxic leadership scale**

This tool aimed to assess nurses' knowledge regarding Toxic Leadership. It consists of three parts:

Part 1: Personal characteristics data for nursing personnel:

This sheet intended to collect data regarding personal characteristics of the study participant. It contained the following items: (Age, gender, years of experience, nursing qualifications, job title, management position, experience in current position, planning to change organization within next year).

Part 2: Toxic leadership scale:

This part aimed to assess nurses' regarding Toxic Leadership developed by (Kayani & Alasan, 2021), and modified by the researcher and divided into 5 dimensions the following: Abusive supervision (7 items), Authoritarian leadership (6 items), Narcissism (5 items), Self-promotion (5 items) and Unpredictability (7 items). It was used before and after the program and three months after implementation of the program (follow up).

Scoring system

The responses of the studied nursing personnel were related on 3-point Likert scale as (1) disagree, (2) neutral, (3) agree. Toxic leadership scale consisted with (cut point at 45 points) (30 items) with a total score of (90). The total grades for each item were summed up and then converted into a percentage score. They were classified into three level as the following (statistics); (Hassan & Ali, 2022) and (Badran & Akeel, 2022).

International Journal of Novel Research in Civil Structural and Earth Sciences

Vol. 11, Issue 3, pp: (7-20), Month: September - December 2024, Available at: www.noveltyjournals.com

- **Low level:** if the total score was less than 60%, it means less than 54 points.
- **Moderate level:** if the total score was equal or more than 60% to less than 75%, it means equal or more than 54 to less than 68 points.
- **High level:** if the total score was equal or more than 75%, it means equal or more than 68 points.

Tool (2): Counterproductive Work Behavior (CWB-C), Questionnaire

This part aimed to determine nurses' Counterproductive Work Behavior, which developed by (Zahid, 2019; Rauf, & Farooq, 2014 and Barbaranelli et al., 2013) and modified by the researcher based on the literature. It contained 5 dimensions as portrayed into the following: Sabotage (3 items), Withdrawal (11 items), Production deviance (3 items), Theft (5 items) and Abuse (23 items).

The scoring system for each item.

The responses of the studied nursing personnel were related on 3-point Likert scale as (1) disagree, (2) neutral, (3) agree. Counterproductive work behavior questionnaire consisted of (45 items) with (cut point at 67.5 points) and total score of (135). The total grades for each item were summed up and then converted into a percentage score. They were classified into three level as the following (statistics); (Hassan & Ali, 2022) and (Badran & Akeel, 2022).

- **Low level:** if the total score was less than 60%, it means less than 81 points.
- **Moderate level:** if the total score was equal or more than 60% to less than 75%, it means equal or more than 81 to less than 102 point.
- **High level:** if the total score was equal or more than 75%, it means equal or more than 102 points.

Procedures

To carry out the study, official letters issued from the Faculty of Nursing Helwan University to explain the aim of the study to the director of Badr University hospital both medical and nursing for obtaining the permission for data collection. Individual oral consent was also obtained from each nurse in the study.

The research approval was obtained from the Scientific Research Ethics Committee of the Faculty of Nursing-Helwan University, before starting the study, also an approval was obtained from the director of Badr University Hospital both of medical and nursing before starting the study. Informed consent was obtained from each participating subject before data collection, they were informed about the purpose and expected outcomes of the study and they were assured that, the study was harmless and their participation was voluntary and they had the right to withdrawal from the study at any time without any reason. They also were assured that, anonymity and confidentiality guaranteed, as well the gathered data that used for the research purpose only. Ethics, values, culture and believes were respected.

The preparatory phase; It was included reviewing of past, current, national and international related literature and theoretical knowledge of various aspects of the study using books, articles, internet, periodicals and journals.

Validity of the Instrumentation; Validity of the tools was done namely face validity and content validity. It was tested by panel of jury group consisted of five experts (Professors) in nursing administration from different faculties of nursing how judged the study's tools for comprehensiveness, accuracy, and clarity in language. Based on their recommendation's correction, addition and / or omission of some items were done (Egami & Hartman, 2023).

Content Validity; Content was conducted to determine the appropriateness of each item that included in the study's tools and questionnaire sheet. Additionally, it assessed whether a test is representative of all aspects of the construct (Roebianto et al., 2023). Minor modifications were done based on the jury groups' recommendations.

Reliability Reliability for the utilized tools was tested to determine the extent to which the items of the tools are inter-correlated to each other. The Cronbach's alpha test was used as the most popular reliability statistics for internal consistency. Moreover, it is a degree to which the used tools measure what was supposed to be measured with the same way each time & under the same condition with the same subjects (Cheung et al., 2023). In which the statistical equation

of Cronbach's alpha reliability coefficient of the toxic leadership scale was (0.996) and the counterproductive work behavior questionnaire was (0.987).

