Efficiency of Acceptance and Commitment Based Nursing Intervention on Work place Ostracism, Organizational Silence and Psychological Distress among Nurses

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Abstract

Background: Psychological distress, workplace ostracism and organizational silence are significant problems in organizations, with negative consequences for both individuals and the organization as a whole. **The aim of the** study was to examine efficiency of Acceptance and Commitment based nursing intervention in work place ostracism, organizational silence and psychological distress among nurses. **Subjects and Method:** A quasi-experimental design approach was adopted. **Setting**: The study was carried out at departments of Emergency Unit, Critical Care Units, Medical Unit, Haemodialysis Unit, and Psychiatric Mental Health Units. of Menoufia University Hospital, Shebin El-kom District, Menoufia Governorate, Egypt. A purposive sample of 100 nurses was selected and divided into two equal groups; study group and control group. **Four tools** were utilized for data collection (1): A structured interviewing questionnaire: to assess socio- demographic characteristics of the nurses, (2) Workplace Ostracism Scale, (3) Organizational silence questionnaire, (4) -21 Items (DASS-21) scale to measure , Depression, Anxiety and Stress (psychological distress) .**The results**: revealed that there was a significant statistically reduction in the level of work place ostracism, organizational silence and psychological distress in the study group after application of Acceptance and Commitment based nursing intervention than control group. **Conclusion**: It was concluded that the acceptance and commitment based nursing intervention has a positive effect on reducing psychological distress level, reducing work place ostracism and reducing organizational silence among nurses. **Recommendations**: Acceptance and Commitment training programs should be implemented for all nurses, particularly those in psychiatric nursing to increase their resilience, and enable them to confront difficult situations with a positive mindset.

Key Words: Acceptance Commitment based nursing intervention, work place Ostracism, Organizational silence, Nurses, Psychological distress.

Introduction

Nurses repeatedly experience physical and mental stress as a result of the demands of their jobs. The levels of psychological distress; workplace ostracism and burnout among healthcare staff are high, with negative consequences for patient care. Psychological distress (PD) is a communal mental health problem in the community. It can be defined as a state of emotional suffering characterized by symptoms of depression and anxiety. Extreme levels of psychological distress are indicative of impaired mental well-being and may reflect common mental complaints, like depressive and anxiety disorders. Symptoms of psychological

distress can differ, even among people who have experienced similar stressors. However, possible symptoms of psychological distress may include problems with anger management, physical symptoms such as headaches, low energy levels, loneliness, and changes in eating or asleep patterns, unnecessary use of alcohol or other substances, beliefs of hurting oneself or others[1].

Several factors contribute to the expansion of psychological distress among nurses, including night shifts, sleeplessness, job profile, exhaustion, work experience, lack of social support, peer interaction, workload, and workplace safety. This distress can lead to an increased risk of cardiovascular illnesses, developing arthritis, and pulmonary disease. Additionally, it has a significant impact on nurses, resulting in increased medical errors, absenteeism, decreased performance, and increased conflict. Psychological distress and workplace ostracism are always significant problems and have adverse outcome for individuals and organizations [2].

Workplace ostracism is defined as the degree to which a person feels excluded and sidelined, or ignored by others. In other words can be defined as an individual's (or group's) exclusion, rejection, or ignore by another individual (or group) that impedes individual's ability to form and maintain positive interpersonal relationship, achieve job-related success, or favorable reputation within their workplace. It harms organizational outcomes as well as individual behavior and performance. When employees experience ostracism, they are unable to engage in social interactions with other members of the organization [3].

Ostracism can extremely affect employees' attitudes and will destroy their motivation. Also, It has a negative effect on employees' emotions, self-esteem, and well-being. In addition, workplace ostracism leads to lower group commitment and higher staff turnover, reduced levels of organizational citizenship behaviors, increased levels of deviance, and decreased levels of job satisfaction. As a result, when nurses are ostracized by their peers, they begin to feel powerless, unhappy, hostile, and unworthy. Moreover, workplace ostracism leads to feelings of social pain alike physical pain and it causes further psychological consequences such as employees' depression, anxiety, distress, and suicide [4]. Ostracism at work is manifested in various forms such as giving a cold shoulder to an individual, avoiding eye contact, ignoring someone, or sometimes excluding them from social events such as business meetings or corporate parties. Also, initiating a session without the presence of a certain employee, omitting important e-mails, or ignoring coworker comments and contributions. Ostracized employees often experience a decline in motivation and does not have willingness to put extra effort or time into the success of their organization. Therefore workplace ostracism is closely associated with reduced enthusiasm and energy of an individual for his work. Moreover, it leads to organizational silence [5].

Studies have shown that exposure to psychological distress and workplace ostracism motivates employees to manifest silence to protect themselves from negative personal consequences. Organizational silence refers to the deliberate withholding of genuine thoughts, feelings, or evaluations regarding one's organizational situation from individuals who are believed to possess the authority to bring about change [6]. Silence is more than just the absence of speech; it can be characterized by

avoiding communication, refraining from participation, exhibiting an unwelcoming attitude, lack of being perceived and disregarding [7]. Employee silence at the individual level, has conveyed a lack of commitment to the organization, undesirable attitudes toward modification, job frustration, and poor performance. Silence among employees within an organization can greatly impede performance and hinder improvement. [8]. Acceptance and commitment therapy can help in handling and overcoming work-related stress, and emotional and psychological distress[9].

Acceptance and commitment therapy (ACT) is a psychotherapeutic approach that focuses on taking action and derives from traditional behavior therapy and cognitive behavioral therapy. It emphasizes the importance of taking action instead of avoiding, ignoring, or fighting against internal emotions. ACT encourages individuals to recognize and accept these deeper feelings as valid responses to specific situations. This acceptance should not hinder their progress in life, but rather empower them to move forward. With this understanding, clients begin to accept their hardships and commit to making necessary changes in their conduct, regardless of what is going on in their lives and how they feel about it. ACT is effective in the treatment of various mental and physical conditions. These conditions encompass anxiety disorders, depression, obsessive-compulsive disorder, eating disorders, substance use disorders, workplace stress, and chronic pain [10].

