

## Psychodrama as a therapy in trauma and posttraumatic stress

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DOI: <https://doi.org/10.22517/25395203.24656>

### Abstract

**Objective:** To evaluate the available evidence in regarding the efficacy of psychodrama in patients with acute and posttraumatic stress disorder and psychological trauma-

**Methods:** Systematic review. Terms: (1)*Psychodrama*, (2)*Role-playing*, (3)*Stress disorders*, *Acute*, *posttraumatic*, and (4)*Psychological trauma* (Mesh), were searched in Pubmed, EMBASE, Cochrane Central, Scopus, Lillacs and OVID, until April 2019. Systematic reviews of the literature, meta-analysis, randomized clinical trials, quasi-randomized and observational studies in English and Spanish were selected. The works should have described interventions with psychodrama techniques.

**Results:** 14 papers met the inclusion criteria.

**Conclusions:** There is no evidence of the psychodrama response to the symptoms after traumatic stress. Research should be carried out with a more rigorous methodological design.

**Key words:** Psychodrama, role playing, psychotherapy, psychological trauma, stress disorders, post-traumatic.

### Psicodrama como terapia en trauma y estrés postraumático

#### Resumen

**Objetivo:** Evaluar la evidencia disponible de la eficacia del psicodrama como terapia para el manejo del trauma psicológico, trastorno por estrés agudo y postraumático.

**Método:** Se realizó una búsqueda sistemática de la literatura en MEDLINE, EMBASE, Cochrane Central, Scopus, LILACS y Ovid hasta abril de 2019. Se incluyeron los términos: (1)*Psychodrama*, (2)*Role-playing*, (3)*Stress disorders*, *Acute*, *posttraumatic*, y (4)*Psychological trauma* (MeSH). Se seleccionaron revisiones sistemáticas de la literatura, metaanálisis, ensayos clínicos aleatorios, cuasi aleatorios y estudios observacionales en inglés y español. Se seleccionaron los trabajos que incluyeran una descripción de las intervenciones con técnicas del psicodrama.

**Resultados:** 14 trabajos cumplieron criterios de inclusión.

**Conclusión:** No se encontró una asociación fuerte de la eficacia del psicodrama ante los síntomas de estrés postraumático. Se requieren más investigaciones con diseño metodológico ajustado para este tipo de intervenciones.

**Palabras clave:** Psicodrama, psicoterapia, desempeño de papel, trauma psicológico, trastorno por estrés postraumático.

### Introduction

Psychodrama (PD) is a type of psychotherapy based on theater, psychology and sociology, created by Jacob Levy Moreno in 1921 (1-3), which consists of the dramatization of the patient's psychological conflicts. It is a group treatment modalities, focused on the staging and representation of real or imaginary situations in order for patients to identify their own thoughts, feelings and behaviors. Each session includes: three contexts (social, group and dramatic); five instruments (protagonists, stage, ego-assistant, director and audience) and three phases (warm-up, action and comments) (1, 3-6). One of the main techniques is role play, which refers to the representation of a person or object that is problematic (7-9). Other main techniques include the soliloquy, the double, the mirror, and secondary techniques such as role reversal, symbolic representation, amplification, concretization, the empty chair, among others (1, 3-5, 8).

This type of psychotherapy has been used to manage depression, anxiety disorder, grief, phobias, and eating disorders. One field in which it has been used is in the treatment of trauma and post-traumatic stress disorder (4).

Psychological trauma is the result of having been exposed to a stressful event with threatening characteristics, which can generate mental discomfort in affected people. One of the most severe sequelae is post-traumatic stress disorder (PTSD) that develops in approximately 14% of cases, being more intense in situations produced by third parties such as war, terrorism, crime, sexual abuse, among others. (10).

PTSD is characterized by a constellation of symptoms, which appear after exposure to one or more potentially life-threatening events, in which intrusive memories, avoidance behaviors, autonomic hyperactivity, sleep disorders, mood disturbances occur and negative cognitions related to the traumatic event (11). PTSD has a lifetime prevalence of around 1.3% to 12%, according to the social context and country of residence. The situations most frequently reported as traumatic are accidents, physical and sexual abuse (12-14).

