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Comparing the Effectiveness of Music Therapy, Dance Movement, and Art Therapy on the Mistrust/Mistreatment Schema in Women with Symptoms of Depression Aged 20-30

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ABSTRACT

Objective: The present study aimed to compare the impact of music therapy, dance movement, and art therapy on the mistrust/mistreatment schema among women aged 20 to 30 with symptoms of depression visiting counseling centers in Tehran.

Method: This research is applied in purpose and quasi-experimental in method, employing a pre-test - post-test design. The population consisted of all women aged 20 to 30 with symptoms of depression who visited four counseling centers in Tehran, among whom 60 eligible individuals were purposively selected and randomly assigned to four groups (three experimental and one control). Interventions based on the therapeutic protocol (music therapy and dance movement, art therapy) were conducted in eight sessions for the experimental groups, while the control group received no intervention. To test the hypotheses, the Young Schema Questionnaire (1988) (short form of 90 questions) was used. Descriptive and inferential statistical indices, including the covariance test, were utilized for data analysis.

Findings: The results showed no significant differences in the effectiveness of music therapy, art therapy, and dance therapy on the mistrust/mistreatment schema among women aged 20 to 30 with symptoms of depression visiting counseling centers in Tehran ($p = 0.000$).

Conclusion: It can be concluded that since all three methods of music therapy, art therapy, and dance movement are forms of art therapy, they all affect the mistrust/mistreatment schema, and there is no significant difference in their effectiveness.

Keywords: *Mistrust/Mistreatment Schema, Music Therapy, Art Therapy, Dance Movement*

1. Introduction

In recent decades, extensive efforts to link clinical cognitive therapy with foundational research have created new insights into theories derived from clinical work. The term "schema" has been utilized in various research domains and is generally defined as a structure, template, or framework. In other words, a schema represents a general plan of the prominent elements of an event. Schemas are deep and robust beliefs about oneself and the world, formed during early years of life and considered an individual's knowledge about themselves and the world, informing them about what they and the world are like (Bach, 2019, 2018; Dadomo, 2016).

Schema theories advocate for knowledge construction by the individual, suggesting that personal information is organized and interconnected in networks of ideas, relationships, and rules. Responses in a specific context are a chain of interconnected responses, depending on the external and apparent context of the stimulus and the mental state of the responder (internal), which has activated certain knowledge. According to Young (1989), schemas are actually stereotypical and predetermined functions of individuals in known situations, carrying generalized knowledge about events (Valipour, 2022).

Early maladaptive schemas are emotional and cognitive patterns of self-harm that form early in development and are repeated throughout life. A schema is considered a principal organizing structure essential for understanding life experiences (Muris, 2006; Yarmohamadi Vassel, 2022). Early schemas include beliefs about oneself, others, and the environment, formed due to unmet primary needs, particularly emotional needs (Bach, 2019, 2018). Schemas cause biases in interpreting events, and these biases manifest in interpersonal psychopathology as misunderstandings, distorted attitudes, goals, and unrealistic expectations (HekmatiyaniFard, 2023).

Schemas, rooted in childhood and adolescence, become maladaptive later because they prevent the fulfillment of emotional needs during that period. Behaviorally, an individual engages themselves in self-harm behavior patterns, selecting and maintaining situations and relationships that perpetuate the desired schema. Conversely, they avoid relationships that are likely to repair the schema. Interpersonally, individuals interact in ways that steer others towards responses that reinforce the desired schema (Valipour, 2022).

Early maladaptive schemas persist through cognitive distortions, pessimistic life patterns, and ineffective coping styles (Bach, 2019; Valipour, 2022). When a maladaptive schema is activated, individuals usually experience a high level of emotions such as intense anger, anxiety, sorrow, or guilt (Muris, 2006). This intensity of emotion is usually unpleasant; therefore, individuals often form automatic processes to avoid schema activation. These processes include cognitive avoidance (automatic efforts to stop thoughts and mental images that may activate schemas), emotional avoidance (automatic or deliberate efforts to block feelings activated by schemas), and behavioral avoidance and the tendency to withdraw from real-life situations or conditions that might activate painful schemas (Dadomo, 2016).