Significance of the study

In healthcare, psychological distress, workplace ostracism, and organizational silence are always significant problems in organizations and these cause employees to be absent from activities that help in the organization advancement, refrain from sharing ideas, thoughts, concerns, and deliberately not exchanging innovative viewpoints and ideas. Also hurts nurse's physical as well as mental well-being, affects an employee's self-esteem negatively, detrimental impact on job performance, and disturbs nurses' work behaviors**.**

The prevalence of psychological distress in Egypt among mental health nurses was 24% [11]**.** A study conducted among healthcare professionals in Egypt assessed the mental health consequences and reported anxiety (42.6%), depression (59.0%), and insomnia (51.9%) [12].According to a study done by Elhanafy [13] founded that the prevalence of workplace ostracism was 52.26%, while 45.9 % of the nursing staff had high level of organizational silence. Also, found that more than half of staff nurses (53%) had a high level of organizational silence [7].

Staff nurses suffer from emotional overtiredness and work stress because of ostracism, and these pressures could disrupt their jobs and lead to conflict. ACT focuses on developing and broadening psychological flexibility. This involves fostering emotional receptiveness and enhance the ability to adapt one's thoughts and behaviors in order to align them more effectively with personal values and goals, so this study aimed to evaluate the efficiency of acceptance and commitment-based nursing intervention on workplace ostracism, organizational silence, and psychological distress among nurses.

The theoretical framework

Acceptance and attachment therapy is an evidence-based intervention, falls under the category of 'third wave' cognitive-behavioral therapy [14]**.** Psychological flexibility refers to

the ability to be fully present in the current moment, without any unnecessary defenses, while also aligning one's behavior with personally chosen values [15]. In simpler terms, psychological flexibility involves being aware of and staying connected to internal experiences such as thoughts, feelings, sensations, and memories and the situations in which they arise. This flexibility enables individuals to recognize and adapt to various contextual demands, utilize their range of behaviors to enhance social and personal functioning, maintain balance across different areas of life, and foster personal growth [16].

Methods

The purpose of the study: evaluate the efficiency of acceptance and commitment- based nursing intervention on work place ostracism, organizational silence and psychological distress among nurses

Research Hypotheses

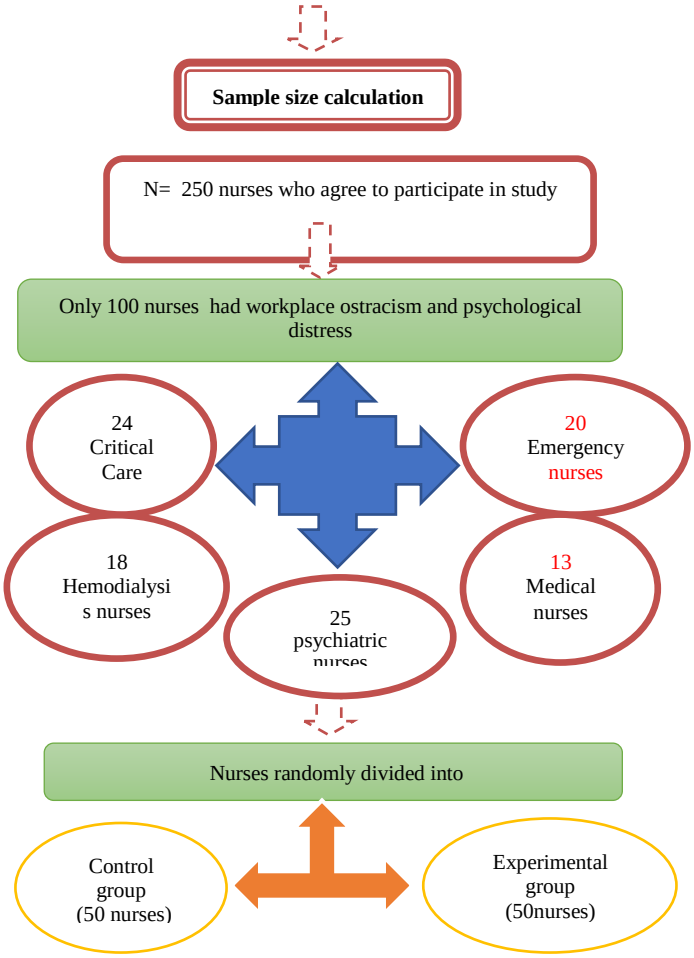
- Nurses who receive acceptance and commitment based nursing intervention will have lower work place ostracism scores in the post-test than in the pre-test compared to those who receive only routine care (control group).
- Nurses who receive acceptance and commitment based nursing intervention will have lower organizational silence scores in the post-test than in the pre-test compared to those who receive only routine care (control group).
- Nurses who receive acceptance and commitment based nursing intervention will have lower psychological distress scores in the post-test than in the pre-test compared to those who receive only routine care (control group).

Research design

A quasi-experimental research design (study/control group-pretest and posttest) was utilized to achieve the aim of the study.

Research Setting

The study was conducted at University Hospital in Menoufia Governorate, Egypt. A random selection of five departments out of the twenty-three department in the above setting was done. The researchers wrote the names of the departments on separate papers then put them in a bowl and selected five papers through random sampling. The selected departments were the Emergency Unit, Critical Care Units, Medical Unit, Hemodialysis Unit, and Psychiatric Mental Health Units.



Subjects

A purposive sample of 100 nurses was gathered from the above-mentioned setting, who fit the following inclusion criteria:

have workplace ostracism and psychological distress, have at least 2years of experience, and free from other medical and psychiatric disorders. They distributed as following (Emergency (20 nurses) - Critical Care Units; (24 nurses) Hemodialysis (18 nurses): Medical (13 nurses) –and psychiatric mental health units (25 nurses), which divided into two groups; study group (n = 50 nurses) and control group (n =50 nurses) and selected randomly in each group .

Tools of data collection

Four tools were used to collect data of the study.

Tool (1): An interview questionnaire: This questionnaire was developed by the research team based on pertinent relevant literature. It consist of two parts. Part 1: includes socio-demographic data such as age, gender, marital status, educational level, and income. Part II: designed to assess occupational and health data about the nurses, including department affiliation, years of experience, the nature of their work, and any medical or psychiatric conditions.

