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# A Comparison between Effects of Theater-Based Art Therapy and Solution-Focused Therapy on Social Adjustment in Students with Low Academic Achievement

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#### ABSTRACT

**Objective:** This study aimed to compare the effects of theater-based art therapy (TRT) and solution-focused therapy (SFT) on social adjustment in students with low academic achievement.

Methods and Materials: A quasi-experimental methodology with a pretest/posttest design and an unmatched control group was adopted. The statistical population consisted of female students of lower-secondary high schools in grade 9 with low academic achievement (GPA<15) in Districts 5 and 7 of Tehran Municipality during the academic year of 2022-2023. Forty-five students meeting the inclusion criteria were selected as the participants via convenience sampling. They were randomly divided into two experimental groups and a control group (fifteen students in each group). The data were collected via the Weinberger Adjustment Inventory (WAI). In addition, the participants in the experimental groups attended ten 60-minute sessions of a TRT intervention designed according to Jones (1997) and eight 60-minute sessions of an SFT intervention designed according to Grant (2011); the control group received no intervention. The data were analyzed statistically using the repeated measures analysis of variance (ANOVA) in SPSS V.18.

**Findings:** The results showed that both TRT and SFT had positive effects on the social adjustment of the participants; however, SFT was more effective than TRT. **Conclusion:** TRT can help adolescents improve their social adjustment and perform better in both daily life and education over time by using consistent, intentional exercises and activities. The TRT intervention can be customized to meet adolescents' requirements.

Keywords: Social adjustment; Theater-based art therapy; Solution-focused therapy (SFT)

#### 1. Introduction

Turrently, academic achievement serves as a significant determinant of success in various fields in life. Highachieving students display increased attentiveness and concentration toward the specific subjects designated for educational purposes (Alfonso, 2019). The diligent efforts of these students are hindered by various personal factors, such as anxiety, which greatly affect their productivity and outcomes (Van Raalte & Posteher, 2019). Academic achievement refers to the level of learning and the acquisition of skills or knowledge expected at a particular stage or age (Faber, 2019). Conversely, low academic achievement or failure to acquire a profession can be attributed to a range of social, economic, familial, cultural, and psychological factors (Closson & Boutilier, 2017). Low academic achievement in students can arise from environmental, psychological, emotional, and physical factors and lead to cognitive, communication, emotional, and behavioral difficulties (Alfonso & Lonigan, 2021).

The term "social adjustment" refers to the ongoing process by which individuals utilize their abilities and adapt their responses to their surroundings to effectively modify their circumstances (Pham & Murray, 2016). This term also refers to a balance between students and their surrounding environment (Besar et al., 2020; Gregory et al., 2016). This is a process that enables students to predict and understand people's actions (Baptista et al., 2016), regulate their own behavior, and oversee emotional and social interactions (Przybylski & Mishkin, 2016). Social adjustment in students is typically regarded as a significant indicator of mental health (Fredricks et al., 2016; Valachiné et al., 2021). Collaboration among students is essential for attaining a shared objective and fostering increased social cohesion (Gardner et al., 2018). Inefficient cognitive processing leads to the creation of an inefficient data processing structure, decreasing social communication and social adaptation (Oclaudya & Sulistyarini, 2021). This is a consequence of one's characteristics in their interaction with environment (Garland, 2016; Tanyi, 2002). Social adjustment generally requires individual capabilities, such as behavioral, cognitive, and emotional processing skills, depending on the circumstances (Regueiro et al., 2018). Students with low academic achievement experience desirable conditions in this regard. Consequently, such students cannot have efficient interactions in their communication at school (Sh, 2014).

The incorporation of methods that encompass activity, cognition, behavior, affection, and interactions simultaneously is an effective strategy to improve social adjustment. Theater-based art therapy (TRT) and Solution-Focused Therapy (SFT) are two novel examples of such approaches (Oclaudya & Sulistyarini, 2021). TRT is an effective art-based approach currently employed for rehabilitating and enhancing mental health. TRT utilizes various dramatic methods and specialized techniques during performances to allow individuals to express their internal conflicts and hidden struggles through acting. This process enables them to confront and understand their true selves, ultimately facilitating personal growth and behavioral improvement (Amiri Majd et al., 2022). TRT aims to address the internal issues of individuals who are experiencing mental and emotional problems (Rowe et al., 2017). TRT involves a deliberate repetition and frequent exposure of individuals to behaviors and thoughts that may initially be distressing or bothersome. This process reduces one's sensitivities to such actions and thoughts over time (Besar et al., 2020). This is commonly known as "displaying upside down" (Sheikholmolouki, 2016). The fundamental principle this psychotherapy approach posits psychopathological symptoms frequently arise as adverse outcomes of ineffective or maladaptive coping strategies (Valachiné et al., 2021). Drama therapists employ a range of techniques to establish appropriate scenarios and facilitate mental exploration. These techniques include creative acting methods, existential methods, and the use of objects to establish connections and relationships tangibly. The aim is to provide psychological treatment (Dehnavi & Sherafati, 2020).