Pilot study It was conducted on (11) nursing personnel who represented (10%) of the total sample size of the study subject of the total sample size (107). The aim of the pilot study was to determine clarity, understanding applicability, clarity and the efficiency of the tools. It also aims to ensure simplicity, relevance and feasibility of conduction of the study tools. In addition, it helps in estimation of the time needed to collect data and determine the obstacles. Accordingly, the tools will be modified and the nurses participated in it was included from the study sample.

Field work:

The field work of the study took two months started in the beginning of august 2023 and completed at the end of September 2023. After securing all official permissions the researcher met the nursing director of the hospital to explain the aim of the study to gain the approval for data collection. The researcher met supervisors and the head nurse of each unit for determining the suitable time to collect the data and obtained approval from them and their staff member. Before beginning to collect data from the study subjects the researcher introduced herself to them, explained the aim of the study, and informed them that their information will be treated confidential and will be used only for the purpose of the research: additionally, each participant was notified about the right to accept or refuse to participate in the study and obtaining a verbal consent to participate in this study. The researcher explained the component of the questionnaires and distributed the sheets to staff nurses in their work settings at different times and attended during the filling of the questionnaires to clarify any ambiguity and answer any questions. The researcher presented 3-4 hours/day, 2days/week to collect data. The time required for each nurse to fill the questionnaire was estimated to be 25-35 minutes. The researcher checked completed of each filled sheet after the nurse completed it to ensure the absence of any missing data. The researcher collected about 8 to 9 sheets every week.

Process of educational program

The educational program of the current study was conducted on four phases; assessment, designing & implementation, evaluation phases and follow up evaluation.

First Phase: Assessment

The researcher was used tools for data collection, met the director of badr Hospital both medical and nursing to explain the aim and process of the study, collected all information personal characteristics of the studied nursing personnel at the hospital which were: (Age, gender, years of experience, nursing qualifications, job title, management position, experience in current position, planning to change organization within next year.), and conducted a pilot on (11) nursing personnel who represented (10%) of the total sample size of the study subject of the total sample size (107) at the beginning of July 2023 and completed by the end of July through(1 month). Additionally, the researcher started to collect data from the beginning of august 2023 to the end of September2023 (2 months) by using the tools in their setting according to developed tools with the studied sample participants at the available time for each of them after explaining to them the purpose and objective of the study. The researcher organized the selection process with the training department on the hospital under the supervision and support of the nursing director as the following: the researcher made (3) visits for each group on day shifts, every visit was ranged between (3-4) hours. In addition, total numbers of nursing personnel selected per visit as: (3 groups) of them included 25 nurses, and (one group) included 20 nurses, in addition to the group of leaders, which included (12 leaders). First, the researcher used use toxic leadership knowledge scale this part aims to assess nurses' knowledge regarding toxic leadership the total time needed by nursing personnel to complete this tools was ranged between (15-20) minutes. In additions to use toxic leadership scale to assess nurses' traits and behaviors regarding toxic leadership before providing educational program.

Second, the researcher used counterproductive work behavior (CWB-C), questionnaire to determine nurses' counterproductive work behavior before conducting the program. The time needed by nursing personnel to complete this tool was ranged between (10-15) minutes.

Finally, the researcher used the selected tools (pre-test) behavior before providing educational program.

Second Phase: Designing and Implementation

In this phase the researcher designed and implemented educational program about toxic leadership. According to pre-test results, toxic leadership management training program's general objective was to improve nursing personnel's knowledge regarding toxic leadership that affected on counterproductive work behavior. This phase started in the beginning of august 2023 to the end of September 2023 (2 months).

Toxic leadership management training program was conducted by the researcher for nursing personnel based on their knowledge and assessment of toxic leadership and their effect on counterproductive work behavior. The researcher distributed nursing personnel in: (3 groups) of them included 25 nurses, and (one group) included 20 nurses, in addition to the group of leaders, which included (12 leaders).

The educational program was taken (2 months) as the following: each group took (three days) to convey the program content to nursing personnel, every day included (2 sessions) with break, every session took (from 90-120 minutes), about (3-4 hours/ day) with (30 minutes) for break time. Different teaching methods were used as the following: lecture, group discussion, brain storming, and scenarios. Also, media as picture, videos, PowerPoint and handouts as Microsoft word was prepared by the researcher and send it via whats app for nursing personnel which supported them to refresh and revise content taken during sessions. By the end of each session, nursing personnel are informed about the content of the next session and its time.

The program theoretical sessions were held in the conference room in coordination with the training department at badr Hospital. The educational program sessions was done to the nursing personnel during the day shifts according to their schedule.

Third Phase: Evaluation

The aim of this phase was to complete the training program and conduct (post- test) for nursing personnel by using questionnaires that were be administrated to nursing personnel immediately after completion of the program.

