





# Comparison of the Effectiveness of Psychodrama Training and Psychological Empowerment on Anger Control and Distress Tolerance in Incarcerated Women

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### Article Info

#### Article type:

Original Research

#### How to cite this article:

Esmaeili Dehaghi, G., Ghasemi Pirbalouti, M., Ahmadi, R., & Kiani, F. (2025). Comparison of the Effectiveness of Psychodrama Training and Psychological Empowerment on Anger Control and Distress Tolerance in Incarcerated Women. *Psychology of Woman Journal*, 6(3), 1-12.

<http://dx.doi.org/10.61838/kman.pwj.6.3.15>



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### ABSTRACT

**Objective:** The present study aimed to compare the effectiveness of psychodrama training and psychological empowerment on anger control and distress tolerance in incarcerated women.

**Methods and Materials:** The research method was semi-experimental with a pretest-posttest-follow-up design and a control group. The statistical population consisted of women imprisoned in the Nesvan Prison of Isfahan City in 2024. A total of 54 participants were selected through convenience sampling and randomly assigned to three groups of 18 individuals each. The measurement tools included the Spielberger Anger Questionnaire and the Distress Tolerance Scale by Simons and Gaher (2005). The collected data were analyzed at two levels: descriptive statistics (mean and standard deviation) and inferential statistics (repeated measures analysis of variance and Bonferroni post hoc test) using SPSS version 24.

**Findings:** The results indicated that both psychodrama training and psychological empowerment led to an increase in anger control and distress tolerance among the incarcerated women, and this effect persisted during the follow-up stage ( $p \leq .05$ ). Furthermore, no significant difference was found between the effectiveness of the two experimental groups ( $p \leq .05$ ).

**Conclusion:** Consequently, both interventions can significantly contribute to improving the psychological issues of incarcerated women and preventing recidivism.

**Keywords:** *distress tolerance, psychological empowerment, psychodrama, anger control, incarcerated women.*

## 1. Introduction

Women, as the cornerstone of family and society, constitute approximately half of the country's

population (Comprehensive Statistical Center of Iran, 2017) and, like men, play a key role in all social, political, economic, and cultural aspects of society. Today, due to changing conditions, women's lifestyles and perspectives

have also shifted. The number of employed women has increased, and they have gained greater economic independence, purchasing power, and decision-making behavior. This change in lifestyle and perspective has, in some cases, led to an increase in criminal activities committed by women and their subsequent incarceration (Paramasivan, 2021). Incarcerated women are individuals who have been deprived of their freedom due to the commission of a crime (Scherer et al., 2020). Although women comprise a small percentage of the total prison population in various countries, including Iran (Anaraki, 2020), research findings show that in many countries, the number of incarcerated women has significantly increased over the past decade, and the incarceration rate of women is rising at a disproportionately higher rate compared to men (Ryder, 2020). With the increasing number of prisoners, the growing prevalence of mental health problems among them has emerged as a significant public health concern (Gómez-Figueroa & Camino-Proañó, 2022).

Women released from prison face numerous challenges, including unemployment, housing difficulties, social stigma, and loss of family relationships, which can increase the risk of recidivism and perpetuate the cycle of crime (Robinson & Fernhaber, 2024). Additionally, incarcerated women are at a higher risk of developing psychiatric disorders such as depression, anxiety, substance use disorders, and even physical health problems, and these issues may persist after release (Haney, 2022; Mahmood et al., 2023; Richie et al., 2021; Roth, 2022; Tripodi & Pettus-Davis, 2020). Therefore, incarcerated women are more vulnerable than other prisoners, and the prevalence of psychological disorders among them has been reported to be significantly higher (Alves et al., 2024; Sunpuwan et al., 2024), and incarceration can have profound effects on women's lives (White, 2023). Hence, investigating the causes and contributing factors of these problems and identifying appropriate strategies to mitigate them is of great importance.

In this regard, evidence suggests that incarcerated women have more difficulty controlling anger compared to non-incarcerated women (Liu et al., 2024), and it can be expected that poor anger control may be one of the factors contributing to crime and incarceration among women (Bodecka et al., 2021). Anger can contribute to abusive behavior and behavioral problems within prison environments. Thus, anger control is a common strategy in efforts to reduce such behaviors (Meena, 2024). Various perspectives exist regarding how anger contributes to crime. One view suggests that anger negatively affects individuals'

cognitive processes and acts as a barrier to problem-solving. Another common view connecting anger and crime is strain theory, which posits that an individual's low socio-economic status acts as a stressor leading to negative emotions (such as anger and frustration), thereby provoking criminal behavior and reducing distress tolerance (Kamaluddin et al., 2021). Low distress tolerance is also prevalent among incarcerated women (Davoodi & Ghahari, 2018).

Incarcerated women often have histories of trauma and psychological harm, which may lead to reduced capacity to cope with stress and distress (Bright et al., 2023). Based on previous evidence and studies, it can be stated that incarcerated women, due to multiple exposures to trauma and harm, likely possess lower levels of distress tolerance (Giovannini et al., 2022). This situation increases their vulnerability to psychiatric disorders such as depression and anxiety. Furthermore, the harsh conditions of imprisonment and enforced separation from family can impose a heavy psychological burden on incarcerated women, which demands a high level of distress tolerance to manage (Daks & Rogge, 2020; Rodriguez et al., 2021). Therefore, given the high prevalence of psychological problems among incarcerated women, there is a need for appropriate psychological and support services in prisons to prevent the long-term consequences of these issues.

Consequently, multiple interventions have been conducted to improve the conditions of incarcerated women, such as emotion regulation training (Fernández et al., 2022), cognitive-behavioral programs (Laursen & Henriksen, 2019), group-based meaning therapy (Ghelbash et al., 2021), the effectiveness of non-suicidal self-injury interventions among incarcerated women (Ekanem & Woods, 2022), and the effectiveness of psychological interventions in prisons for reducing recidivism (Beaudry et al., 2021). Although psychodrama with female offenders can facilitate emotional expression, exploration of new solutions, enhancement of self-esteem, and improvement of relational attitudes (Akgun, 2024; Testoni et al., 2020), its effectiveness among incarcerated women has not yet been systematically examined.