Tool (2): Workplace Ostracism

This tool was developed by Ferris [(17)]and translated in to Arabic by the researchers. The scale consists of 10 items, and was designed to assess the level of workplace ostracism among staff nurses. Nurses` responses were scored on a 3-point Likert scale ranging from (1) disagree to (3) agree. The level of workplace ostracism was considered high if the percent score was more than 75% , moderate if it fell between 60% and 75%,and low (if it was less than 60%).

Tool (3): The depression, anxiety and stress scale (Arabic DASS-21)

The original version of this scale was developed by Lovibond [(18)] to assess psychological states of depression, anxiety, and stress. It was translated into Arabic by Taouk [(19).] Each of the three- sub scales consists of 7 items. The depression items are (3,5, 10,13,16,17and 21).The anxiety items are (2,4,7,9,15,19 and 20). The stress items are (1,6,8,11,12,14 and 18). The scale used a 4-point Likert scale, ranging from 0 to 3, with the following values: 0 = never, 1 = sometimes, 2= often, and 3 = almost always. To calculate the scores for depression, anxiety, and stress, the scores for the relevant items are summed and then multiplied by 2 to obtain the final score. Additionally, this scale includes a scoring system to determine the levels of depression, anxiety, and stress, as well as the total psychological distress.

Levels	anxiety	depression	stress	Total psychological distress
Mild	8-9	10-13	15-18	42-100
Moderate	10-14	14-20	19-25-	101-126
Severe	15-19	21-27	26-33	127-168
Extremely severe	+20	+28	+34	+168

Tool (4): Organizational silence questionnaire: It was developed by Sehitoglu, [(20)], modified and translated into Arabic by the researchers. It consists of two parts: Part I focuses on the types of silence and includes 15 items. These items are used to measure the levels of organizational silence among nurses and are divided into three dimensions: acquiescent silence (5 items), defensive silence (5 items), and prosocial silence (5 items). To score the responses, a three-point Likert Scale was used, with options ranging from "disagree (1) " to

"neutral (2) " and "agree (3) ". The scores for each item were summed up and then divided by the total number of items, giving a mean score for each type of silence. These mean scores were then converted into a percentage. Scores below 60% indicated a low level of organizational silence, scores between 60% and 75% indicated a moderate level, and scores above 75% indicated a high level.

Part II: Causes of Organizational Silence: This section aims to evaluate the causes of organizational silence as perceived by nurses. It comprises 27 items that are categorized into five factors:1) support of the top management of silence (5 items), 2) lack of communication opportunities (6 items), 3) support of supervisor for silence (5 items), 4) Misuse of official authority (5 items), and 5) subordinate's fear of negative reactions (6 items).

Scoring System: The subjects' response was rated on a three-point Likert Scale, ranging from "not a cause" (1), to "moderate cause" (2), and "significant cause" (3). The scores of the items were summed up and divided by the number of items to calculate a mean score for each cause. These scores were then converted into a percentage score. Scores below 60% were considered not effective causing factors of silence, while scores of 60% and above were considered effective causing factors of silence.

Ethical considerations

An official approval was obtained from the Research and Ethics Committee of the Faculty of Nursing **(No 947).** Prior to conducting the study, written approval was obtained from the provost of the university hospital. Informed consent was obtained from each nurse after providing them with detailed information about the purpose of the study and assuring them of the maintenance of anonymity and confidentiality of their data. The researchers explained to the nurses that participation in the study is voluntary, and they have the right to withdraw if they choose to do so. After completing the intervention and administering the post-test to both groups, the control group was provided with intervention sessions and a guide booklet for theoretical parts, as well as guide videos for practical parts . They were also encouraged to regularly apply these interventions in their work environment to reduce workplace ostracism, organizational silence and psychological distress.

Validity of the tools:

Validity: Tools of data collection were translated into Arabic and reviewed for their content validity by five experts who were selected to test the content and face validity of the instruments. The panel included three experts from the nursing administration department, two experts from the psychiatric nursing department and necessary modifications were done to reach the final valid version of the tools. The tools were considered valid from the experts' perspective.

Reliability: The tools were tested for reliability by using Cronbach's alpha coefficient ($\alpha = 0.95$) for workplace ostracism tool, ($\alpha = 0.87$) for organizational silence tool and ($\alpha = 0.94$) for the depression, anxiety and stress scale (DASS). The tools were clear, comprehensive, and applicable.

Pilot Study

A pilot study was conducted to determine the questionnaires' practicality and applicability. It was carried out on ten nurses. The participants of the pilot study were not included in the final analysis. The pilot study revealed that the study tools were clear, understood, and applicable.

Data Gathering Method

Permission to conduct the study was obtained from the provost of the University Hospital in

Menoufia Governorate, Egypt. After obtaining informed consent from the nurses and assuring them of the confidentiality of the information obtained, the researchers administered pre-test questionnaires to identify nurses who experienced workplace ostracism and psychological distress. This process took approximately 30 minutes.

Based on the data analysis, only 100 nurses out of 250 nurses had workplace ostracism and psychological distress that completed pretest questionnaires (workplace ostracism, organizational silence and psychological distress scales). These 100 nurses were then divided into a study group and a control group using a simple random sample.

The intervention was administered once a week for 8 weeks, lasting between 45-60 minutes, and was only given to the study group. After the intervention, post-test questionnaires were administered to both the study and control groups to assess the effectiveness of the intervention. The study was conducted from the beginning of May to the end of June 2023. The data for this study was collected through four phases: assessment, planning, implementation, and evaluation.

– **Assessment phase**

After receiving thorough information about the study's objectives, the researchers proceeded to conduct interviews with nurses at their respective work locations within the hospital. Pretest questionnaires were distributed by the researchers to identify nurses who met the inclusion criteria. In a comfortable environment, the researchers introduced themselves to the nurses and obtained their informed consent before conducting individual interviews. The researchers requested that the nurses complete the study instruments, which included assessments for workplace ostracism, organizational silence, and psychological distress.