Fourth Phase: follow up evaluation

Immediate evaluation: Following the completion of the program, nursing personnel were given Toxic leadership scale and behavior (Tool I) to assess nursing personnel's Toxic leadership knowledge and behavior after providing educational program. Also, Counterproductive work behavior (Tool II) that aimed to determine nurses' Counterproductive Work behavior.

Data analysis

Data entry and analysis were performed using SPSS statistical package version 25. Categorical variables were expressed as number and percentage while continuous variables were expressed as (number, percentage and mean \pm SD). Chi-Square (χ^2) was used to test the association between row and column variable of qualitative data. The fisher exact test was used with small, expected numbers. ANOVA test was used to compare mean in normally distributed quantitative variables at more than two groups. Pearson correlation was done to measure correlation between quantitative variables. For all tests, a two-tailed p-value ≤ 0.05 was considered statistically significant, P-value ≤ 0.01 was considered highly statistically significant. While p-value > 0.05 was considered not significant.

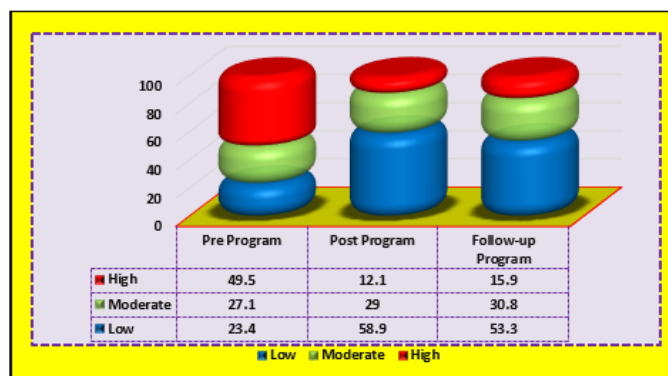
3. RESULTS

Table (1): Described personal characteristics of the studied nursing personnel, it shows that the most (90.7%) of the studied nursing personnel their age was ranged from 20 to less than 30 years old, with a mean age of 26.95 ± 3.61 , more than half (58.9%) of them were male with a male to female ratio was 1.4:1, more than three-quarters (78.5%) of them held a technical certificate, about tiny (15.9%) of them were working in management position, out of this percentage, (64.7%) of them were working in first-level management, more than four-fifths (86% & 86.9%) of them had from 1 year to less than 5 years of experience in nursing and lasting in the current position with a total mean of 4.41 ± 2.3 and 3.81 ± 1.44 respectively and finally, about tiny (12.1%) of them had planning to change their organization within the next year.

Table (1): Frequency distribution of Personal characteristics among the studied nursing personnel (n=107)

Personal characteristics	No	%	
Age (in years)	20- < 30 yrs.	97	90.7
	30- < 40 yrs.	9	8.4
	40- < 50 yrs.	0	0.0
	≥ 50 yrs.	1	0.9
	$\bar{x} \pm SD$	26.95 ± 3.61	
Gender	Female	44	41.1
	Male	63	58.9
	Male to Female ratio	1.4:1	
Qualification	Nursing Diploma degree	5	4.7
	Technical institute	84	78.5
	Bachelor's degree	14	13.1
	Master	3	2.8
	PHD	1	0.9
Management position	Yes	17	15.9
	No	90	84.1
If yes (n=17)	First-level Management:	11	64.7
	Mid-level Management:	6	35.3
	Top -level Management	0	0.0
Year of experience	1 < 5 years	92	86.0
	5 years < 10 years	11	10.3
	≥ 10 years	4	3.7
	$\bar{x} \pm SD$	4.41 ± 2.3	
Experience in current position	1 < 5 years	93	86.9
	5 years < 10 years	12	11.2
	≥ 10 years	2	1.9
	$\bar{x} \pm SD$	3.81 ± 1.44	
Planning to change organization within the next year	Yes	13	12.1
	No	94	87.9

Figure (1): Shows total level of toxic leadership during pre, post & three months follow up among the studied nursing personnel. It illustrates that about three-fifths (58.9%) of the studied nursing personnel perceived a low level of toxic leadership during the post-test phase, followed by the phase of follow-up test (53.3%) as compared with the phase of the pre-test (23.4%). In addition to presence of difference between at $\chi^2=52.6, P=0.000$. Moreover, there was a highly statistically significant difference between total mean score of toxic leadership during pre, post & three months follow up among the studied nursing personnel at $P = 0.000$.



$\chi^2=52.6, P=0.000$

Figure (1): Percentage distribution of total level of toxic leadership during pre, post & three months follow up among the studied nursing personnel (n=107)

Table (2): clarifies total mean score of toxic leadership during pre, post & three months follow up among the studied nursing personnel. It denotes, during the post-test phase, the studied nursing personnel perceived lower mean score (47.20±18.9) of toxic leadership, followed by the phase of follow-up test (49.04±19.8) as compared with the phase of pre-test 66.26±21.3 (Total score=90). Moreover, there was a highly statistically significant difference between total mean score of toxic leadership during pre, post & three months follow up among the studied nursing personnel at P = 0.000.