Various approaches have been proposed for treating and resolving various issues. One of these approaches, related to the selection of goals, is music therapy. Music is one of the activities that captivates the human brain. One of the common and relatively widespread uses of music is music therapy. In this therapeutic method, pleasant sound stimuli are used for specific therapeutic purposes. Music therapy involves the use of music to 1) induce relaxation, 2) accelerate the recovery process from diseases, and 3) improve mental functioning and promote health. Individuals undergoing music therapy listen to specific music under the supervision of a music therapist or create music for themselves. Music therapy is one of the creative arts therapies or expressive therapies (including art therapy, poetry, drama therapy, and psychodrama). Music therapy can be used alone or in combination with other treatments. Music therapists work with all age groups, from young children to the elderly. In the classifications of the World Health Organization (WHO) and the National Institutes of Health (NIH), music therapy is considered one of the mind-body harmonization methods. The characteristics of this group of therapeutic methods include holism, person-centered (not disease-centered) treatment, emphasis on lifestyle, connection and unity with nature, and attention to the existential dimensions of health. Numerous scientific studies have proven the effectiveness of music therapy in treating cognitive-behavioral disorders such as anxiety, depression, hyperactivity, autism, learning disabilities, speech disorders, psychosis, and mental retardation, as well as physical problems such as migraine and tension headaches, chronic pain, respiratory distress, coronary artery disease, high blood pressure, nausea caused by chemotherapy, and also in facilitating childbirth and

inducing anesthesia and analgesia (Castillo-Pérez, 2010; Zadbagherseyghalani, 2016).

Another effective therapeutic approach in mental health is art therapy. Art therapy assesses the cognitive, interpersonal, or psychological functions of individuals (Faramarzi, 2015; Feldman, 2014). In fact, painting is one of the most important factors in expressing thoughts, beliefs, and inner needs. By examining the paintings of children and adults, useful information can be obtained regarding the personality traits, psychological capacities, emotional and emotional characteristics, pressures, and internal interests of individuals (Naderi, 2011). Art therapy originates from the theories of Freud, Jung, and others, and is especially influenced by psychoanalytic technique. From the perspective of psychoanalytic theory, painting is considered a clinical-projective activity. Freud believed that the image of desires formed by art is projective and manifest; that is, through painting, an individual can express what is in their unconscious mind and possibly causing discomfort and anxiety (Feldman, 2014; Naderi, 2011). The basis of art therapy is involving participants in the structural process of art to indirectly express their thoughts and feelings. Individuals can overcome their emotions through the projection of their inner life with painting (Golamzadeh, 2014; Karimae, 2019). Art therapy in general, and art therapy in particular, is a method for treating mental problems of individuals, in which artistic creativity is used to promote physical, mental, and emotional health at different ages. This method can increase an individual's self-awareness regarding their emotions and conflicts and prepare them to face the problems that arise in mental health processes (Atari, 2011; Veiskarami, 2017).

Dance therapy or movement therapy is one of the complementary medical methods effective in treating various physical, mental, and emotional pressures and diseases. I invite you to read this article. Dancing involves moving body parts accompanied by music. Its artistic aspect is what distinguishes it from other physical activities. Dancing with music goes back to the oldest innate nature of humans. Since ancient times, dance has been part of culture and, in addition to being beneficial for the body and mind, strengthens the senses of sight, hearing, and equilibrium. The dances of each nation have specific styles and types for communicating with others. Dance metaphorically expresses the relationships of humans with each other. In group dances, a common feeling and emotion arise among the dancers and spectators. Dance therapy, also called movement therapy, uses movement as a process of