– **Planning phase**

After conducting a thorough review of electronic dissertations, books, articles, and journals, the researchers developed a user-friendly and inspiring arabic guide booklet. The participants were divided into 5 sub-groups, each consisting of 10 nurses. Each sub-group attended 8 intervention sessions, with each session lasting 45-60 minutes, once a week on Sundays. The sessions were conducted by one researcher for each group, with five groups being accommodated per day. The sessions took place from 10 AM to 10:45 or 11 AM. The program was implemented over a period of 8 weeks, completing the sessions within two months.

Implementation phase

The ultimate goal of the Acceptance and Commitment Intervention is to help nurses reduce workplace ostracism, organizational silence, and psychological distress. This is achieved through various educational approaches, such as lectures, brainstorming, active discussions, demonstrations, re-demonstrations, providing examples, modeling, and role-playing. To support the teaching methods, booklets, data shows, pictures, and video are utilized as media. At the end of each session, feedback, summary and time were allotted for asking any questions, and explaining homework assignments for the next subsequent session. The Acceptance and Commitment Intervention consists of a total of eight sessions.

The first session: In this session, the researchers introduced themselves to the nurses. The main objective was to facilitate an

open discussion in order to identify and integrate the group, as well as clarify the goals of the timetable for the acceptance and commitment intervention. The researchers conducted interviews with the nurses at their places within the hospital, collecting initial data using three different tools: pre- test tool two, tool three, and tool four. At the end of the session, the researchers scheduled additional meeting times with the nurses. The entire session lasted approximately 60 minutes.

The second session was designed to enhance nurses' understanding of Acceptance and commitment intervention. This session began with an overview of Acceptance and commitment including definition, benefits and elements (contacting the present moment, defusion, acceptance, self-as-context, values, and committed action), definition, forms, types, effects of workplace ostracism, also included information about meaning, effect of organizational silence and steps to decrease psychological distress.

The third session (Acceptance): The researcher assists nurses express their emotions regarding their ostracism, such as fear, anger, and sadness and to accept negative personal events without conflict by using analogies, feedback, and relaxation techniques

The fourth session (**cognitive defusion**): The session focused on teaching nurses how to detach themselves from their thoughts, enabling them to avoid getting caught up in them. Additionally, it aimed to support nurses in replacing negative thoughts with more constructive ones.

The fifth session (Problem solving skills)

The researcher used analogies, feedback, and relaxation techniques to aid nurses in accepting challenging and distressing personal situations without engaging in arguments with them.

The sixth session: contact present moment

The researcher assists nurses in addressing work-related stress and train them how to focus on the present moment instead of making evaluative judgments about their circumstances. The session incorporated various techniques such as body scanning, the mindful stopping technique, and engaging in mindful activities.

The seventh session: (Commit actions)

Commit actions in line with the value. The goals are to help nurses in discovering their core values and acting on them, even in the face of the challenges they encounter while providing patient care.

The eighth session: Final Session

The evaluation phase: During this phase, the researchers welcomed all participants and expressed gratitude for their attendance and completion the acceptance and commitment intervention, Additionally, throughout this phase the researchers collected post-test using the research tools two, three and four. This was done to evaluate the effect of the acceptance and commitment intervention.

After finishing the evaluation phase give the control group one session about the important task that can used to reduce the work ostracism, counterproductive behaviors and enhance their psychological well-being.

Statistical Analysis : Data were collected, tabulated, statistically analyzed using an IBM personal computer with Statistical Package of Social Science (SPSS) version 20 (SPSS, Inc, Chicago, Illinois, USA).where quantitative data were presented in the form of mean, standard deviation (SD), range, and qualitative data were presented in the form numbers and percentages. **Shapiro wilk test** was used to show normality

distribution of data. **Chi-square test (χ^2)** was used to study association between two qualitative variables**. t- test** was used to compare between two groups having quantitative data**. Paired t- test** was used for comparison between two related groups normally distributed having quantitative variables and **Wilcoxon test (nonparametric test):** was used for comparison between two related groups not normally distributed having quantitative. Marginal homogeneity test and Mc Nemar test were used for related qualitative data. **Spearman's correlation (r) was** used for correlating quantitative variables .**P value of <0.05 was considered statistically significant**

Results

Table (1): reveals no statistically significant difference between the study and control groups regarding to all their socio-demographic characteristics.

This figure (1) clarifies that there is no statistically significant difference in psychological distress level between study and control group before nursing intervention where p value (p = 0.532**).** While there is a highly statistically significant reduction in psychological distress level among the study group after the intervention compared to the control group where p value (p= 0.001),the moderate level of psychological distress among study group reduced from 68% before intervention to 16% after intervention where p value (p = 0.001).

Figure (2): clarifies that there is no statistically significant difference in work place ostracism level between study and control group before nursing intervention where p value (p = 0.839) **.** while there is a highly statistically significant reduction in work place ostracism level among the study group after the intervention compared to the control group where p value (p= 0.001), the moderate level of work place ostracism among study group reduced from 42% before intervention to 6% after intervention

Table (2): shows that there is no statistically significant difference in depression, anxiety and stress level between study and control group before nursing intervention (p = 0.852, 0.532 , 0.966) respectively. While there is a significant reduction in depression level among the study group after the intervention compared to the control group. The moderate level of depression among study group reduced from 42% before intervention to 12% after intervention where (p= 0.001). In addition, there is a significant reduction in anxiety level among the study group after the intervention compared to the control group where p value (p= 0.001), the sever level of anxiety among study group reduced from 22% before intervention to 4% after intervention where (p = 0.001).

Table (3): reveals that there is a statistically significant reduction in organizational silence level among study group post intervention than pre intervention compared to the control group; the moderate level of organizational silence among study group reduced from 64.2% before intervention to 52.7% after intervention, (p = 0.001). Also, the prosocial silence type was the first-ranking organizational silence type with the greatest mean score, whereas defensive silence type had the smallest mean score.

Table (4) reveals ranking of five factors perceived by nurses as causes of organizational silence; misuse of official authority, support of silence by top management, lack of communication opportunities, support of supervisor for silence and nurses' fears of getting negative reactions respectively.

Table (5): shows that there is highly statistically significant positive correlation between work place ostracism , organizational silence and total psychological distress level of study group after intervention where (p= 0.001).

Table (1): Comparison of socio-demographic characteristics among study and control groups (N = 50 for each group).