Table (2): Total mean score of Toxic leadership during pre, post & three months follow up among the studied nursing personnel (n=107)

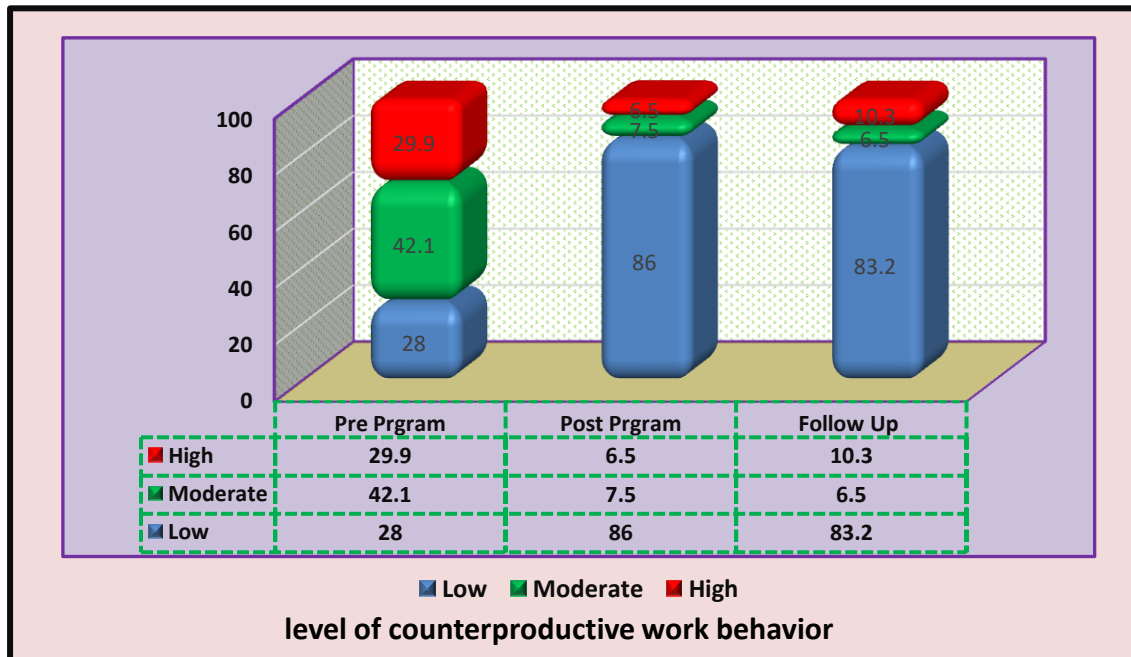
Items		Pre	Post	3 months follow up	F Test	P-Value
		$\bar{x} \pm SD$	$\bar{x} \pm SD$	$\bar{x} \pm SD$		
Abusive supervision	Low	7.40±0.91	7.42±1.16	7.42±1.1	26.1	0.000***
	Moderate	13.41±0.62	13.90±0.40	13.83±0.3		
	High	18.96±1.7	18.92±1.5	18.88±1.9		
	Total	14.76±4.8	10.64±4.3	11.04±4.5		
Authoritarian Leadership	Low	6.15±0.45	6.44±1.0	6.44±1.1	19.6	0.000***
	Moderate	11.30±0.65	12.0±0.25	12.0±0.34		
	High	16.84±0.95	16.46±1.71	16.75±1.6		
	Total	12.59±4.4	9.37±3.7	9.95±3.9		
Narcissism	Low	5.62±1.1	5.42±0.81	5.48±1.0	16.7	0.000***
	Moderate	10.07±0.45	9.92±0.41	9.98±0.41		
	High	14.61±0.89	14.47±0.94	14.65±0.67		
	Total	11.15±3.7	8.54±3.3	8.92±3.5		
Self-Promotion	Low	6.17±1.2	5.16±0.52	5.20±0.62	38.1	0.000***
	Moderate	10.07±0.53	9.95±0.32	9.95±0.32		
	High	14.61±0.81	13.85±1.2	14.0±1.2		
	Total	11.49±3.5	7.87±3.1	8.16±3.3		
Unpredictability	Low	8.88±1.82	7.42±1.1	7.40±1.2	44.8	0.000
	Moderate	14.19±0.56	14.04±0.18	13.97±0.18		
	High	20.35±1.2	19.0±2.1	19.28±2.05		
	Total	16.28±4.9	10.78±4.5	11.1±4.7		
Total	Low	34.28±4.9	33.16±6.2	32.51±4.9	29.2	0.000**
	Moderate	59.03±2.4	60.45±1.8	59.82±2.3		
	High	85.30±5.2	83.62±6.2	83.53±7.1		
	Total	66.26±21.3	47.20±18.9	49.04±19.8		

*Significant p ≤ 0.05

**Highly significant p ≤ 0.01

F: ANOVA Test

Figure (2): Plays total level of counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel. It describes that more than four-fifths (86%) of the studied nursing personnel perceived a low level of counterproductive work behavior during the post-test phase, followed by the phase of follow-up test (83.2%) as compared with the phase of the pre-test (28%). In addition to presence of difference between at $\chi^2=146$, P=0.000. Moreover, there was a highly statistically significant difference between total mean score of counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel at P = 0.000.