integrating emotional, cognitive, physical, and social processes and is one of the main expressive arts that involves the direct expression of emotions and mental states through physical movements. In dance therapy, the body and mind or body and mind are interconnected, meaning that every body movement is affected by an inner emotional state. Alternative medicine experts believe that stresses and mental and emotional problems often manifest in the body as muscle tension, and this issue is one of the factors that make movement and dance very effective in addressing it. Today, it is used as a powerful tool in the field of therapy and self-knowledge. Dance therapy is used as psychotherapy for movement and brings about changes in emotions, cognition, physical functioning, behavior, and perspective, and reduces stress and psychological pressure (Kiepe, 2012). Based on the results of studies, it can be said that among the newest psychological interventions in recent years in the treatment of behavioral and mental disorders, the method of music therapy and art therapy through painting therapy and dance therapy with rhythmic movements, whose effectiveness in various studies including aggression and depression (Silver, 2006), oppositional defiant disorder (Kiepe, 2012), self-concept and happiness, and interpersonal skills (Kiepe, 2012) has been confirmed; however, no study has yet been conducted on the use of music therapy, art therapy, and dance therapy in improving the mental health of adolescents and youth; therefore, conducting research in the field of mental health and using beneficial and effective therapeutic methods such as music therapy, art therapy, and dance therapy, which are essential for expressing emotions, presenting thoughts, and showing feelings that are major and influential issues during adolescence and youth, is necessary and of high importance.

Given that no study has yet been conducted on comparing the impact of various art therapy methods such as music therapy, dance therapy, and painting therapy on the mistrust/mistreatment schema, the researcher aimed to compare the impact of various group therapy methods including music therapy, dance therapy, and painting therapy on the mistrust/mistreatment schema in women aged 20-30 visiting counseling centers in Tehran, thereby raising the main question: Is there a difference in the effectiveness of music therapy, dance therapy, and painting therapy on the mistrust/mistreatment schema in women with symptoms of depression aged 20-30 visiting counseling centers in Tehran?

2. Methods

2.1. Study design and Participant

The present study was semi-experimental, utilizing a pre-test and post-test design, and focused on examining the impact of independent variables (music therapy, art therapy, and dance therapy) on the dependent variable (mistrust/mistreatment schema). This research was conducted using three experimental groups and one control group, with participants randomly assigned. The population consisted of all women aged 20 to 30 with symptoms of depression who visited four counseling centers in Tehran. To select the sample, an announcement about the organization of sessions and the conditions for initial registration was communicated to potential participants. After registering, 60 eligible individuals were purposively selected through preliminary interviews and a pre-test. They were then randomly divided into four groups (three experimental groups of 15 participants each, and one control group of 15). Interventions based on the therapeutic protocol (music therapy, art therapy, and dance therapy) were carried out in eight sessions, with each group undergoing experimental measurements twice (pre-test and post-test).

Inclusion criteria for the research were age between 20 and 30 years, no psychological treatment received or a gap of more than one month since previous treatments, willingness to continue the program after necessary explanations about the time, place, and nature of the sessions, no history of neurological or psychiatric illness, no hospitalization due to mental illness, consistent attendance during therapeutic sessions, and no experience of stressful events such as divorce, death of close relatives, job loss, accidents, etc., in the past six months. Exclusion criteria included receiving other psychological treatments during the study, experiencing a stressful event, inconsistent attendance at therapy sessions, unwillingness to continue the program, or being hospitalized for mental health issues.

2.2. Measures

2.2.1. Young Schema

Developed by Jeffrey Young in 1988, this self-report questionnaire contains 205 items and is designed to measure 16 early maladaptive schemas. Factor analysis supported the existence of 13 (Schmidt, Joiner, Young, & Telch, 1995) and 15 schemas (Lee, Taylor, & Dunn, 1999) among the proposed 16. The short form of the Young Schema Questionnaire (YSQ-SF), based on findings from Schmidt et al. (1995), includes a subset of 75 items covering 15 early