Due to the severity of the symptoms, this disorder is correlated with a considerable degree of disability that can last for years. Current guidelines recommend trauma-focused cognitive behavioral therapy (CBT) as the first line of treatment and eye movement desensitization and reprocessing (EMDR) (12, 15-19). These therapies have in common that they use techniques such as psychoeducation, emotional regulation and coping mechanisms, imaginary exposure, processing and cognitive restructuring (20). However, the rate of failure and abandonment of these treatments is high, so alternative modalities such as psychodrama could be useful by favoring the management of trauma through other sensory processes (15).

The main objective is to evaluate the available evidence of the efficacy of psychodrama as a therapy for the management of psychological trauma (PD), acute stress disorder and PTSD.

## Methodology

A systematic review of the literature was carried out with the objective of evaluating the effectiveness of psychodrama in patients with psychological trauma, acute stress disorder and PTSD.

**Search strategy:** An electronic search was carried out in the MEDLINE, EMBASE, Cochrane Central, Scopus, LILACS and Ovid databases; in February and April 2019. To increase the scope of the search, studies were included from the references of the included articles. The databases were explored using a combination of the following terms “psychodrama”, “role playing”,

“psychological trauma”, “stress disorders, traumatic acute”, and “stress disorders, post-traumatic”. The following Spanish DeCS terms “psychodrama”, “role play”, “psychological trauma”, “post-traumatic stress disorder” and “acute traumatic stress disorder” were also used for the LILACS search.

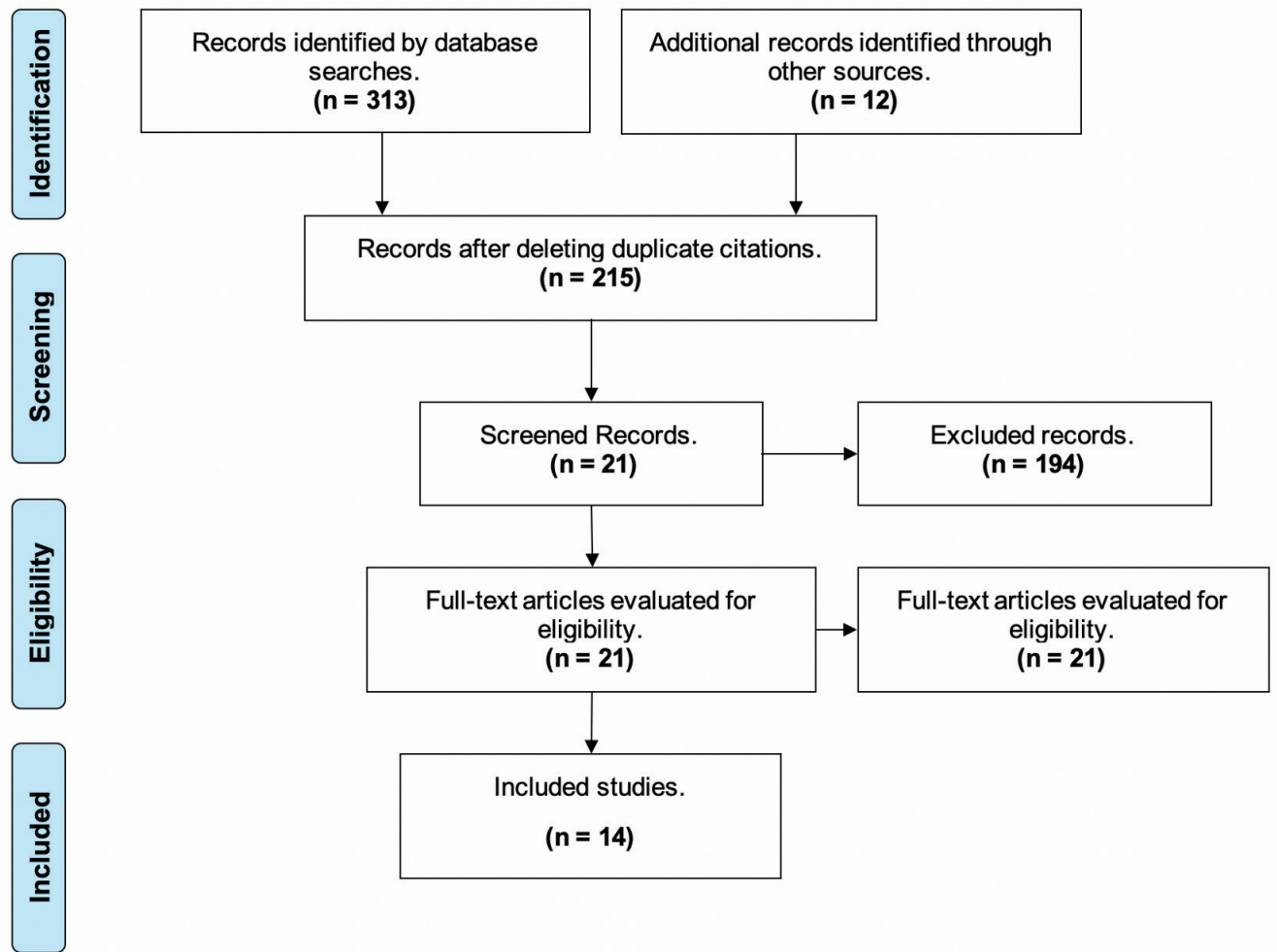
**Study selection criteria:** Systematic literature reviews, meta-analyses, randomized, quasi-randomized clinical trials, and observational studies evaluating the efficacy of the intervention were included. The studies could include subjects of any age, with diagnoses of post-traumatic stress disorder, acute stress or psychological trauma, who had an intervention based on psychodramatic techniques and published in English or Spanish. All studies published up to April 2019 were included. Case reports, review articles and those studies in which the inclusion criteria were unclear or had insufficient data were excluded.