Studied variables	Study group N=50)		Control group (N=50)		Total (N=100)		$\chi 2$	P value
	No.	%	No.	%	No.	%		
Age / years								
Less than 25 years	**6**	**12.0**	**8**	**16.0**	**14**	**14.0**		
25 – 35 years	**28**	**56.0**	**27**	**54.0**	**55**	**55.0**	**0.336**	**0.854**
34 – 45 years	**16**	**32.0**	**15**	**30.0**	**31**	**31.0**		
Gender								
Male	**9**	**18.0**	**13**	**26.0**	**22**	**22.0**	**0.932**	**0.334**
Female	**41**	**82.0**	**37**	**74.0**	**78**	**78.0**		
Marital state								
Married	**41**	**82.0**	**39**	**78.0**	**80**	**80.0**	**0.250**	**0.617**
Unmarried	**9**	**18.0**	**11**	**22.0**	**20**	**20.0**		
Educational level								
Diploma	**16**	**32.0**	**16**	**32.0**	**32**	**32.0**		
Nursing technical institute	**15**	**30.0**	**17**	**34.0**	**32**	**32.0**	**0.243**	**0.970**
Bachelor of nursing	**18**	**36.0**	**16**	**32.0**	**34**	**34.0**		
Master	**1**	**2.00**	**1**	**2.00**	**2**	**2.00**		
Income								
Enough	**9**	**18.0**	**8**	**16.0**	**17**	**17.0**	**0.071**	**0.790**
Not enough	**41**	**82.0**	**42**	**84.0**	**83**	**83.0**		
Years of experience								
Less than 5 years	**5**	**10.0**	**4**	**8.00**	**9**	**9.00**	**0.136**	**0.934**
5 – 10 years	**25**	**50.0**	**25**	**50.0**	**50**	**50.00**		
More than 10 years	**20**	**40.0**	**21**	**42.0**	**41**	**41.00**		
Department								
Crirical care units	**14**	**28.0**	**10**	**20.0**	**24**	**24.0**		
Emergency department	**10**	**20.0**	**10**	**20.0**	**20**	**20.0**		
Hemodialysis	**8**	**16.0**	**10**	**20.0**	**18**	**18.0**	**3.17**	**0.529**
Psychiatric department	**14**	**28.0**	**11**	**22.0**	**25**	**25.0**		
Medical department	**4**	**8.00**	**9**	**18.0**	**13**	**13.0**		
Satisfied with work environment	**8**	**16.0**	**8**	**16.0**	**16**	**16.0**	**0.243**	**0.334**
Yes	**42**	**84.0**	**42**	**84.0**	**84**	**84.0**		
No								

Table (2): Comparison between Psychological Distress Subscales among Studied Subjects (study and control group) before and after Nursing Intervention (N =50 for each group).

Psychological distress subscales	Pre- intervention				Test of sig. p value	Post- intervention				Test of sig. p value
	Study group (N=50)		Control group (N=50)			Study group (N=50)		Control group (N=50)		
	No.	%	No.	%		No.	%	No.	%	
Depression										
Mild	12	24.0	9	18.0		44	88.0	6	12.0	
Moderate	21	42.0	23	46.0	χ^2	6	12.0	27	54.0	χ^2 59.2
Severe	9	18.0	11	22.0	0.786	0	0.00	8	16.0	**0.001***
Extremely severe	8	16.0	7	14.0	0.852	0	0.00	9	18.0	
Anxiety										
Mild	0	0.00	1	2.00		37	74.0	0	0.00	
Moderate	16	32.0	9	18.0	χ^2	11	22.0	13	26.0	χ^2 69.5
Severe	11	22.0	15	30.0	2.19	2	4.00	10	20.0	**0.001***
Extremely severe	23	46.0	25	50.0	0.532	0	0.00	27	54.0	
Stress										
Mild	37	74.0	35	70.0		50	100	31	62.0	
Moderate	3	6.00	2	4.00	χ^2	0	0.00	4	8.00	χ^2 23.4
Severe	10	20.0	11	22.0	0.267	0	0.00	15	30.0	0.093
Extremely severe	0	0.00	0	0.00	0.966	0	0.00	0	0.00	
Total psychological distress	9	18.0	6	12.0	χ^2 0.86	39	78.0	8	16.0	χ^2 38.6
mild	34	68.0	35	70.0	0.649	8	16.0	32	64.0	**0.001***
Moderate severe	7	14.0	9	18.0		3	6.00	10	20.0	

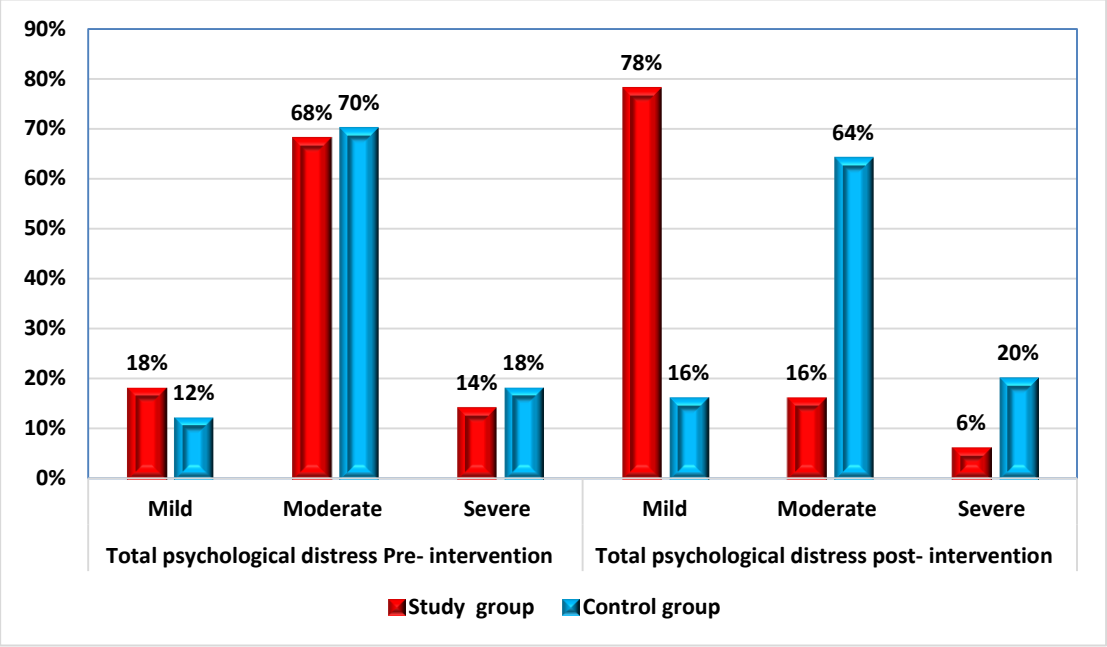


Figure (1) Comparison of Total Psychological Distress Level among Studied Subjects (study and control group) before and after Nursing Intervention (N =50 for each group).