maladaptive schemas. Each item is rated on a six-point scale ranging from (completely false) to (completely true). A higher score on a particular subscale suggests a greater likelihood of that maladaptive schema for the individual. The comprehensive initial study on the psychometric properties of the YSQ was conducted by Schmidt, Jones, Young, and Telch (1995). This research found that for each schema, the alpha coefficient ranged from 83% for undeveloped self-schemas to 96% for defect/shame, with retest reliability in a non-clinical population ranging from 50% to 82%. The initial subscales showed high test-retest reliability and internal consistency. The questionnaire also demonstrated good convergent and discriminant validity with scales of psychological distress, perceived vulnerability to depression, and symptoms of personality disorders. These researchers conducted a factor analysis using clinical samples, and the factors obtained closely aligned with the hierarchies of schemas Young had developed based on clinical work. In a sample of undergraduate students, 17 factors were obtained, covering 15 of Young's 16 proposed schemas (1990), although one schema (social undesirability) was not identified, while two new factors emerged that had not been previously accounted for. Smith and colleagues (1995) performed a new attempt to cross-validate this factorial structure on a sample from the same initial population. The researchers found that 13 of the initially obtained 17 factors were replicated in the second sample. Furthermore, they concluded that three higher-order factors exist, revealing that in a sample of patients, 15 factors were identified out of the 16 originally proposed by Young (1990). These 15 factors accounted for 45% of the total variance. The norm for this questionnaire in Iran was established by Ahi on a sample of 387 students from universities in Tehran, including 252 females and 135 males, randomly selected from multiple stages at universities such as Allameh Tabataba'i, Shahid Beheshti, Tehran, Tarbiat Modares, and Azad University Science and Research Branch. Internal consistency of this questionnaire using Cronbach's alpha was 97% for females and 98% for males (Valipour, 2022).

2.2.2. Depression

First introduced by A. T. Beck, Ward, Mendelson, Mock, and Erbaugh in 1961, this inventory was revised in 1971 and published in 1978. The test consists of 21 items that reflect various symptoms and asks respondents to rate the severity of these symptoms on a four-point scale from 0 to 3. The

questions cover areas such as feelings of guilt, sense of failure, feelings of inadequacy, irritability, and sleep disturbance. This self-assessment tool typically requires 5 to 10 minutes to complete, and an understanding at a 5th or 6th-grade reading level is sufficient for comprehension of the items. Scores range from a minimum of 0 to a maximum of 63, but scores of 40 or 50 are typically found only in cases of severe depression. Clinically depressed individuals usually score between 12 and 40. The Cronbach's alpha for the Persian version of this scale, in a sample of 723 students, was calculated at 0.81 (Golamzadeh, 2014).

2.3. Interventions

2.3.1. Music Therapy

Music therapy sessions focused on using music to enhance emotional expression, improve mood, and reduce feelings associated with mistrust and mistreatment schemas. The sessions were structured to progressively introduce more interactive and complex tasks (Amini Shirazi, 2022; Castillo-Pérez, 2010; Zadbagherseyghalani, 2016).

Session 1: Introduction and Relaxation - Participants were introduced to the principles of music therapy and its goals. The session included listening to calming music to reduce anxiety and promote relaxation.

Session 2: Musical Preferences and Receptivity - Participants shared their musical preferences, and therapists tailored the session to include selected music, fostering a sense of safety and personal connection.

Session 3: Active Listening - Focused on deep listening to different genres of music, identifying and discussing the emotions evoked by these pieces.

Session 4: Improvisation - Participants were encouraged to engage in musical improvisation using simple instruments, facilitating spontaneous emotional expression.

Session 5: Songwriting - This session involved writing simple lyrics or modifying existing songs to express personal feelings and stories, enhancing personal reflection and expression.

Session 6: Singing - Group singing activities were used to promote community feeling and emotional release.

Session 7: Musical Performance - Participants practiced and performed their creations or rehearsed pieces, which helped in building self-esteem and group cohesion.

Session 8: Reflection and Closure - Participants reflected on their experience throughout the sessions and discussed any changes in their feelings or perceptions related to the mistrust/mistreatment schema.

Dance Therapy Protocol

2.3.2. Art Therapy

Art therapy sessions utilized various mediums to explore and express emotions, aiming to alter the negative schemas by fostering a new understanding and perspective through creative expression (Ghahremani, 2016; Golamzadeh, 2014; Karimae, 2019).