$\chi^2=146, P=0.000$

Figure (2): Percentage distribution of level of Counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel (n=107)

Table (3): clarifies total mean score of counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel. It denotes, during the post-test phase, the studied nursing personnel perceived lower mean score (57.03 ± 19.8) of counterproductive work behavior, followed by the phase of follow-up test (59.07 ± 21.66) as compared with the phase of pre-test 86.49 ± 20.4 (Total score=135). Moreover, there was a highly statistically significant difference between total mean score of counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel at $P = 0.000$.

Table (3): Total mean score of Counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel (n=107)

Items		Pre	Post	3 months follow up	F Test	P- Value
		$\bar{x} \pm SD$	$\bar{x} \pm SD$	$\bar{x} \pm SD$		
Sabotage	Low	3.67±0.68	3.14±0.48	3.16±0.50	28.0	0.000 ***
	Moderate	6.0±0.0	6.0±0.0	6.0±0.0		
	High	7.91±0.81	8.56±0.52	8.31±0.63		
	Total	5.50±1.9	3.81±1.6	3.97±1.8		
Withdrawal	Low	12.82±2.1	11.71±1.8	11.80±1.9	65.2	0.000 ***
	Moderate	21.65±2.0	22.31±1.2	22.36±1.2		
	High	30.33±2.7	30.67±2.7	31.47±2.3		
	Total	25.93±7.1	15.65±7.2	16.31±7.7		
Production deviance	Low	3.09±0.29	3.22±0.54	3.23±0.55	44.1	0.000 ***
	Moderate	6.0±0.0	6.0±0.0	6.0±0.0		
	High	7.91±0.97	8.77±0.43	8.75±0.44		
	Total	6.54±2.05	4.18±1.9	4.36±2.1		
Theft	Low	5.0±0.0	5.0±0.0	5.0±0.0	N.C.	
	Moderate	-	-	-		
	High	-	-	-		
	Total	5.0±0.0	5.0±0.0	5.0±0.0		

Abuse	Low	30.19±5.5	25.89±5.3	25.98±5.4	82.4	0.000
	Moderate	46.93±2.6	47.29±2.7	46.29±3.4		
	High	53.91±1.6	55.0±1.4	54.38±1.8		
	Total	43.51±9.6	28.37±9.1	29.43±10.1		
Total	Low	58.10±10.8	50.18±10.1	50.60±10.5	67.8	0.000**
	Moderate	90.38±5.5	90.75±7.4	89.29±6.4		
	High	107.62±3.1	108.43±3.5	108.45±3.3		
	Total	86.49±20.4	57.03±19.8	59.07±21.66		

*Significant $p \leq 0.05$

**Highly significant $p \leq 0.01$

F: ANOVA Test

Table (4) Correlation between toxic leadership and counterproductive work behavior during pre, post & three months follow up the studied nursing personnel. It clarifies that, there was a highly strong statistically significant positive correlation between dimension of toxic leadership (Abusive supervision, Authoritarian Leadership, Narcissism, Self-Promotion, Unpredictability) and dimensions of counterproductive work behavior (Sabotage, Withdrawal, Production deviance and Abuse) during pre, post & three months follow up the studied nursing personnel at $r =$ ranged from 0.773 to 0.971 & $P = 0.000$.

Table (4): Correlational matrix between dimensions of Toxic leadership and dimensions of counterproductive work behavior during pre, post & three months follow up the studied nursing personnel

Dimension of counterproductive work behavior		Dimension of toxic leadership									
		Abusive supervision		Authoritarian Leadership		Narcissism		Self-Promotion		Unpredictability	
		r	P	r	P	R	P	r	P	r	P
Sabotage	Pre-test	0.934	0.000**	0.914	0.000**	0.904	0.000**	0.904	0.000**	0.904	0.000**
	Post-Test	0.971	0.000**	0.787	0.000**	0.779	0.000**	0.773	0.000**	0.809	0.000**
	Follow-up	0.826	0.000**	0.814	0.000**	0.800	0.000**	0.800	0.000**	0.830	0.000**
Withdrawal	Pre-test	0.940	0.000**	0.933	0.000**	0.957	0.000**	0.970	0.000**	0.973	0.000**
	Post-Test	0.900	0.000**	0.878	0.000**	0.857	0.000**	0.865	0.000**	0.909	0.000**
	Follow-up	0.918	0.000**	0.891	0.000**	0.862	0.000**	0.883	0.000**	0.918	0.000**
Production deviance	Pre-test	0.953	0.000**	0.911	0.000**	0.935	0.000**	0.926	0.000**	0.932	0.000**
	Post-Test	0.954	0.000**	0.835	0.000**	0.835	0.000**	0.822	0.000**	0.860	0.000**
	Follow-up	0.883	0.000**	0.864	0.000**	0.848	0.000**	0.859	0.000**	0.883	0.000**
Theft	Pre-test	N.C.									
	Post-Test	N.C.									
	Follow-up	N.C.									
Abuse	Pre-test	0.953	0.000**	0.930	0.000**	0.948	0.000**	0.953	0.000**	0.958	0.000**
	Post-Test	0.876	0.000**	0.858	0.000**	0.931	0.000**	0.846	0.000**	0.885	0.000**
	Follow-up	0.898	0.000**	0.874	0.000**	0.837	0.000**	0.865	0.000**	0.896	0.000**