Psychodrama is a group therapy method in which participants explore their psychological and interpersonal problems through role-playing and reenacting real-life situations (Guzmán-Huamuña et al., 2023; Madran, 2020; Şenyuva et al., 2022). Psychodrama is based on various theories, including Moreno's role theory, Bandura's observational learning, and the concept of focused attention in psychoanalysis (Donners & Lechner-Weintraub, 2021).

The aim of this intervention is for individuals to gain greater insight into their situations so they can better cope with their thoughts and feelings and enhance their personal resources and strengths (López-González et al., 2021).

Therefore, given the importance of improving psychological well-being among incarcerated women, research comparing the effectiveness of different therapeutic methods within this population is essential. Since the restrictive prison environment imposes multiple negative effects on the mental health of female prisoners (Lee et al., 2021), in the present study, psychodrama intervention was compared with psychological empowerment training to identify the most effective educational interventions for incarcerated women. Psychological empowerment training includes enhancing self-esteem, independent thinking, problem-solving, and coping skills, helping women to feel more competent and capable. Moreover, this training has been shown to significantly reduce symptoms of depression and anxiety among incarcerated women (Sahin, 2020).

Psychological empowerment is a mental, cognitive, and attitudinal process that helps individuals feel effective, competent, and autonomous in performing their tasks (Llorente-Alonso et al., 2024). Given that prisoners tend to suffer disproportionately from a range of mental health issues and higher rates of psychotic disorders compared to non-incarcerated populations, they require internal psychological resources to promote positive mental health and adaptive functioning (Bartholomaeus & Strelan, 2021). Therefore, considering the increasing number of incarcerated women in recent years and the fact that this group faces multiple social, emotional, and psychological problems both in prison and after release, alongside the critical role women play in the health of society and the future generations, there is a pressing need for effective interventions. Hence, the present study was conducted to compare the effectiveness of psychodrama training and psychological empowerment on anger control and distress tolerance among incarcerated women.

## 2. Methods and Materials

### 2.1. Study design and Participant

The present study, in terms of nature and methodology, was a semi-experimental research with two experimental groups, a control group, and a pretest-posttest-follow-up design. The statistical population included all women incarcerated in the Nesvan Prison of Isfahan Province, from which 54 participants were selected through convenience

sampling and randomly assigned into two experimental groups of 18 participants each (psychodrama training and psychological empowerment training) and one control group of 18 participants without any intervention.

The inclusion criteria were: age between 18 and 32 years, at least six months remaining in their prison sentence, and absence of acute psychiatric and physical disorders based on a clinical interview conducted by a psychologist. Exclusion criteria included failure to complete the questionnaires, absence from more than two sessions, and lack of interest in continuing participation in the intervention.

The procedure was as follows: initially, the necessary permissions for conducting the research were obtained from the relevant authorities (Iran's Prisons and Security and Corrective Measures Organization). Among all prisons in Isfahan Province, the Nesvan Prison section was approved for the study. Subsequently, participants were randomly selected and divided into two experimental groups and one control group. Afterwards, the Anger Control and Distress Tolerance questionnaires were administered to the incarcerated women. Upon completion of the group therapy programs, the aforementioned tests were administered again to all three groups, and after three months, the follow-up assessment was conducted.

It should be noted that the psychological empowerment training protocol was adapted from existing protocols in articles such as Karimi Vakil et al. (2017), and the psychodrama training was based on Group Therapy Workbook: Integrating Cognitive-Behavioral Therapy with Psychodrama Theory and Practice (Treadwell, 2018), Intrapsychic Drama: Psychotherapy Through Dramatic Methods: Theatre Therapy (Blatner, 2015), Jafari et al. (2022), and Drama Therapy in the Path of Evolution (Amraei, 2016). All interventions were conducted by the researcher, who had been trained in these therapeutic methods. Both interventions were delivered twice a week, with each session lasting 90 minutes.

### 2.2. Measures

#### 2.2.1. State-Trait Anger Expression

This instrument is a paper-and-pencil scale designed for the age group of 16–30 years. It consists of 57 items and includes six scales and five subscales. The items are organized into three sections: state anger, trait anger, and anger expression/control. The first section measures state anger, wherein participants rate the intensity of their feelings on a four-point scale ranging from "Not at all = 1" to "Very

much = 4." This section includes 15 items and three subscales: feelings of anger (items 2, 3, 6, 10), verbal expression of anger (items 9, 12, 13, 15), and physical expression of anger (items 7, 8, 11, 14). The second section, consisting of 10 items, measures trait anger, which includes angry temperament (items 16, 17, 18, 21) and angry reaction (items 19, 20, 22–25). The third section, titled "Typical angry behavior and reactions," measures anger expression and control with 32 items across four scales: outward expression of anger (items 31, 35, 39, 43, 47, 51, 55), suppressed inward anger (items 33, 37, 41, 45, 49, 53, 57), outward anger control (items 30, 34, 38, 42, 46, 50, 54), and inward anger control (items 32, 36, 40, 44, 48, 52, 56). The possible score range is from 57 to 228. Scores between 57 and 86 indicate low sense of coherence, 86 to 143 indicate moderate sense of coherence, and scores above 143 indicate high sense of coherence. In the study by Khodayari-Fard et al. (2007), the content validity of this scale was reviewed and confirmed by experts. The reliability coefficients reported in their study using Cronbach's alpha were .93 for state anger, .83 for trait anger, and .82 for anger expression and control (Ghobadi et al., 2021).