Session 1: Introduction and Collage Making - An introduction to art therapy was provided, and participants created collages to express their current emotional states.

Session 2: Drawing Emotions - Participants drew abstract representations of their emotions, using colors and shapes to depict their feelings.

Session 3: Clay Work - Working with clay to form shapes that represented personal barriers or challenges related to mistrust.

Session 4: Painting to Music - Participants listened to music while painting, allowing the music to influence their creative expression.

Session 5: Mask Making - Creating masks that represented how they believe others see them versus how they see themselves.

Session 6: Sculpture - Building small sculptures that symbolize personal growth or change they wish to see in themselves.

Session 7: Artistic Storytelling - Creating a series of artworks that tell a story of a significant personal experience, focusing on themes of trust and mistreatment.

Session 8: Exhibition and Discussion - Participants shared their artworks in a group setting, discussing the process and any insights or emotional shifts they experienced.

2.3.3. Dance Therapy

Dance therapy sessions were designed to use body movement as a means to express and explore emotions, aiming to connect physical and emotional insights and foster a healthier schema regarding trust and self-image (Guzmán-García et al., 2013; Kiepe, 2012; Meekums et al., 2012).

Session 1: Introduction and Movement Exploration - Introduction to the concepts of dance therapy followed by gentle warm-up movements to explore personal space and boundaries.

Session 2: Rhythmic Movement - Engaging in rhythmic exercises to music, focusing on the expression of emotions through body rhythms.

Session 3: Mirror Exercises - Working in pairs, participants mirrored each other's movements to build empathy and understanding.

Session 4: Expression Through Choreography - Participants created simple choreographies based on personal stories of trust and mistrust.

Session 5: Role Play Through Dance - Engaging in role-playing activities using dance to explore different perspectives within personal relationships.

Session 7: Group Dynamics - Focusing on group dances that require cooperation and trust, emphasizing collective support.

Session 8: Performance and Reflection - Participants performed a group choreographed piece that encapsulated their journey through the therapy, followed by a discussion on the insights gained and feelings experienced regarding their schemas.

2.4. Data Analysis

Data analysis in the quantitative section was carried out in two stages: descriptive statistics (mean and standard deviation) and inferential statistics (repeated measures analysis of variance). Calculations were performed using SPSS software, version 22.

3. Findings and Results

The average age of the art therapy group is 27.20, the music therapy group is 28.13, the dance therapy group is 27.33, and the control group is 27.46. In the art therapy group, the majority of participants (46.7%) hold a bachelor's degree and the fewest (13.3%) hold a degree higher than a bachelor's. In the music therapy group, the majority (53.3%) have a diploma and the fewest (13.3%) hold a degree higher than a bachelor's. In the dance therapy group, the majority (80%) hold a bachelor's degree and the fewest (6.7%) hold a degree higher than a bachelor's. In the control group, the majority (53.3%) have a diploma and the fewest (20%) hold a bachelor's degree.

Table 1

Descriptive Indices of Mistrust/Mistreatment Schema by Group and Test

	Art Therapy		Music Therapy		Dance Therapy		Control	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Pre-test	15.20	4.98	14.53	5.79	16.86	5.44	13.00	4.84
Post-test	13.80	4.47	13.06	4.53	15.33	4.67	13.01	3.92
Follow-up	13.55	4.26	13.01	4.48	15.11	4.51	13.08	3.90

As observable in Table 1, the mistrust/mistreatment schema in the art therapy, music therapy, and dance therapy groups decreased at post-test compared to pre-test, but in the control group, no significant difference was observed between the pre-test and post-test means. The Kolmogorov-Smirnov test results indicated that mistrust/mistreatment follows a normal distribution ($p > 0.05$). Furthermore, since the p-value obtained in the M Box test is below the significance level of 0.01, the condition of homogeneity of variance-covariance matrices is established at the error level

of 0.01. One of the assumptions of analysis of variance with repeated measures is the equality of error variances, assessed using Levene's test. The results of the examination of the equality of error variances show that the p-values in Levene's tests for the variables under study are greater than 0.05; therefore, at the significance level of 0.05, the assumption of homogeneity of error variances in the studied groups is achieved. In other words, the error variances of the mistrust/mistreatment variable at the pre-test and post-test stages do not differ significantly.