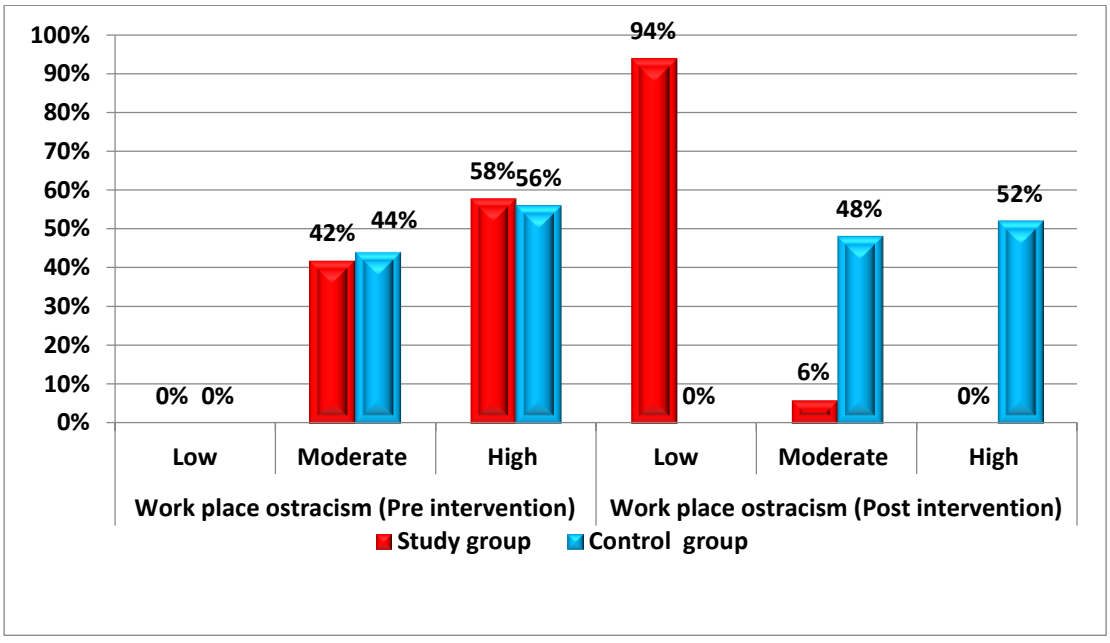


Figure (2) Comparison of Work Place Ostracism Level among Studied Subjects (study and control group) before and after Nursing Intervention (N =50 for each group).

Table (3): Distribution of means and standard deviation of Organizational Silence in the studied subjects (study and control group) pre post intervention (N =50 for each group).

Types of organizational silence	Pre- intervention		t- test p value	Post- intervention		t- test p value
	Study group (N=50)	Control group (N=50)		Study group (N=50)	Control group (N=50)	
	Mean±SD	Mean±SD		Mean±SD	Mean±SD	
Acquiescent silence	8.26±3.64	8.36±3.52	0.140 0.889	5.78±1.05	8.38±3.50	5.03 **0.001***
Defensive silence	8.02±3.28	8.00±3.21	0.031 0.976	5.68±1.20	8.12±3.24	4.99 **0.001***
Prosocial silence	12.7±2.63	12.6±2.62	0.190 0.850	12.2±1.61	12.8±2.60	1.29 0.168
Total organizational silence	28.9±6.08	28.9±5.61	0.017 0.987	23.7±2.37	28.8±2.39	10.7 **0.001***

Table (4): Causes of Organizational Silence pre and post Intervention among the study group (N=50):

Causes of organizational silence	Mean±SD	Mean (%)	Rank
Misuse of official authority	12.4±2.95	82.7	1
Lack of communication opportunities	13.5±3.85	75%	3
Subordinate's fear of negative reactions	9.80±3.23	65.3%	5
Support of supervisor for silence	10.6±3.55	70.7%	4
Support of the top management of silence	14.3±6.60	79.4%	2
Total	60.1±12.0	74.1%	-

Table (5): Correlation between work place ostracism, organizational silence and total psychological distress among the study group post intervention (N=50):

Studied variable	Total psychological distress	
	R	P value
Work place ostracism	0.582	**0.001***
Organizational silence	0.347	**0.001***

Discussion

Experiencing workplace ostracism was linked to higher levels of psychological distress, intentions to leave the job, and engaging in deviant behavior at work. It also resulted in lower levels of organizational identification and commitment. So, the current study was conducted with the purpose of investigating the effect of application of acceptance and commitment-based nursing intervention (ACT) on nurses' psychological distress, ostracism and organizational silence. It successes to meet the proposed hypotheses.

The results will be discussed in the following order: nurses' level of psychological distress, level of ostracism among nurses, level of organizational silence among nurses, relation between workplace ostracism and organizational silence, and the effect of application of acceptance and commitment-based nursing intervention on nurses' psychological distress, ostracism and organizational silence.

Concerning level of psychological distress among nurses, the current study showed that the highest percentage of the studied nurses have moderate level of psychological distress. This could be due to nursing profession is one of the most stressful careers and working in nursing is mentally and physically demanding. This result was consistent with **Al Maqbali., (2021) [21]; Miranda et al., (2021) [22]** who reported that nurses have been consistently reporting higher levels of psychological distress, which manifest in various symptoms including sleep disturbances, anxiety, and depression.