#### 2.2.2. Distress Tolerance

This is a self-report scale developed by Simons and Gaher (2005). The items of this scale assess distress tolerance based on the individual's ability to endure emotional distress, subjective appraisal of distress, attention to negative emotions when they occur, and regulatory actions taken to tolerate distress. The DTS includes 15 items and four subscales: tolerance (items 1, 3, 5), absorption (items 2, 4, 15), appraisal (items 6, 7, 9, 10, 11, 12), and regulation (items 8, 13, 14). The tolerance subscale measures emotional distress endurance; the absorption subscale measures being absorbed by negative emotions; the appraisal subscale measures subjective evaluation of distress; and the regulation subscale measures regulatory efforts to alleviate distress. Items are rated on a five-point Likert scale, ranging from "Strongly agree" (1) to "Strongly disagree" (5). For item 6, scoring is reversed. Higher scores on the scale indicate greater distress tolerance and lower experience of emotional distress. Simons and Gaher (2005) reported Cronbach's alpha coefficients of .72, .82, and .70 for the subscales, and .82 for the total scale. They also reported that the DTS has good preliminary construct and convergent validity. In the study by Amin al-Re'aya et al. (2016), Cronbach's alpha coefficients for the tolerance, absorption,

appraisal, and regulation subscales were .71, .69, .77, and .73, respectively, and .82 for the overall scale. Similarly, Azizi et al. (2010) reported a Cronbach's alpha coefficient of .67 and a test-retest reliability of .79 for the DTS (Davoodi & Ghahari, 2018).

#### 2.3. Interventions

##### 2.3.1. Psychological Empowerment

The psychological empowerment training program was conducted over ten sessions. In the first session, participants were introduced to each other, the goals, structure, rules, rights, and approach of empowerment were explained, and concerns and ambiguities were addressed, followed by setting daily plans for the sessions. The second session focused on the concept of meaningfulness in life, its importance, and its relationship with purposefulness, with participants tasked to write down their imaginary life goals and dreams. In the third session, participants learned about defining meaning in life, selecting imaginary goals, and developing responsibility toward life goals, accompanied by an assignment to list achievable goals through imagination. The fourth session introduced the "creative self," social interest, determinism, and mistakes in goal-setting, with participants revisiting past goals and setting new future targets. The fifth session involved reviewing previous sessions, group discussions, sharing experiences, and answering questions. The sixth session explained self-determination, its significance in life, and its outcomes, and participants wrote a page about self-determination. The seventh session connected childhood experiences, lifestyle, and self-determination, involving role-playing exercises about self-determined choices. The eighth session continued the exploration of lifestyle, hereditary and environmental factors influencing self-determination, with participants describing parts of their life and identifying behavioral differences from parents. In the ninth session, the focus was on feelings of competence, adequacy, inferiority, and learned helplessness, with participants reflecting on past instances of perceived inability and overcoming them. Finally, the tenth session included a group discussion and review of previous assignments and topics learned during the training.

##### 2.3.2. Psychodrama Training

The psychodrama training was conducted over ten sessions. In the first session, members were familiarized



with each other, and explanations were provided about psychodrama, its techniques, session structure, and rules. The second session emphasized trust-building and expressive communication exercises to facilitate group interaction. The third and fourth sessions focused on concentration exercises, non-verbal methods to increase emotional awareness, familiarity with body language, creative expression of mental abilities, and enhancing the experience of various emotions such as joy and sadness through verbal and behavioral exercises. In the fifth session, members were encouraged to recount their problems through role-play using psychodrama techniques, such as doubling, role reversal, mirror technique, and future projection, with emphasis on developing emotional expression skills. The sixth session reviewed and summarized the previous sessions, where participants shared their personal growth plans for life outside prison. The seventh session examined participants' motivation for participation, identified problems through reflection techniques, and used role reversal to redefine relationships. The eighth session introduced the validation technique, where the therapist emphasized the legitimacy and comprehensibility of participants' emotional responses based on their individual experiences. The ninth session focused on specialized training in emotional expression and psychodrama techniques. Finally, the tenth session involved reviewing all previous sessions and conducting discussions to conclude the intervention process.

#### 2.4. Data Analysis

Descriptive statistics (frequency, percentages for describing the general characteristics of respondents and the studied population) and inferential statistics (repeated measures analysis of variance) were used to analyze the data via SPSS-23.

**Table 1**

*Descriptive Indicators of Study Variable Scores by Group*

Variable	Group	Pretest Mean	Pretest SD	Posttest Mean	Posttest SD	Follow-up Mean	Follow-up SD
Anger Control	Psychodrama Training	39.72	11.13	47.77	10.96	49.04	10.84
	Psychological Empowerment	40.27	9.98	59.77	7.36	60.77	7.38
	Control Group	39.05	10.97	27.61	11.92	28.72	11.49
Distress Tolerance	Psychodrama Training	35.44	9.36	48.05	8.42	50.27	8.02
	Psychological Empowerment	37.72	10.81	50.27	8.43	53.00	7.94
	Control Group	35.22	9.26	34.05	8.92	34.05	9.09

The results of the Shapiro–Wilk test for assessing the normality of the distribution of the study variables showed

### 3. Findings and Results

Based on the demographic findings, in the psychodrama group, the ages of 5 participants (27.8%) were between 19 and 25 years, 5 participants (27.8%) were between 26 and 30 years, and 8 participants (44.4%) were between 31 and 35 years. In the psychological empowerment group, 8 participants (44.4%) were between 26 and 30 years, and 10 participants (55.6%) were between 31 and 35 years. In the control group, 2 participants (11.1%) were between 19 and 25 years, 5 participants (27.8%) were between 26 and 30 years, and 11 participants (61.1%) were between 31 and 35 years. In the psychodrama group, 2 participants (11.1%) had less than a high school diploma, 11 participants (61.1%) had a high school diploma, and 5 participants (27.7%) held a bachelor's degree. In the psychological empowerment group, 1 participant (5.6%) had less than a high school diploma, 13 participants (72.2%) had a high school diploma, and 4 participants (22.2%) held a bachelor's degree. In both the control and psychodrama groups, 12 participants (66.6%) had one year of imprisonment experience and 6 participants (34.4%) had more than one year of imprisonment experience. In the psychological empowerment group, 13 participants (72.3%) had one year of imprisonment experience and 5 participants (27.7%) had more than one year of imprisonment experience. According to the chi-square test, there were no significant differences between the three groups in terms of age, education level, and prison experience ( $p > .05$ ).