Table 2

Results of Wilks' Lambda, Hotelling's Trace, Pillai's Trace, and Largest Root Tests

Test	Value	F	Hypothesis df	Error df	Significance	Partial Eta Squared
Pillai's Trace	0.908	272.152	2	55	0.001	0.908
Wilks' Lambda	0.092	272.152	2	55	0.001	0.908
Hotelling's Trace	9.896	272.152	2	55	0.001	0.908
Largest Root	35.16	272.152	2	55	0.001	0.908

The results in Table 2 demonstrate that all tests are significant for mistrust/mistreatment scores. Thus, it can be stated that the relationship between the linear combination of dependent variables and the independent variable is significant. In other words, at least one of the therapeutic methods had an effect on the dependent variables. The sphericity assumption (homogeneity of variance-covariance

matrices) with reported Mauchly's sphericity values is accepted at the error level of 0.05. Therefore, the assumptions of multivariate analysis of variance with repeated measures are met, and it is permissible to use analysis of variance with repeated measures. Below, the results of the effects of time and the interaction effect of time and group on the research variable are presented.

Table 3

Results of Between-Group Effects for the Mistrust/Mistreatment Variable

Factor	Sum of Squares	df	Mean Square	F	Significance	Eta Squared
Time	44.408	1	44.408	30.551	0.000	0.353
Time x Group	5.692	3	1.897	1.305	0.282	0.065
Error	81.400	56	1.454			

The results presented in Table 3 indicate that there are significant differences between the scores of dependent variables across the experimental and control groups at the pre-test and post-test times. Specifically, there are significant differences in the mistrust/mistreatment variable

among participants in the control, art therapy, music therapy, and dance therapy groups. To further scrutinize these differences, the Bonferroni post-hoc test was utilized, which is elaborated upon below.

Table 4

Results of Bonferroni Post-hoc Test for the Mistrust/Mistreatment Variable

Comparison	Mean Difference	Standard Error	Significance
Art Therapy vs. Music Therapy	0.733	1.648	0.001
Art Therapy vs. Dance Therapy	-1.533	1.648	0.001
Art Therapy vs. Control	1.267	1.648	0.001
Music Therapy vs. Art Therapy	-0.733	1.648	0.001
Music Therapy vs. Dance Therapy	-2.267	1.648	0.001
Music Therapy vs. Control	0.533	1.648	0.001
Dance Therapy vs. Art Therapy	1.533	1.648	0.001
Dance Therapy vs. Music Therapy	2.267	1.648	0.001
Dance Therapy vs. Control	2.800	1.648	0.569
Control vs. Art Therapy	-1.267	1.648	0.001
Control vs. Music Therapy	-0.533	1.648	0.001
Control vs. Dance Therapy	-2.800	1.648	0.569

According to the data presented in Table 4, there are no significant differences between the mean scores of mistrust/mistreatment across the three approaches of art therapy, music therapy, and dance therapy ($p > 0.05$). This indicates that the impact of art therapy, music therapy, and dance therapy on the mistrust/mistreatment schema is equivalent.

mistrust/mistreatment schema in women aged 20 to 30 with depressive symptoms who visited counseling centers in Tehran. The results showed no significant differences in the effectiveness of music therapy, art therapy, and dance therapy on the mistrust/mistreatment schema in these women. These findings are consistent with the results of prior studies (Amini shirazi, 2022; Atari, 2011; Castillo-Pérez, 2010; Faramarzi, 2015; Feldman, 2014; Golamzadeh, 2014; Guzmán-García et al., 2013; Karimae, 2019; Kiepe, 2012; Meekums et al., 2012; Naderi, 2011; Veiskarami, 2017; Zadbagherseyghalani, 2016). However, it should be noted that these studies did not compare the effectiveness of

4. Discussion and Conclusion

This study aimed to compare the effectiveness of music therapy, art therapy, and dance therapy on the

art therapy, music therapy, and dance therapy; each was examined separately, which underscores the necessity and novelty of this research.