**Study selection, data collection and analysis:** Two review authors independently screened all titles and abstracts of retrieved articles. Articles in which there were discrepancies in inclusion were discussed and those in which consensus was reached were chosen. Reviewers extracted variables of interest from included studies using ad hoc standard forms. All data collection was double and independent. One of the reviewers entered the data from the forms into spreadsheets. If, by doing this, the reviewer found a discrepancy between their information and that of the other reviewer, then a consensus was reached.

Due to the small number of publications on PD and PTSD, an integrative review was implemented that allowed the combination of publications with diverse methodology, including quantitative, qualitative and mixed studies.

## Results

A total of 324 articles were identified in the systematic search, of which 215 were included for review according to the title and abstract. Twenty-one studies were selected for full-text evaluation, and from these, the 14 that met the inclusion criteria were chosen. (Figure 1. Study selection diagram).

**Figure 1. Flow Diagram for Study Selection**

The investigations had a publication interval from 1990 to April 2019. More than half of these were carried out in children and only four in people over 40 years of age. Six of the articles included patients who had a clinical diagnosis of PTSD. In the other publications, they evaluated people who had been exposed to trauma (sexual and physical abuse, death of a family member, suicide of family members, traumatic events during the war) without having a formal diagnosis of PTSD. In addition, one of the publications was made on healthy people with anxiety to seek the emotional representation of what the concept of “death annihilator” means. Other comorbid disorders accompanying PTSD or traumatic reaction included: anxiety, dissociative, and somatoform disorders. (See Table 1).