On the other hand, SFT is a therapeutic approach that focuses on creating significance, harnessing positive emotions (such as hope), and collaborating with clients to develop their own solutions (Sh, 2014). It involves the therapist and client collaborating to identify a suitable solution for the client's current problem (Brockman et al., 2016). SFT helps clients take advantage of their strengths to focus on future-oriented goals and tasks (Roth, 2019). The goal of SFT is to concentrate on the advantageous and pragmatic aspects of a solution. Thus, clients can discover their own route to a solution that aligns with their specific objectives, strategies, capabilities, and assets (Hsu et al., 2021).

TRT and SFT are new methods that actively help individuals as they include many cognitive, behavioral, emotional, and social areas (Rahimi Pardanjani et al., 2021).

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TRT is one of the most successful forms of psychotherapy. In individual psychotherapy, the therapist and client can only communicate to open up about the issue, identify contributing factors, and comprehend the underlying feelings and ideas, while action and performance also assist the therapist in TRT (Snir, 2022). TRT helps understand how one's thoughts, emotions, and behaviors are intertwined and how they contradict one another (Valachiné et al., 2021). It is intended to assist individuals in embracing a positive and practical perspective of managing difficulties, better understanding the role of emotions, and creatively formulating a strategy to alleviate psychological distress and enhance overall well-being (Bakhtiarzadeh et al., 2020). On the other hand, solution-focused brief therapy (SFBT) is different from conventional treatments as it prioritizes the present and future over the past (Shahi & Ojinejad, 2014). This treatment shows no interest in raising awareness of the issue since it is highly preoccupied with the possibilities; it suggests that problems and their solutions do not always have to be related (Brockman et al., 2016). SFT includes empowering assumptions (Eftekhari Moghadam, 2020); for example, individuals are healthy and competent and they can develop solutions to improve their lives (Garba & Tanko, 2022).

Rahimi-Amiri-Majd et al. (2022) concluded that art therapy (theatre and drama) significantly improved social adjustment in boys. This implies a significant difference between the experimental and control groups in the effectiveness of art therapy in the improvement of social adjustment (Rahimi Pardanjani et al., 2021). Shahi and Ojinejad (2014) showed that SFT increased social adjustment and alleviated identity crises in female adolescents (Shahi & Ojinejad, 2014). Oclaudya et al. (2021) found that art therapy can effectively improve social adjustment disorders in adolescents (Oclaudya & Sulistyarini, 2021). Hence, it is necessary to examine the factors affecting cognitive and behavioral parameters in students who exhibit low academic achievement. Identification of specific variables that enhance academic achievement in such students helps establish a foundation for future research and mitigate the occurrence of these conditions. A few studies in Iran have compared the effects of TRT and SFT on social adjustment and academic procrastination among students with low academic achievement. Therefore, this study seeks to determine whether TRT and SFT differ in affecting social adjustment in students with low academic achievement.

#### 2. Methods and Materials

#### 2.1. Study Design and Participants

This study was a quasi-experimental research with a pretest/posttest design and a control group. The statistical population consisted of female students at lower-secondary high schools with low academic achievement (GPA<15) in Districts 5 and 7 of Tehran Municipality during the academic year of 2022-2023. Since the minimum sample size per group in intervention studies is fifteen, a total of forty-five students meeting the inclusion criteria were selected through convenience sampling; the participants were randomly divided into two experimental groups and a control group (fifteen students in each group).

The inclusion criteria included female gender, low academic achievement, fifteen years of age, lack of mental or physical disorders that could hinder participation in the therapy sessions, non-reception of prescribed drugs that could affect class activity, living in Tehran, and parents' written consent. The exclusion criteria, on the other hand, were failure to meet the inclusion criteria at any stage of the study, submission of incomplete questionnaires, failure to attend three or more intervention sessions, and unwillingness to continue participation.