Table 1 presents the descriptive statistics results for the study variables according to group membership. The results in Table 1 show that the mean scores for distress tolerance and anger control in the intervention groups (psychodrama and psychological empowerment) increased more in the posttest and follow-up stages compared to the pretest stage relative to the control group.

that the null hypothesis of normal distribution was retained for most variables, including anger control and distress

tolerance in the pretest, posttest, and follow-up stages. This indicates that the sample scores were normally distributed and similar to the population, and the observed skewness and kurtosis were random ( $p$ -values  $> .05$ ).

Moreover, the results of Levene's test for homogeneity of variances showed that for the study variables—anger control ( $p$ -values: .940, .404, .521) and distress tolerance ( $p$ -values:

.671, .994, .952) in the three stages of pretest, posttest, and follow-up—the null hypothesis was not rejected, confirming homogeneity of variances (all  $p$ -values  $> .05$ ). Therefore, repeated measures analysis of variance was used to test the study hypotheses. The results of the between-subject effects analysis are presented in Table 2.

**Table 2**

*Results of Between-Subject Effects Analysis for Study Variables*

Variables	Source	Sum of Squares	df	Mean Square	F	p-value	Effect Size	Statistical Power
Anger Control	Group	13134.16	2	6567.08	24.49	.001	.490	1
	Error	13673.07	51	268.09				
Distress Tolerance	Group	1598.53	2	779.26	12.07	.001	.321	.993
	Error	3374.79	51	66.17				

According to the findings presented in Table 2, the mean scores for anger control and distress tolerance differed significantly between the two intervention groups (psychodrama training and psychological empowerment training) and the control group ( $p < .05$ ). The results showed that 49% of the individual differences in anger control and 32.1% of the individual differences in distress tolerance were attributable to differences between the three groups.

The parameter estimates or post hoc tests for comparing the groups at different stages of the study are shown in Table 3. These results indicated that the mean differences in pretest

scores between the three groups were not significant. However, in both the posttest and follow-up stages, there were significant differences between the control group and the psychodrama training group and between the control group and the psychological empowerment training group ( $p \leq .001$ ), indicating that both educational interventions led to improvements in anger control and distress tolerance. There was no significant difference between the two treatment methods in terms of their effects on anger control and distress tolerance in the posttest and follow-up stages.

**Table 3**

*Parameter Estimates for Comparing Mean Scores of Study Variables at Different Stages*

Stage	Group Comparison	Variable	Mean Difference	Std. Error	t	Significance	Effect Size
Pretest	Psychodrama vs. Control	Anger Control	12.35	3.13	0.752	0.457	0.014
		Distress Tolerance	5.56	0.103	0.919	0.001	0.571
	Psychological Empowerment vs. Control	Anger Control	0.143	3.13	0.046	0.964	0.001
		Distress Tolerance	5.56	0.090	0.926	0.001	0.500
Posttest	Psychodrama vs. Psychological Empowerment	Anger Control	-2.21	3.13	-	0.484	0.013
		Distress Tolerance	-0.071	5.56	-	0.990	0.001
		Anger Control	13.72	3.15	-3.45	0.001	0.234
		Distress Tolerance	10.14	2.71	-4.21	0.001	0.258
	Psychological Empowerment vs. Control	Anger Control	21.81	3.15	-3.26	0.001	0.342
		Distress Tolerance	12.55	2.71	-3.78	0.001	0.205
	Psychodrama vs. Psychological Empowerment	Anger Control	-8.09	3.15	-2.98	0.040	0.156
		Distress Tolerance	-2.40	2.71	0.43	0.990	0.007
Follow-up	Psychodrama vs. Control	Anger Control	12.06	2.98	-2.69	0.004	0.219

Psychological Empowerment vs. Control		Distress	16.63	5.23	3.18	0.003	0.260
		Tolerance					
		Anger Control	19.55	2.98	-2.87	0.007	0.324
		Distress	18.50	5.23	3.53	0.001	0.206
Psychodrama vs. Psychological Empowerment		Tolerance					
		Anger Control	-7.49	2.98	-1.17	0.049	0.134
		Distress	-1.87	5.23	-	0.422	0.003
		Tolerance			0.358		

The results of the Bonferroni post hoc test for comparing the mean scores of anger control at the three stages for each group indicate that the differences in mean scores of anger control and distress tolerance between the intervention groups (psychodrama training and psychological empowerment training) in the pretest compared to the posttest and also the pretest compared to the follow-up are statistically significant ( $p < .001$ ). However, the differences in mean scores between the posttest and the follow-up stages were not statistically significant ( $p > .05$ ).

Thus, the results show that, while both interventions (psychodrama training and psychological empowerment training) had significant effects in increasing distress tolerance in the posttest stage and that the effects remained stable in the follow-up stage, there were no significant differences in the effectiveness of the two interventions for improving anger control and distress tolerance among incarcerated women.

**Table 4**

*Bonferroni Post Hoc Test Results for Comparing Mean Scores of Study Variables at Different Stages by Group*

Variables	Group	Stage Comparison		Mean Difference	Significance	Group	Stage Comparison		Mean Difference	Significance
Anger Control	Psychodrama Training	Pretest	–	-5.37	0.001	Control	Pretest	–	1.14	0.122
		Posttest					Posttest			
		Pretest	–	-6.50	0.009		Pretest	–	1.15	0.123
		Follow-up					Follow-up			
		Posttest	–	3.57	0.075		Posttest	–	0.10	0.998
		Follow-up					Follow-up			
	Psychological Empowerment	Pretest	–	-5.38	0.001					
		Posttest								
		Pretest	–	-1.13	0.002					
		Follow-up								
		Posttest	–	1.44	0.408					
		Follow-up								
Distress Tolerance	Psychodrama Training	Pretest	–	-8.00	0.001	Control	Pretest	–	-0.857	0.906
		Posttest					Posttest			
		Pretest	–	-9.64	0.001		Pretest	–	-0.643	0.923
		Follow-up					Follow-up			
		Posttest	–	-9.37	0.001		Posttest	–	0.214	0.998
		Follow-up					Follow-up			
	Psychological Empowerment	Pretest	–	-8.21	0.001					
		Posttest								
		Pretest	–	-10.31	0.001					
		Follow-up								
		Posttest	–	-1.64	0.007					
		Follow-up								

#### 4. Discussion and Conclusion

The present study investigated and compared the effectiveness of psychodrama training and psychological

empowerment on anger control and distress tolerance among incarcerated women in Isfahan. The results showed that psychodrama training led to improvement in anger control among the incarcerated women. This finding is indirectly

consistent with the results of prior studies (Braithel & Allaouna, 2025; Rasekhi Nejad & Khodabakhshi Koolaei, 2019; Taherzadeh & Pourrezaeian, 2022) which reported the effectiveness of psychodrama in controlling anger and aggression in other populations.