*Significant $p \leq 0.05$

**Highly significant $p \leq 0.01$

N.C.: Not Computed as Variable is Constant

Table (5): clarifies Effect size and η^2 of toxic leadership management training program on counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel. It calcifies that toxic leadership management training program had positive large effect size on nursing personnel's counterproductive work behavior during pre, post & three months follow up at $\eta^2 = 0.299$. As when Eta-square value = 0.01 to < 0.06, the effect is considered weak, when it = 0.06 to < 0.14, the effect is considered medium and when it ≥ 0.14 the effect is large. Therefore, this provides enough evidence to support research hypothesis.

Table (5): Effect size and η^2 of Toxic leadership management training program on counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel

Interval	Mean	SD	F Test	P value	η	η^2	Effect size
Pre-test	86.49	20.42	67.8	0.000***	0.547	0.299***	Large effect
Post-test	57.03	19.85					
Follow up	59.07	21.66					
Total	67.53	24.60					

*Significant $p \leq 0.05$

**Highly significant $p \leq 0.01$

F: ANOVA Test

* Small effect size = 0.01 to < 0.06

**Medium effect size = 0.06 to < 0.14

***Large effect size ≥ 0.14

4. DISCUSSION

Toxic leadership has been increasingly recognized as a significant factor contributing to counterproductive work behavior (CWB) in organizations. Toxic leaders, characterized by manipulative, exploitative, or uncivil behaviors, create a harmful work environment that often leads to negative emotional responses among employees (Guo et al., 2024), Counterproductive work behaviors are often driven by emotions like anger and fear, which arise from the unjust treatment to employees. Additionally, supervisor incivility, a form of toxic leadership, has been shown to directly increase CWBs among subordinates (Naeem et al., 2024), so the aim of the study was to explore the effect of toxic leadership management training program on counterproductive work behavior among nursing personnel.

Concerning with the personal characteristics among the studied nursing personnel; Described personal characteristics of the studied nursing personnel, it shows that the most (90.7%) of the studied nursing personnel their age was ranged from 20 to less than 30 years old, with a mean age of 26.95 ± 3.61 , more than half (58.9%) of them were male with a male to female ratio was 1.4:1, more than three-quarters (78.5%) of them held a technical certificate, about tiny (15.9%) of them were working in management position, out of this percentage, (64.7%) of them were working in first-level management, more than four-fifths (86% & 86.9%) of them had from 1 year to less than 5 years of experience in nursing and lasting in the current position with a total mean of 4.41 ± 2.3 and 3.81 ± 1.44 respectively and finally, about tiny (12.1%) of them had planning to change their organization within the next year.

Regarding the studied nurses' total perceptions of the toxic leadership, this study demonstrated a significant reduction in perceived levels of toxic leadership among nursing personnel from the pre-test to the post-test and a slight decline at the three-month follow-up phase, as the researcher overview, This is due to the intervention aimed at addressing toxic leadership within the organization was largely successful. This trend implies that the personnel became more aware of toxic leadership behaviors and perhaps organizational changes were made to reduce such behaviors.

In the same line with the study findings a study by Davis and Allen (2022), who conducted a study on "Leadership Training and its Impact on Reducing Toxic Leadership in Healthcare" and found that targeted interventions significantly reduced the occurrence of toxic leadership behaviors. Participants reported improved leadership practices and a more positive work environment.

In disagreement with this finding, a study by Smith et al. (2023), who conducted a study on "Evaluating the Long-Term Effects of Leadership Training on Toxic Leadership in Healthcare" and found that while leadership training can improve knowledge and awareness, it does not always translate into sustained behavioral change, especially in complex and hierarchical organizations like hospitals. Regarding the total of the counterproductive work behavior among the studied nursing personnel, the current study presented a significant reduction in counterproductive work behavior (CWB) among the studied nursing personnel from the pre-test to the post-test and follow-up phases with a slight decline during the follow-up phase. The statistical analysis shows a highly significant difference between the phases, the researcher opinion show that the statistically significant declines were attributed to the effect of successfully implementing the toxic leadership training program. Also, the presence of culture shift towards positive behavior among peers after implementation of the training program attributed to the reduction in CWBs.