Art therapy refers to a form of treatment where individuals engage in the world of art and creativity, undergoing mental and emotional healing through visual and auditory creative activities. Art therapy facilitates mental health and well-being. Mental disorders such as anger or aggression are sometimes controlled by engaging in art. In fact, by engaging in art, a person's thoughts and feelings become involved, motivating and creating new experiences for them, which aids their mental and physical health. Continuation of this leads to self-awareness and the recognition of their talents and skills, ultimately helping them achieve internal satisfaction and happiness, which alleviates many of the mental and emotional disturbances in individuals (Faramarzi, 2015; Golamzadeh, 2014).

Art therapy provides a context where individuals can connect with the environment through painting, music, and dance, and find mental peace without the need for conversation or an interlocutor to speak to. The use of artistic methods to treat mental disorders and enhance mental health is recognized as art therapy. Art therapy is a technique based on the idea that creative expression can foster healing and psychological well-being. The impact of all three modalities—art therapy, music therapy, and dance therapy—on the mistrust/mistreatment schema is due to this reason (Naderi, 2011).

Given the similarities between art therapy, music therapy, and dance therapy, this study compared these three therapeutic methods to determine whether, despite all their similarities, the differences between them could affect their effectiveness. Ultimately, the results showed that none of the treatments was superior to the others. The reason there was no difference in the effectiveness of these three therapeutic methods in this study could be because all three are forms of art therapy (Castillo-Pérez, 2010; Naderi, 2011).

The overall goal of art therapists is to enable clients to use artistic tools in a safe and healthy environment to foster personal growth and development. Thus, in art therapy, clients are given the opportunity to express their thoughts and feelings and communicate with others (Golamzadeh, 2014; Kiepe, 2012). Art opens doors and windows to the human psyche. Suddenly, individuals see and understand themselves in different ways. The subject of art is provided to the client, and they create a process that yields immediate behavioral data that can also metaphorically be used by the therapist or client as a generalization of the client's habitual

response to life situations. In the process of creating art, the entire brain is engaged, accessing both the right and left hemispheres. This integration of emotions, cognition, and senses results in new insights.

Art therapy is a care method that expands the psychotherapeutic process to include verbal, visual, and emotional reactions of the client. Art makes visible those things that are difficult and painful to see or articulate. It helps clients see more clearly and feel a sense of life within themselves. When clients are asked to simply explain a decision made during the art-making process, their behavior, thoughts, and feelings become as clear as they are in other situations (Feldman, 2014). As clients feel, discover, think, and create, they also gain new insights about themselves, their relationships, and their life patterns. This is why, in this study, art therapy (including music therapy, art therapy, and dance therapy) was effective in reducing the mistrust/mistreatment schema.

5. Suggestions and Limitations

This research, like all studies, faced limitations. Due to time constraints, it lacked a follow-up period. Typically, having an independent evaluator is considered essential in educational and therapeutic research. Due to limited resources and time constraints, the study lacked an independent evaluator in all aspects of the research, and data were collected through self-reporting by participants via questionnaires, which could be influenced by various factors such as the respondents' tendency to present a positive image. Considering the research findings, it is recommended that efforts be made to reduce the levels of maladaptive schemas and depression by planning educational programs that can influence depression and schemas. Also, given the effectiveness of music therapy in modifying the mistrust/mistreatment schema, it is suggested that these therapeutic methods be more widely used in counseling clinics. Furthermore, to enhance mental health in society, it is recommended that organizations and treatment institutions embrace psychological educational programs, such as art therapy, cooperate fully with the implementers of these programs, and expedite the therapeutic process.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

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.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

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

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