In explaining the finding regarding the effectiveness of psychodrama on anger control, it can be stated that in the psychodrama setting, when individuals externalize their negative emotions regarding distressing situations in a free, non-judgmental environment using dramatic techniques such as the empty chair, hidden technique, doubling, and others, they gain insights into their behaviors, others, and the existing conditions. This process leads to a deeper understanding of their circumstances and relationships. Participants learn that events occurring in different situations result from a combination of factors. Through psychodrama, individuals re-enact difficult and traumatic past experiences to achieve better understanding and greater mastery over their future. Psychodrama can thus lead to general outcomes like reduced depression or more specific outcomes such as behavioral changes, improved relationships, and enhanced self-esteem.

Using psychodrama by creating a sense of vitality and joy brings about positive changes in individuals. Since psychodrama is a rich therapeutic approach that integrates drama, imagination, mental imagery, physical actions, and group dynamics, combining art, play, emotional sensitivity, and clear thinking, clients can comfortably deal with and understand their suppressed pains and actively work to resolve them. Furthermore, psychodrama emphasizes interpersonal interactions, confrontation, spontaneity, creativity, and emotional catharsis, making it an effective strategy for controlling and treating anger.

The results also indicated that psychological empowerment intervention was effective in controlling anger, a finding consistent with the prior studies (Ghobadi et al., 2021; Zhou & Chen, 2021). These studies show that empowerment training can influence the improvement of anger management. In explaining this finding, psychological empowerment is theoretically defined by four key dimensions: competence, meaning, autonomy, and impact (Zare et al., 2023). Among these, the dimension of competence has the most influence on anger control. Competence refers to an individual's belief in their own capabilities and skills in managing situations and emotional challenges.

This dimension helped the incarcerated women feel more competent in handling negative emotions such as anger. As

their belief in their ability to control behaviors and reactions increased, their threshold for anger tolerance naturally rose, enabling them to manage anger more effectively. In this regard, practicing cognitive-behavioral skills, learning coping strategies, and boosting self-confidence strengthened their competence dimension, thereby improving anger control.

Moreover, the results showed that while both psychodrama training and psychological empowerment interventions significantly increased distress tolerance at the posttest stage, and these effects remained during the follow-up, there was no significant difference between the effectiveness of the two interventions in improving distress tolerance among incarcerated women. This finding aligns with the prior studies (Asharan et al., 2018; Dejestan & Fahimi, 2022) which found that psychodrama positively affects distress tolerance.

It also aligns with the prior findings (Dixon-Gordon et al., 2023; Moayedimehr et al., 2023; Zare et al., 2023) which demonstrated that psychological empowerment training is effective in improving psychological issues. In explaining the finding regarding the effectiveness of psychodrama, it can be said that when individuals have low levels of distress tolerance, the emotional suffering caused by internal and external pressures is experienced more intensely and severely. As a result, individuals with low distress tolerance tend to seek immediate relief from emotional distress rather than directly confronting and solving their problems (Larrazabal et al., 2022).

Additionally, these individuals hold dysfunctional attitudes toward negative emotions, finding it difficult to accept the presence of negative emotions within their mental framework. When experiencing negative emotions, they feel distressed and attempt to quickly escape these experiences (Duran et al., 2018). Psychodrama is a role-playing-based approach in which clients re-experience aspects of their past, present, future, or inner world as if they are happening in real time.

One of the key therapeutic components of psychodrama is problem-solving within an interpersonal and social context. Using its specific techniques and procedures, psychodrama helps break down many of the individual's defensive patterns and cognitive distortions, thereby increasing their insight into their issues. This means that during psychodrama, incarcerated women became intimately and tangibly familiar with their deepest personal and interpersonal problems, often stepping outside their own



mental frameworks to view interpersonal issues from others' perspectives.

This special environment of psychodrama moved incarcerated women away from egocentricity and excessive focus on personal emotional states, enhancing their understanding of others. Moreover, one of the most important therapeutic components of psychodrama is the increase of positive emotions. Elevating positive emotions is a principal goal of psychodrama sessions, regardless of the treatment topic or type of clients. The structure of psychodrama sessions is designed so that each session begins and, as much as possible, ends with positive emotions (López-González et al., 2021).

Considering the results of the present study and previous research showing the positive impact of the intervention methods used, it can be stated that psychodrama facilitates emotional regulation through emotional expression and teaching emotional modulation. This training leads to reduced absorption by negative emotions and increased effort to alleviate distress, ultimately raising the average distress tolerance of individuals.

Regarding the finding on the effectiveness of psychological empowerment training in improving distress tolerance among incarcerated women, it can be explained that the goal of psychological empowerment training is to help individuals develop the ability to face and cope with life's difficulties, overcome weaknesses, enhance positive aspects of life, and increase skills and capabilities for rational life control, implementing these in practice (Zhou & Chen, 2021).

Accordingly, through psychological empowerment intervention, incarcerated women gained a stronger sense of choice, hope, and optimism about the future, enabling them to better cope with the burden of imprisonment and meet their psychological and social needs through acquired competencies. This process rescued them from preoccupation with stressful or hopeless matters and helped them envision a better future with optimism, thus increasing their distress tolerance scores.