Table 1. Reviewed studies - summary						
Paper	Objective	Diagnosis	N	Age	Method / Technique	Results
Corder, B. F., Hailip, T., & DeBoer, P. (1990) <sup>21</sup>	To develop coping skills in sexually abused children. (Qualitative study)	Sexually abused children with mild to moderate post-traumatic disorders; sexual worries and nightmares	Undetermined	6-8 years old	Structured role-playing games	Decrease in post-traumatic symptoms,  more assertive verbalization of their feelings. Most of the children stated that they felt better knowing that they were not the only ones to whom it had happened. Decrease in guilty feeling
Almqvist, K., & Brandell-Forsberg, M. (1995) <sup>22</sup>	To describe the effects of violence and separation caused by forced migration on Iranian children. To compare their behaviors with the verbal reports given by their parents. (Clinical trial).	Post-war PTSD	50	4-8 years old	Resignification of problems related to direct exposure or as witnesses to war (by playing)	It was demonstrated suitable ways of obtaining information in children through acting
Ragsdale, K. G., Cox, R. D., Finn, P., & Eisler, R. M. (1996) <sup>23</sup>	To identify specific traumatic events related to war in the field of combat. (clinical trial)	PTSD	24	40-49 years old	Role playing game	The symptoms of PTSD did not change significantly in response to treatment with the exposure to role-playing combat
Carbonell, D. M., & Partelano-Barehmi, C. (1999) <sup>24</sup>	To evaluate the effectiveness of Psychodrama in schoolgirls with previous exposure to traumatic events. (Clinical trial)	Girls exposed to traumatic events: sexual abuse, death of a relative, physical abuse, suicide of a relative	28	11-13 years old	Psychodrama	Psychodrama helped resolve trauma and improved self-efficacy and competence in subjects
Doughert, M. J. (2002) <sup>25</sup>	To assess interventions in patients with PTSD and dissociative disorders by a satisfaction survey questionnaire. (Clinical trial)	PTSD and dissociative disorders	43	21-63 years old	Psychodrama	Participants identified that the interventions applied to them, including Psychodrama, are useful therapeutic strategies
Thabet, A. A., Vostanis, P., & Karim, K. (2005) <sup>26</sup>	To assess short-term impact of a group crisis intervention. (Clinical trial).	Children with PTSD	47	9-15 years old	Group intervention.  Encouraging expression of experiences and emotions by storytelling, drawing, free game- and Role-playing game	There was no significant impact of group intervention on post-traumatic or depressive stress symptoms.
Avinger, K. A., & Jones, R. A. (2007) <sup>27</sup>	Review of 10 group therapy outcome studies published in 1985-2005 for adolescent women victims of sexual abuse. (Systematic review)	Sexually abused adolescent women	28	11-13 years old	Psychodrama	Psychodrama helped to resolve trauma and to improve self-efficacy and competence.
Ryum, T., Vogel, P. A., Hagen, R., & Stiles, T. C. (2008) <sup>28</sup>	To review the effectiveness of psychomotor interventions and psychodrama as group therapies in people with psychopathology. (Clinical trial).	Neurotic, Somatoform and Traumatic Stressor Disorders	7	39.8 years old (avr.)	Observation of body language, expression unresolved conflicts and emotional scars	Conflicting results

<b>Högberg, G., &amp; Hällström, T. (2008)</b> <sup>29</sup>	To describe and the clinical presentation of 14 young people with suicide attempt and exposure to different traumatic events.  (Clinical trial)	Adolescents with a suicide attempt who reported exposure to trauma	14	10-18 years old	Active multimodal psychotherapy (including psychodrama)	Treatment with active multimodal psychotherapy gave good results.  with about 20 sessions, suggesting the possibility of a cost-effective treatment for avoid suicide
<b>Nilsson, D., &amp; Wadsby, M. (2010)</b> <sup>30</sup>	To validate the hypothesis that the “symbol drama” significantly reduces the symptoms of PTSD, dissociation, anxiety, and depression in adolescents. (Clinical trial)	PTSD, dissociative disorders, anxiety and depressive disorders, stress and anger in adolescents after exposure to traumatic events	15	13-18 years old	“Symbol drama” or guided affective image	Symbol drama was shown to be a good strategy to reduce; Dissociative and post-traumatic symptoms in adolescents who had experienced trauma
<b>Newton, J. W., &amp; Hobbs, S. D. (2015)</b> <sup>31</sup>	To determine the effects of simulated amnesia on information about child sexual abuse.  (Clinical trial)	PTSD and post-childhood sexual abuse dissociative disorders	144	18-31 years old	Role-playing game, where the individual participated as a victim.	Conflicting results
<b>Singla, D. R., Kohrt, B. A., Murray, L. K., Anand, A., Chorpita, B. F., &amp; Patel, V. (2017)</b> <sup>32</sup>	Meta-analysis	Exposure to traumatic events	5	No	Role playing game	0.6 improvement of the symptoms evaluated
<b>Baker, F. A., Metcalf, O., Varker, T., &amp; O'Donnell, M. (2018)</b> <sup>15</sup>	Examine the effectiveness of the creative arts, including music therapy, art therapy, dance / movement therapy, and theater therapy, in the treatment of post-traumatic stress disorder.  (Clinical trial)	TEPT en adultos	48	43-49 years old	Psychodrama	No significant change in PTSD scores in either group
<b>Testoni, I., Ronconi, L., Palazzo, L., Galgani, M., Stizzi, A., &amp; Kirk, K. (2018)</b> <sup>33</sup>	To evaluate the coping mechanisms of anxiety about death and death, in schoolchildren. (Clinical trial).	People without psychopathology under management of anxiety about the meaning of “death annihilator”	268	17.2 years old (avr.)	Psychodrama	Decreased anxiety about the meaning of “death annihilator” was reported (with the use of psychodrama and art film production).