This result was contradicted with **Simaes C., & Gomes, A.R., (2019) [23]** who found that the highest percentage of nurses (79.3%) exhibited significant levels of psychological distress, indicating a pressing need for clinical intervention. On the other side **Taha and Elhady ., (2020) [24]** found that the majority of the studied nurses had psychological distress with more half of them experiencing severe distress

Concerning level of ostracism among nurses, the current study finding revealed that most of nursing staff had a high level of ostracism. This could be due to until now nursing profession is not valued by the community. The majority of the general public view nurses as individuals who administer medications, and follow doctors' orders without questioning them. The image of nurse is heavily influenced by how nursing is presented in the media and seldom reflects the true nature of the profession. This result agreed with **Gkorezis et al., (2016) [25]** who stated that most of the nurses who were studied experienced workplace ostracism.

On the other hand, the results of **Gharaei et al., (2020) [26]** who found that approximately two-thirds of the nurses surveyed exhibited a moderate level of workplace ostracism, while one-fifth of the nurses experienced low levels of workplace ostracism. Furthermore, the study performed by **Chen and Li.,(2019) [27]** reported that half of the nurses in the study reported experiencing low levels of workplace ostraci

In contrast to the current findings, the results of **Elhanafy and Ebrahim ., (2022) [13]** revealed that More than ninety percent (92.5%) of nursing staff have a low level of workplace ostracism.

Regarding the organizational silence, the results showed that nurses exhibited a moderate level of total organizational silence in the study setting. **From the researchers' point of view**, the nurses' moderate organizational silence level could be attributed to nurses often choose to remain silent because they are uncertain if their opinions will be valued by supervisors. Additionally, this may be due to a fear of negative consequences such as job loss, a damaged reputation, or missed opportunities for promotion. They strive to avoid being perceived as complainers and to maintain positive social relationships. Furthermore, the nursing staff may lack knowledge on how to effectively address and handle complaint.

The current study result was on the same line with **Okeke-James et al., (2020) [28]** who found that the perception levels of organizational silence were moderate. In confirmation with these results **Abdou et al., (2023) [7]** who found that more than half of the nurses studied (53%) exhibited a high level of organizational silence. Additionally, over one quarter of them (26%) had a low level of organizational silence. The remaining percentage (20%) fell into the category of having a moderate level of organizational silence. The previous result was in agreement with the study done by **Çaylak and Altuntaş., (2017) [29]** who found that, more than half of staff nurses had high level of organizational silence. Meanwhile, more than one quarter of them (26%) had low level of organizational silence.

Meanwhile, a study conducted by **Abid., (2016) [30]** revealed that only 28.51% of the staff nurses had a high level of organizational silence due to administrative and organizational reasons, as well as fear of damaging relationships. This finding aligns with the research conducted by **Yang et al., (2022) [31]**, which also indicated a moderate level of organizational silence among Chinese nurses.

On the other side of the coin, this result is contradicted with **Diab and Mohamed., (2020) [32]** who found that that the majority of the nurses studied (85%) had a high level of organizational silence. Also, this result is opposite to the study of **Sim¸sek and Akta., (2014) [33]** who found that participants' silence grade points were often high. On the other hand, this result was incongruent with **Alqarni ., (2020) [34]** were with the findings of the present study which found that teachers' perception levels of organizational silence were low.

Results regarding the three types of organizational silence, The prosocial silence type ranked first with the greatest mean score, while the defensive silence type came in last with the lowest mean score. According to the researchers, this result shows the nurses' desire to protect the privacy and reputation of their organization as well as its data, which supports their sense of loyalty to it. All of **Diab and Mohamed .,(2020) [32], Karakas., (2019) [35] and Flynn et al., (2015) [36],** reported similar findings. In contrast to the current findings, **Abied and Khalil.,(2019) [37]** found that the nursing staff's arithmetic means were in the following order: Acquiescent Silence, Defensive Silence, and Prosocial Silence, respectively.

Regarding how nurses perceive factors causing organizational silence behavior in the study setting, The result of the current study indicated five factors that have been identified as affective

causing factors of silence **(74.1%)**; misuse of official authority, support of silence by top management, lack of opportunity for communication and supervisor support for silence and nurses' fears of getting negative reactions respectively. This could be a sign that the nursing leaders working in the management of the hospital units misuse their position of authority and help create an environment that fosters the silence through some practices such as attracting individuals who will support their viewpoints at the detriment of others, and their resistance to receive criticism regarding their performance or their labeling of those who hold contrasting views as troublemakers, and also in order to protect the hospital's reputation and present it favorably to higher authorities and the general public, they want to ensure that their unfavorable practices and problems do not reach the top management of the facility, thus they are using all means necessary to suppress the voices of the opposition nurses.

The current study is consistent with **Ciris .,(2018) [38], and Alheet .,(2019) [39]** who identified organizational and managerial causes as well as fear of isolation as the primary causes for silent behavior. Additionally, **Nafei., (2016) [40]** reported that employee silence is a deliberate behavior in which individuals choose to withhold their opinions in order to avoid negative consequences within the organization.

This finding contradicted the findings of **Bordbar et al., (2019) [41]**, **Diab and Mohamed.,(2020) [32]** who found that the majority of the participants in their study disagreed on the factors that contribute to silence within organizations and individuals.

According to the findings of the current study, two-thirds of the nurses claimed that these five factors were the reason for their silence at work. There was also a highly statistically significant positive correlation between organizational silence-causing factors and nurses' silence-behavior, whereby employees' silence increases in the presence of these factors. This result was congruent with **Diab and Mohamed .,(2020) [32]**

Regarding relation between workplace ostracism and psychological distress, the current study revealed that there was a highly statistically significant positive correlation between workplace ostracism and psychological distress level of study group after intervention where (p= 0.001).This could be due to experiencing loneliness, rejection, and self-doubt due to exclusion can result in heightened levels of anxiety and depression. This result was consistent with **Yang and Tan., (2022) [42]** whose study revealed that the ostracism experienced by nursing staff in the work environment is a significant cause of distress for them. This result is also consistent with the study conducted by **Sarfraz et al., (2019) (43)**, who found workplace ostracism is positively associated with stress.