Additionally, discussing life issues and prison environment concerns during intervention sessions fostered empathy among group members, facilitated mutual support, and encouraged sharing experiences, ending feelings of isolation and promoting greater distress tolerance. Furthermore, in psychological empowerment training, by teaching the identification and correction of cognitive distortions and maladaptive beliefs with positive thinking and alternative strategies toward meaningful life goals,

incarcerated women learned to recognize and correct irrational beliefs causing despair, distress, and psychological harm.

Thus, through increased insight and positive attitude change, their level of distress tolerance improved. In general, regarding the lack of difference between the effectiveness of the two educational interventions, it can be stated that despite their different content and techniques, both approaches ultimately emphasized enhancing self-esteem and positive emotions, fostering a sense of self-control over current circumstances.

Using nonverbal methods for emotional awareness, learning body language, creatively expressing mental abilities, becoming aware of one's own and others' emotions, retelling personal problems through role-play, exercising self-determination, and choosing meaningful life goals contributed to improving anger control and distress tolerance among incarcerated women.

## 5. Limitations and Suggestions

The limitations of this study include its restriction to incarcerated women in Isfahan Province, failure to control influencing variables on anger control and distress tolerance, failure to control demographic variables, and lack of random sampling. Therefore, it is suggested that future studies be conducted in other cities and regions with different cultural backgrounds, among incarcerated women with crime type differentiation, with control of influencing variables and demographic factors, and employing random sampling to enhance the generalizability of the results.

Given the effectiveness of psychodrama training and psychological empowerment training in improving anger control and distress tolerance among incarcerated women, it is recommended at the practical level that the Prison Affairs Organization and the Judiciary's Office for the Prevention of Social Harms and Crime prioritize the education of incarcerated women. By implementing such programs, incarcerated women can be empowered to manage their lives and improve anger control and distress tolerance, which serve as preventive factors against recidivism.

## Authors' Contributions

Authors contributed equally to this article.

## Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

## Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

## Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

## Declaration of Interest

The authors report no conflict of interest.

## Funding

According to the authors, this article has no financial support.

## Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

## References

- Akgun, R. (2024). *FROM STAGE TO LIFE: PSYCHODRAMA with FEMALE OFFENDERS*. GLOBAL ACADEMY YAYINCILIK VE DANIŞMANLIK HİZMETLERİ SANAYİ TİCARET LİMİTED ŞİRKETİ. <https://doi.org/10.59740/academy.75>
- Alves, J., Gonçalves, M., & Maia, Á. (2024). Factors associated with physical and psychological health outcomes among inmate women in Portugal. *Women & Criminal Justice* VL - 34 IS - 3 SP - 211 EP - 226. <https://doi.org/10.1080/08974454.2022.2074611>
- Anaraki, N. R. (2020). *Prison in Iran: A Known Unknown*. Springer Nature. <https://doi.org/10.1007/978-3-030-57169-6>
- Asharan, S., Yazdkhasti, F., & Arizi, H. (2018). Comparison of the effectiveness of psychodrama and dialectical behavior therapy on emotion regulation and distress tolerance in addicted women undergoing withdrawal. *Addiction Research*, 12(45), 247-264. [https://etiadjpajohi.ir/browse.php?a\\_id=1581&slc\\_lang=en&id=1&printcase=1&hbmr=1&hmb=1](https://etiadjpajohi.ir/browse.php?a_id=1581&slc_lang=en&id=1&printcase=1&hbmr=1&hmb=1)
- Bartholomaeus, J., & Strelan, P. (2021). The empowering function of the belief in a just world for the self in mental health: a comparison of prisoners and non-prisoners. *Personality and Individual Differences* VL - 179 SP - 110900. <https://doi.org/10.1016/j.paid.2021.110900>
- Beaudry, G., Yu, R., Perry, A. E., & Fazel, S. (2021). Effectiveness of psychological interventions in prison to reduce recidivism: A systematic review and meta-analysis of randomised controlled trials. *The Lancet Psychiatry* VL - 8 IS - 9 SP - 759 EP - 773. [https://doi.org/10.1016/S2215-0366\(21\)00170-X](https://doi.org/10.1016/S2215-0366(21)00170-X)
- Bodecka, M., Grala, K., Szymczak, K., Zajenowska, A., Rajchert, J., Kostrzewska, D., & Lawrence, C. (2021). Relationship between trait anger and rejection sensitivity: the moderating role of the group (inmates and non-inmates). *The Journal of Forensic Psychiatry & Psychology* VL - 32 IS - 6 SP - 777 EP - 791. <https://doi.org/10.1080/14789949.2021.1909104>
- Braithel, D., & Allaoua, R. (2025). Employing Psychodrama as a therapeutic method to reduce aggressive behavior among adolescents (Experimental Study). *مجلة دراسات في سيكولوجية الانحراف* VL - 9 IS - 2 SP - 462 EP - 472. <https://asjp.cerist.dz/en/article/261252>
- Bright, A. M., Higgins, A., & Grealish, A. (2023). Women's experiences of prison-based mental healthcare: a systematic review of qualitative literature. *International Journal of Prisoner Health* VL - 19 IS - 2 SP - 181 EP - 198. <https://doi.org/10.1108/IJPH-09-2021-0091>
- Daks, J. S., & Rogge, R. D. (2020). Examining the role of psychological inflexibility, acceptance, and disclosure in the emotional chaos of couples coping with illness. *Journal of Contextual Behavioral Science* VL - 16 SP - 155 EP - 163. <https://doi.org/10.1016/j.jcbs.2020.08.003>
- Davoodi, R., & Ghahari, S. (2018). Effectiveness of emotion regulation and distress tolerance skills training on coping strategies, emotion regulation, and perceived stress in prisoners. *Social Determinants of Health* VL - 4 IS - 3 SP - 145 EP - 153. <https://journals.sbm.ac.ir/sdh/article/view/22819>
- Dejestan, N., & Fahimi, H. (2022). The effectiveness of the psychodrama method on emotion regulation, distress tolerance, social isolation, and self-efficacy in women addicted to opioids. The 5th International Conference on Law, Psychology, Educational and Behavioral Sciences, Tehran.
- Dixon-Gordon, K. L., Barnica, C., Petrie, J., & Whalen, D. (2023). Brief distress tolerance treatment for self-harm in incarcerated women: A pilot randomized controlled trial. *Journal of Consulting and Clinical Psychology* VL - 91 IS - 2 SP - 172 EP - 185.
- Donners, M. F., & Lechner-Weintraub, R. (2021). Drama therapy and psychodrama: An integrative literature review. *The Arts in Psychotherapy* VL - 74 SP - 101793.
- Duran, S., Ergün, S., Tekir, Ö., Çalışkan, T., & Karadaş, A. (2018). Anger and tolerance levels of the inmates in prison. *Archives of Psychiatric Nursing* VL - 32 IS - 1. <https://doi.org/10.1016/j.apnu.2017.09.014>
- Ekanem, O. J., & Woods, P. (2022). Effectiveness of nonsuicidal self-injury interventions among incarcerated women in correctional facilities and secure settings: An integrative review. *Issues in Mental Health Nursing* VL - 43 IS - 3 SP - 220 EP - 238. <https://doi.org/10.1080/01612840.2021.1967532>
- Fernández, M. C. M. C., Gómez-Díaz, M., Gómez-Sánchez, R., Conesa-Fuentes, M. C., Díaz-Agea, J. L., & Leal-Costa, C. (2022). Effects of an emotional education program on prisoners: An experimental study. *Journal of Forensic Nursing* VL - 18 IS - 2 SP - 106 EP - 116. <https://doi.org/10.1097/JFN.0000000000000346>
- Ghelbash, Z., Yektatalab, S., Momennasab, M., & Foruhi, Z. (2021). Effect of group-based logotherapy on imprisoned women's level of hope: a randomized controlled trial (RCT). *International Journal of Prisoner Health* VL - 17 IS - 2 SP - 87 EP - 97. <https://doi.org/10.1108/IJPH-05-2020-0032>
- Ghobadi, H., Sharifi, T., Ghazanfari, A., & Cherami, M. (2021). Comparison of the effectiveness of group anger management training and psychosocial empowerment on aggression and social self-efficacy. *Social Cognition* VL - 10 IS - 19 SP - 211