## Discussion

Few systematic reviews evaluating PD have been carried out in the scientific literature, despite being a known psychotherapy for almost a century (8, 34).

PTSD is the most serious mental pathology associated with exposure to traumatic events. Interventions seek to reduce symptoms, avoid dissociation, promote adaptive coping mechanisms and increase the sense of security (20).

Some meta-analyses have evaluated the effectiveness of psychological interventions in the treatment of PTSD in children and young people (35-37). The psychotherapy that has shown the most evidence in this age group and in adults is trauma-focused CBT (18, 19, 36, 38). The NICE (National Institute for Clinical Excellence) guidelines for the management of PTSD do not recommend the routine use of other modalities such as supportive therapy, psychodynamic psychotherapies and hypnotherapy, because they have not been found to have a significant clinical effect (18). A 2017 Cochrane

systematic review evaluated three non-pharmacological interventions (trauma-focused CBT, EMDR, and brief psychoeducation) in patients with severe mental illness, but the results were limited and inconclusive due to, among others, the low quality of the results studies (39).

Although meta-analysis and systematic reviews of the efficacy of group psychotherapy in adults for the management of PTSD have recently been published (40, 41), they have limitations due to heterogeneity and lack of high-quality controlled clinical trials. In addition, they have postulated the use of other alternative therapies such as psychodrama, without consistent evidence (17).

In the present investigation, the number of individuals intervened in each study was very low, except in a meta-analysis (N = 144), which corroborates that there is little evidence of the effect of PD for emotional reactions to stressful events (42). On the other hand, more than half of the publications were made on children and only four were made on people over 40 years of age, which shows that the research has focused on the age group of minors and more studies would be required to extrapolate the results to other population groups.

The psychodrama was developed by Moreno with specific techniques (1, 43), but for research purposes, artistic, conceptual and medical elements are combined (44), which makes it difficult to homogenize the variables. Kipper and Ritchie (8) conducted the first meta-analysis that evaluated the effectiveness of psychodramatic techniques in 25 experimental studies (n = 1325) and found a similar or better effect than that reported for group psychotherapies in general. For the current systematic review, most of the studies did not use the same methods, however psychodrama as an intervention shows a discrete potential effect for treating symptoms generated by trauma.

Regarding the results, no objective scales were found before and after the interventions, some of the studies concluded that there were no significant changes in the symptoms in the people operated on. Two of the studies showed contradictory results and the other studies reported that the treatment “could improve symptoms in the face of trauma and some other associated symptoms, without specifically quantifying these changes.

The studies analyzed have methodological limitations, such as a small sample size, lack of an adequate follow-up period, lack of randomization and a control group, and they evaluated psychodrama techniques as adjunctive therapy to another intervention. Based on the findings, it is reinforced that there are multiple barriers that prevent

reaching clinically significant evidence on the effect of psychodrama in the treatment of symptoms in the face of trauma (45).

The main objective of this systematic review was to evaluate the efficacy of psychodrama-based interventions for treating acute or chronic stress reactions, specifically PTSD. With the results found, it can be concluded that the studies had a low level of evidence for the use of this intervention in the treatment of reactions to trauma. This technique has generally been evaluated as adjuvant therapy and has been more widely used in children and adolescents with post-traumatic symptoms.

Finally, it would be recommended that future investigations include randomization, demonstrating the technical skills of the therapist, long-term follow-up, reporting of adherence, adverse situations, and tolerability of treatment. It is also important to homogenize the psychodramatic techniques studied and evaluate PD without any other accompanying intervention, which would help to define more precisely the real impact of this psychotherapeutic technique in PTSD.

#### Financiation

None

#### Conflicts of interest

Authors declare not to have any conflicts of interest. This research did not get any support by the public sector agencies, private sector agencies nor nonprofit agencies.

**Acknowledgments:** We thank the Pontificia Universidad Javeriana, the Department of Psychiatry and Mental Health of said University and the doctors: Sergio Mario Castro Díaz, MD., MSc., And Carlos Gómez Restrepo. MD., MSc., PhD., For their advice.

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