Regarding relation between organizational silence and total psychological distress, the current study revealed that there was a highly statistically significant positive correlation between organizational silence and psychological distress level of study group after intervention. This could be due to nurses may feel undervalued due to organizational silence , which results in a lack of control over their work and leads to feelings of dissonance, stress, and burn out. This finding is in line with the study conducted by **Erdoğan, et al,.(2022) [44]** , who found a positive relationship between perceived Stress and organizational silence among emergency service doctors.

Regarding relation between workplace ostracism and organizational silence, the current study revealed that there was a highly statistically significant positive correlation between work place ostracism and organizational silence level of study group after intervention. **This could be attributed to** nurses facing ostracism in the workplace are subjected to being ignored by their coworkers, who fail to embrace their ideas, opinions, and suggestions. Consequently, nurses tend to withdraw from social interactions and adopt a defensive silence as a means to avoid rejection in their professional environment. Similar findings were reported by **Panagiotou et al., (2016) [45]** ,**Wu et al., (2012) [46]** , **and Elhanafy and Ebrahim., (2022) [13] .**

One of the main study findings was the effect of the study intervention on nurses' psychological distress, The findings showed that there was a statistically significant reduction in psychological distress level among study group post intervention than pre intervention where (p = 0.001). This might be because of the effect of ACT intervention which involved teaching nurses mindfulness methods such as as body scanning, the mindful stopping technique, and the NOW acronym for mindful moments. These methods helped the nurses enhance their awareness of thoughts and concentrate on the present moment. Additionally, they apply coping strategies such as self-monitoring, self-control, and problem - solving techniques.

This finding is seen to be in line with similar studies like that of **Prudenzi etal., (2022) [47]** who found that Acceptance and Commitment Therapy (ACT) interventions led to a significant decrease in symptoms of psychological distress and were effective for reducing work-related stress at follow-up.

This result is congruent with the finding of study conducted by **Waldeck et al., (2017) [48]** which revealed that strategies to increase psychological flexibility as ACT interventions may help individuals cope with psychological distress.

Regarding to the effect of the study intervention on nurses' anxiety, there was a statistically significant reduction in anxiety level among study group post intervention than pre intervention; the sever level of anxiety among study group reduced from 22% before intervention to 4% after intervention where (p = 0.001). This could be attributed to the beneficial impact of the intervention that emphasizes acceptance and change. Nurses are instructed on how to manage their anxiety-related discomfort by assuming control and engaging in actions that align with their personal values .Additionally, the program includes instruction on performing body scanning and other mindful activities in a proper manner. This aids nurses in recognizing their abilities and reducing anxiety to a certain extent.. This finding is seen to be in line with **Sianturi et al., (2018) [49]** who indicated that acceptance and commitment therapy had led to a decrease in the anxiety of the nurses, comparing to the control group. ($p<0.01$) Hence, acceptance and commitment therapy is an effective method in decreasing anxiety. Also, this result is consistent with **Dinarvand et al., (2022) [50]** who demonstrated that compare to control group, ACT group had lower scores of anxiety in posttest and follow-up.

This result is congruent with the finding of **Asâ et al., (2022) [51]** who found that ACT reduce anxiety.

In confirmation with these results, **Kabusi .,(2023) [52]** who found that participants showed clinically significant pretreatment to post

treatment changes in severity of anxiety disorders.

Regarding the effect of the study intervention on nurses' depression, there was a statistically significant reduction in depression level among study group post intervention than pre intervention; the moderate level of depression among study group reduced from 42% before intervention to 12% after intervention. This might be because ACT intervention assist nurses in shifting their emphasis from a broad negative emotional and cognitive style to a more targeted and present oriented one. It enables nurses to reduce stress and anxiety and consequently alleviate depression among nurses.This result was confirmed with **[53]** who found that ACT effectively reduces depression.

Consistent with this result, **Otared .,(2021)** [(54)] who indicated that acceptance and commitment therapy has proven to be effective in reducing depression among nursing home residents. There was a significant difference between the mean score before and after the intervention in both groups.

In the same line **Puspitasari and Hamidah .,(2020)** [(55)] found that Acceptance and commitment therapy has improved nurses' happiness. Also, this result is consistent with **Dinarvand et al., (2022)** [(50)] who demonstrated that compare to control group, ACT group had lower scores of depression in posttest and follow-up. In addition, this result is congruent with the finding of **Asâ et al., (2022)** [(51)] who found that ACT reduce depression.

As for the second main finding; the effect of the study intervention on nurses' nurses' feeling of ostracism, the result of the present study found that there was a statistically significant reduction in work place ostracism level among study group post intervention than pre intervention; the moderate level of work place ostracism among study group reduced from 42% before intervention to 6% after intervention, where (p = 0.001). This could be related to this intervention method helps nurses transform their relationship with distressing thoughts and emotions, such as feelings of ostracism to reduce their impact on their lives. Moreover, it provides support in discovering alternative ways to engage with their experiences and empowers them to fully integrate into a purposeful and value-based life. This finding is seen to be in line with **Waldeck et al., (2017)** [(48)] who suggested that strategies to increase psychological flexibility such as ACT interventions may help individuals cope with everyday experiences of ostracism.

***As* for the third main finding; the effect of the study intervention on organizational silence**, the finding of the current study showed that there was a statistically significant reduction in organizational silence level among study group post intervention than pre intervention; the moderate level of organizational silence among study group reduced from 64.2% before intervention to 52.7% after intervention. This finding aligns with the research conducted by **Bond et al. (2013)** [(56)] , which proposed that implementing an expanded version of Acceptance and Commitment Therapy has resulted in the development of new interventions that promote psychological flexibility consequently, these interventions have been found to improve organizational behavior, such as organizational voice and health**Conclusion**: The acceptance and commitment-based nursing intervention has a positive effect on reducing psychological distress level, work place Ostracism level and Organizational silence**.**

Recommendation: This study recommended that:

- Acceptance and commitment-based training should be integrated into nursing education and health care policies to foster a healthier workplace climate.
- A supportive system should be provided in each medical care unit, as well as a confidential referral system
- Flexibility from directors and a strong commitment to actively listen to the voice of nurses is crucial.
- Further studies were required at all psychiatric settings for early detection of psychological problems among psychiatric nurses and to assist them to confront difficult situations with a positive mindset using acceptance and commitment therapy.

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