- EP - 237.  
[https://sc.journals.pnu.ac.ir/article\\_7967.html?lang=en](https://sc.journals.pnu.ac.ir/article_7967.html?lang=en)
- Giovannini, C., Giromini, L., Alvaro, R., Venturini, M., & De Camilli, F. (2022). Inflexibility coping, distress intolerance, and psychopathological symptoms: The moderation effect of psychological flexibility. *Current Psychology SP - 1*, 11.
- Gómez-Figueroa, H., & Camino-Proañó, A. (2022). Mental and behavioral disorders in the prison context. *Revista española de sanidad penitenciaria VL - 24 IS - 2 SP - 66*.  
<https://doi.org/10.18176/resp.00052>
- Guzmán-Huamuña, E., Madariaga, C., & Castillo-Toro, C. (2023). Psychodrama as a therapeutic approach for victims of domestic violence: A pilot study. *Psychological Trauma: Theory, Research, Practice, and Policy VL - 15 IS - 3 SP - 336 EP - 345*.
- Haney, C. (2022). The psychological effects of incarceration on women. *Women & Criminal Justice VL - 32 IS - 1 SP - 1 EP - 21*.  
<https://doi.org/10.1080/08974454.2022.2021000>
- Kamaluddin, M. R., Mahat, N. A., Mat Saat, G. A., Othman, A., Anthony, I. L., Kumar, S., Wahab, S., Meyappan, S., Rathakrishnan, B., & Ibrahim, F. (2021). The psychology of murder concealment acts. *International Journal of Environmental Research and Public Health VL - 18 IS - 6 SP - 3113*.  
<https://doi.org/10.3390/ijerph18063113>
- Larrazabal, M. A., Naragon-Gainey, K., & Conway, C. C. (2022). Distress tolerance and stress-induced emotion regulation behavior. *Journal of Research in Personality VL - 99 SP - 104243*.  
<https://doi.org/10.1016/j.jrp.2022.104243>
- Laursen, J., & Henriksen, A. K. (2019). Altering violent repertoires: Perspectives on violence in the prison-based cognitive-behavioral program anger management. *Journal of Contemporary Ethnography VL - 48 IS - 2 SP - 261 EP - 286*.  
<https://doi.org/10.1177/0891241618771153>
- Lee, A. Y., Kim, S. Y., Kwon, H. J., & Park, S. A. (2021). Horticultural therapy program for mental health of prisoners: Case report. *Integrative Medicine Research VL - 10 IS - 2 SP - 100495*.  
<https://doi.org/10.1016/j.imr.2020.100495>
- Liu, L., Ding, X., Li, S., & Chen, X. (2024). Exploring aggressive emotions in women in prison: the role of empathy and perceived social support in moderating the effects of childhood discrimination experiences. *BMC Public Health VL - 24 IS - 1 SP - 3333*.  
<https://doi.org/10.1186/s12889-024-20844-8>
- Llorente-Alonso, M., García-Ael, C., & Topa, G. (2024). A meta-analysis of psychological empowerment: Antecedents, organizational outcomes, and moderating variables. *Current Psychology VL - 43 IS - 2 SP - 1759 EP - 1784*.  
<https://doi.org/10.1007/s12144-023-04369-8>
- López-González, M. A., Morales-Landazábal, P., & Topa, G. (2021). Psychodrama group therapy for social issues: A systematic review of controlled clinical trials. *International Journal of Environmental Research and Public Health VL - 18 IS - 9 SP - 4442*.  
<https://doi.org/10.3390/ijerph18094442>
- Madran, H. A. D. (2020). The use of psychodrama in various psychological disorders: A review of literature. *Frontiers in Psychology VL - 11 SP - 1642*.
- Mahmood, S. T., Vaughn, M. G., Blevins, L., Cho, T., Epperson, M., & Swartz, J. L. (2023). Prevalence and correlates of serious mental illness among incarcerated women. *Journal of Correctional Health Care VL - 29 IS - 1 SP - 3 EP - 16*.
- Meena, B. P. M. (2024). Does Anger Management Among Prisoners Work?-A Review of Recent Meta-Analyses. *Qeios*.  
<https://doi.org/10.32388/D1SDI8>
- Moayedimehr, M., Peymani, J., Ahadi, H., & Tizdast, T. (2023). Investigating the Impact of Psychological Empowerment Program Training on Marital Responsibility and Mental Well-being in Spouse of Addicted Husband. *IJPN VL - 11 IS - 3 SP - 81 EP - 94*.  
[https://ijpn.ir/browse.php?a\\_id=2124&sid=1&slc\\_lang=en](https://ijpn.ir/browse.php?a_id=2124&sid=1&slc_lang=en)
- Paramasivan, C. A. (2021). Study on Status of Women in Prison in India. *Wesleyan Journal of Research VL - 14 IS - 4*.  