The findings are consistent with other studies that highlighted the effectiveness of targeted interventions in reducing CWBs such as; a study by Le Roy et al. (2021), who conducted a study on " The impact of leadership development on

counterproductive work behaviors: A longitudinal study in healthcare" and found that leadership development programs that focused on ethical behavior and decrease toxic leadership practices significantly reduced CWBs in healthcare settings.

In disagreement with the current findings, a study by **Johnson and Kim (2023)**, who conducted a study on "Counterproductive work behavior in healthcare: The role of organizational factors" and reported that despite implementing similar training program, CWBs remained prevalent in some healthcare organizations.

Regarding the effect size and η^2 of toxic leadership management training program on counterproductive work behavior during pre, post & three months follow up among the studied nursing personnel, the current study revealed that the toxic leadership management training program had a large positive effect on reducing counterproductive work behavior (CWB) among the studied nursing personnel during pre, post, and three months follow-up phases.

From the researcher point of view this significant effect size indicated that the training program was highly effective in mitigating the negative behaviors associated with toxic leadership. The reasons for the large effect size may be the increased awareness and understanding of toxic leadership behaviors that the training program provided to the nursing personnel. By educating them on the characteristics, consequences, and coping strategies related to toxic leadership, the program likely empowered nurses to recognize and appropriately respond to these behaviors. This awareness could lead to a reduction in feelings of helplessness or frustration that often drive CWB.

It answered the research hypothesis which stated that implementing the toxic leadership management training program will affect nursing personnel counterproductive work behavior.

This is in consistent with a study by **White and Green (2021)**, who conducted a study on "The role of ethical leadership training in mitigating counterproductive work behavior" and found that leadership training focused on toxic leadership significantly reduced CWB among healthcare workers.

In disagreement with this, a study by **Adams et al. (2020)**, who conducted a study on "Long-term impact of leadership training on counterproductive work behavior: A critical analysis" and found that while leadership training programs can have short-term benefits, their long-term impact on reducing CWB may be limited if not supported by ongoing organizational changes.

5. CONCLUSION

The study findings concluded that, there was a highly statistically significant decline in nursing personnel' perception of toxic leadership level in the post and follow up phases as compared to the pre-intervention phase. In addition to that, there was a highly statistically significant decline in nursing personnel' counterproductive work behavior in the post and follow up phases as compared to the pre-intervention phase. Implementing a toxic leadership training program for nursing personnel is effective in decline their counterproductive work behavior.

6. RECOMMENDATIONS

Based on the study finding, it recommended that, provide regularly nurses with training programs focused on management of toxic leadership and counterproductive work behavior, through workshops, simulations, and role-playing exercises. Encourage and support ethical leadership within the organization. Demonstrate integrity, fairness, and professionalism, setting a positive example of leaders for all staff members. Implement recognition and reward systems that acknowledge and reinforce positive behavior to encourage a culture of excellence and reduce counterproductive work behaviors. Further studies should be developed to study the effect of toxic leadership training program on nurses' innovative behaviors.

REFERENCES

- [1] Adams, M., Davis, R. & Kim, S. (2020). Long-term impact of leadership training on counterproductive work behavior: A critical analysis. *Journal of Organizational Behavior*, 41(5), 723-738.
- [2] Badran, F. M. & Akeel, A. F. (2022). Perceived abusive supervision and its influence on counterproductive work behavior among staff nurses. *Egyptian Journal of Nursing and Health Sciences*, 3(2), 158-182.

- [3] Bani-Melhem, S., Al-Hawari, M. A. & Quratulain, S. (2020): Leader-member exchange and frontline employees' innovative behaviors: The roles of employee happiness and service climate. *International Journal of Productivity and Performance Management*, 71(2), 540-557.
- [4] Barbaranelli, C., Fida, R., & Gualandri, M. (2013). Assessing counterproductive work behavior: A study on the dimensionality of CWB-Checklist. *Testing, Psychometrics, Methodology in Applied Psychology*, 20(3), 1-15.
- [5] Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2023). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, 1-39.
- [6] Davis, R., & Allen, J. (2022). Leadership Training and its Impact on Reducing Toxic Leadership in Healthcare. *Journal of Healthcare Management*, 67(1), 22-31. <https://doi.org/10.1097/JHM.0000000000000400>
- [7] Diab, G. & Hassan, M. (2023): Relationship between toxic leadership and work outcomes: a cross-sectional study. *Egyptian Journal of Health Care*, 14(1), 199-211.
- [8] Egami, N. & Hartman, E. (2023). Elements of external validity: Framework, design, and analysis. *American Political Science Review*, 117(3), 1070-1088.
- [9] Gülçin, E. R. E. N., & Demir, R. (2023). The Effect of Perceived Pay Equity on Counterproductive Work Behaviors: The Mediating Role of Organizational Cynicism. *Ege Academic Review*, 23(2), 219-236.
- [10] Guo, L., Luo, J., & Cheng, K. (2024). Exploitative leadership and counterproductive work behavior: A discrete emotions approach. *Personnel Review*, 53(2), 353-374. <https://doi.org/10.1108/PR-02-2021-0131>.
- [11] Gupta, A., & Chawla, S. (2024). Toxic Leadership in Workplaces: Insights from Bibliometric, Thematic Analysis, and TCM Framework. *International Journal of Organizational Leadership*, 13(1), 179-200.
- [12] Hassan, A., Aziz, A. E., & Fahmy Diab, S. M. (2024). The Relationship between Toxic Leadership and Career Success. An empirical study on nurses in medical centers and hospitals in Mansoura university, *Raya International Journal of Business Sciences*, 3(8), 89-126.
- [13] Ibrahim, N. H., Makhbul, Z. K. M., Ayob, A. H., & Lokman, A. M. (2023). Systematic Literature Review: Affective Experiences as a Predictor of Counterproductive Work Behaviour. *International Journal of Professional Business Review*, 8(3), e01191-e01191.
- [14] Johnson, A., & Kim, S. (2023). Counterproductive work behavior in healthcare: The role of organizational factors. *Journal of Health Organization and Management*, 37(2), 245-261.
- [15] Kayani, M. B., & Alasan, I. I. (2021). Impact of toxic leadership on counterproductive work behavior with the mediating role of psychological contract breach and moderating role of proactive personality. *Studies of Applied Economics*, 39(4).
- [16] Le Roy, J., Burns, C., & Lee, Y. (2021). The impact of leadership development on counterproductive work behaviors: A longitudinal study in healthcare. *Journal of Nursing Management*, 29(4), 571-579.
- [17] Mekawy, S.H., & Ismail, S. A.M. (2022): Effects of toxic leadership style of nurse managers on counterproductive work behaviors and intention to quit among staff nurses: A Comparative Study. *Egyptian Journal of Health Care*, 13(3), 1466-1481.
- [18] Mokhtar Taha, A., Saeed Ahmed, E., & Ahmed Abd Allah, N. (2024): Toxic Leadership as Perceived by Nurses and Its Relation to Job Coping. *Journal of Nursing Science Benha University*, 5(1), 384-402.
- [19] Naeem, R. M., Weng, Q. D., Hameed, Z., Arain, G. A., & Islam, Z. U. (2024). Supervisor incivility and counterproductive work behavior: The role of job and personal resources. *Personnel Review*, 53(4), 857-876. <https://doi.org/10.1108/PR-09-2022-0603>.
- [20] Norouzinik, Y. Rahimnia, F., Maharati, Y., & Eslami, G. (2021). Narcissistic leadership and employees' innovative behavior: Mediating roles of job embeddedness and job engagement. *Innovation*, 24(3), p.p 355-380.

- [21] Permata, R. K., & Soeling, P. D. (2022): Overcoming Counterproductive Work Behavior with Organizational Justice and a Job Satisfaction Approach. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(2), 8294-8306.
- [22] Rauf, K., & Farooq, A. (2014). Adaptation and validation of counterproductive work behavior checklist (45 and 32). *International Journal of Novel Research in Humanity and Social Sciences*, 1(1), 39-49.
- [23] Roebianto, A. D. I. Y. O., Savitri, S. I., Aulia, I. R. F. A. N., Suciyan, A. R. I. E., & Mubarakah, L. A. I. L. A. T. U. L. (2023). Content validity: Definition and procedure of content validation in psychological research. *TPM*, 30(1), 5-18.
- [24] Sherifdeen, K., & Godwin Olaoye, E. F. (2024). Definition and characteristics of toxic leadership in school organizations. <https://www.researchgate.net/publication/378715994>.
- [25] Smith, L., Brown, T., & Williams, P. (2023). Evaluating the Long-Term Effects of Leadership Training on Toxic Leadership in Healthcare. *Journal of Nursing Administration*, 53(4), 189-195. <https://doi.org/10.1097/NNA.0000000000000600>
- [26] Wang, S., Wu, J., He, C., & Gu, J. (2022). The impact of authoritarian leadership on employee creativity: the joint moderating roles of benevolent leadership and power distance. *Journal of Managerial Psychology*, 37(6), pp. 527-544. doi.org/10.1108/JMP-01-2021-0046.
- [27] White, M., & Green, S. (2021). The role of ethical leadership training in mitigating counterproductive work behavior. *Nursing Ethics*, 28(6), 890-902.
- [28] Zahid, F. (2019): Self-serving counterproductive work behaviors: the development and validation of a scale, pakistan, *Pakistan Journal of Commerce and Social Sciences*, 13 (2), pp: 257-282.