[https://www.researchgate.net/publication/351871509\\_A\\_STUDY\\_ON\\_STATUS\\_OF\\_WOMEN\\_IN\\_PRISON\\_IN\\_INDI](https://www.researchgate.net/publication/351871509_A_STUDY_ON_STATUS_OF_WOMEN_IN_PRISON_IN_INDI)
- Rasekhi Nejad, M., & Khodabakhshi Koolaei, A. (2019). The effectiveness of group psychodrama in enhancing social skills and reducing aggression in Afghan migrant working children. *Pediatric Nursing VL - 6 IS - 2 SP - 61 EP - 68*.  
<https://jpen.ir/article-1-370-en.html>
- Richie, B. E., Friedman, J., Crump, D., & Hussey, J. (2021). Prevalence of trauma and mental health problems among incarcerated women. *Journal of Urban Health VL - 98 IS - 2 SP - 173 EP - 180*.
- Robinson, F., & Fernhaber, S. A. (2024). Entrepreneurship after prison: It's complicated. *Journal of Business Venturing Insights VL - 21 SP - e00465*.  
<https://doi.org/10.1016/j.jbvi.2024.e00465>
- Rodriguez, E. M., Lee, J., Underwood, M., & Panuzio, J. (2021). Distress tolerance as a mediator of the relationship between mindfulness and mental health outcomes among trauma-exposed adults. *Mindfulness VL - 12 IS - 1 SP - 109 EP - 119*.
- Roth, R. (2022). Chronic health conditions among incarcerated women. *American Journal of Public Health VL - 112 IS - 3 SP - 412 EP - 419*.
- Ryder, J. A. (2020). Enhancing female prisoners' access to education. *International Journal for Crime, Justice and Social Democracy VL - 9 IS - 1 SP - 139 EP - 149*.  
<https://doi.org/10.5204/ijcjsd.v9i1.1468>
- Sahin, E. (2020). *The Mediating Role of Psychological Empowerment in the Relationship between Personality and Work Engagement* [Adler University].  
<https://www.proquest.com/openview/89688082eae787fa05fa4772ad9f49e4/1?cbl=18750&diss=y&pq-origsite=gscholar>
- Scherer, Z. A. P., Scherer, E. A., Santos, M. A. D., Souza, J. D., Pillon, S. C., & Scherer, N. P. (2020). Freedom-deprived women: social representations of prison, violence, and their consequences. *Revista Brasileira de Enfermagem VL - 73 SP - e20180781*.  
<https://doi.org/10.1590/0034-7167-2018-0781>
- Şenyuva, E., Çınar, N., & Madenoğlu Kivanç, M. (2022). The effect of psychodrama on nursing students' empathy levels. *The Arts in Psychotherapy VL - 75 SP - 101873*.
- Sunpuwan, M., Thaweessit, S., & Tangchonlatip, K. (2024). Perceived anxiety and depression and associated factors among women inmates with a long-term sentence in Thailand. *PLOS ONE VL - 19 IS - 3 SP - e0299318*.  
<https://doi.org/10.1371/journal.pone.0299318>
- Taherzadeh, E., & Pourrezaeian, M. (2022). The effectiveness of psychodrama therapy on emotion regulation and aggression in adolescents. *Developmental Psychology of Iranian Psychologists VL - 75 SP - 335 EP - 344*.  
<https://ensani.ir/fa/article/544663/>
- Testoni, I., Bonelli, B., Biancalani, G., Zuliani, L., & Nava, F. A. (2020). Psychodrama in attenuated custody prison-based treatment of substance dependence: The promotion of changes in wellbeing, spontaneity, perceived self-efficacy, and alexithymia. *The Arts in Psychotherapy VL - 68 SP - 101650*.  
<https://doi.org/10.1016/j.aip.2020.101650>
- Tripodi, S. J., & Pettus-Davis, C. (2020). Prevalence of mental health disorders among incarcerated women: A national study. *Criminal Justice and Behavior VL - 47 IS - 8 SP - 949 EP - 967*.

- White, F. (2023). *The Effects of Long-Term Incarceration on Women: An Investigation of the Re-Entry Journey of Four Long-Term Incarcerates Living at a Re-Entry Program* St. John's University (New York)]. [https://scholar.stjohns.edu/theses\\_dissertations/618/](https://scholar.stjohns.edu/theses_dissertations/618/)
- Zare, F., Manshaei, G., & Keshti Aray, N. (2023). The effectiveness of psychological empowerment training on self-worth and psychological capital of female heads of households. *Applied Psychological Research Quarterly* VL - 14 IS - 1 SP - 195 EP - 210. [https://japr.ut.ac.ir/article\\_92283.html](https://japr.ut.ac.ir/article_92283.html)
- Zhou, H., & Chen, J. (2021). How does psychological empowerment prevent emotional exhaustion? Psychological safety and organizational embeddedness as mediators. *Frontiers in Psychology* VL - 12 SP - 546687. <https://doi.org/10.3389/fpsyg.2021.546687>