Initially, a preliminary investigation was conducted by engaging in discussions with experts and university professors to gather their views on each stage of the research. Once organizational permission of the Research Deputy of the university, Tehran Office for Education, and Tehran Office for Treatment had been obtained, the two interventions were implemented (two sessions per week) for the experimental groups (alternatingly on even and odd days).

According to Jones (1996), the TRT intervention was developed in ten 60-minute sessions (Jones, 1996). Amirkhani et al. (2014) confirmed the content validity of this intervention (Amirkhani et al., 2014). In addition, according to Grant (2011), the SFT intervention was developed in eight 60-minute sessions (Grant, 2011). Pourdel and Samarisafa (2021) confirmed the content validity of the SFT intervention (Pourdel & Samari Safa, 2021). The parents of the participants were asked to provide their written consent. This study was observed all ethical principles in research, including respect, confidentiality, and professional, scientific, and educational accountability. All participants in the experimental and control groups filled out the questionnaire before the intervention (pretest) and after it

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(posttest). Indeed, the control group received no intervention.

#### 2.2. Measure

# 2.2.1. Social Adjustment

This 37-item questionnaire was developed by Weinberger and Schwartz (1990). It consists of three subscales: dispersion (items 1, 3, 7, 13, 15, 19, 21, 25, 27, 32, 34, and 35), no constraint (items 11, 22, 23, 24, 26, 28, 29, 30, 31, 33, 36, and 37), and non-repression (items 2, 4, 5, 6, 8, 10, 12, 14, 16, 17, and 20). The items are scored on a 5-point Likert scale, ranging from 1 (almost never) to 5 (almost always). Higher scores indicate a higher level of social adjustment. It is noteworthy that items 1, 2, 4, 5, 6, 10, 11, 12, 14, 15, 16, 20, 21, 22, 23, 24, 26, 29, 30, 31, 33, and 35 are scored inversely. The developers of the WAI confirmed its construct and content validity, while its reliability was measured using Cronbach's alpha and found to be between 0.81 and 0.85. In Iran, Saeedi et al. (2016) confirmed the validity of the WAI and reported its Cronbach's alpha to range between 0.67 and 0.84 (Saeedi et al., 2016).

#### 2.3. Intervention

# 2.3.1. Theater-Based Art Therapy

TRT leverages drama and theatrical techniques to enhance emotional understanding, interpersonal skills, and social adjustment. Rooted in the premise that artistic expression fosters self-awareness and problem-solving skills, TRT engages participants in role-playing and storytelling to explore moral reasoning and personal development. This intervention combines cognitive and experiential learning by incorporating theatrical elements such as stage dynamics, emotional expression, and character development. The process aims to build social competence, boost self-esteem, and promote collaborative behaviors, culminating in a group performance that reinforces learned skills.

Session 1: Introduction, Goal Setting, and Pretest

The session begins with an introduction to the group, the facilitator, and the objectives of the program. Participants discuss their expectations, responsibilities, and protocols while exploring the concept of moral reasoning and its role in personal growth. A brief overview of theater therapy is provided to set the stage for subsequent sessions.

Session 2: Presenting the Main Components of Drama

Participants are introduced to fundamental elements of theatrical performance, including physicality, emotive expression, and sensory awareness. Principles such as stage movement, positioning, and dynamics are also covered to establish a foundation for practical activities.

Session 3: Correct Understanding and Expression of Emotions

This session focuses on teaching participants to accurately recognize and express emotions using facial mimicry, body language, and non-verbal cues, enhancing emotional intelligence and communication skills.

Session 4: Evaluating and Cultivating a Character

Participants learn to develop a character through physiological, sociological, and psychological analysis. They practice applying these skills to scenarios provided by the facilitator.

Session 5: Reading and Analyzing a Play

The session introduces methods for reading and analyzing plays, focusing on understanding themes, character arcs, and underlying messages.

Session 6: Assignment of Roles

A play based on Kohlberg's moral dilemma ("Heinz and the Theft of Medication") is distributed. Participants receive roles and begin rehearsals, guided by the facilitator.

Session 7: Rehearsal and Group Practice

Rehearsals are conducted in groups, encouraging collaboration and ensuring active participation from all members.

Session 8: Performing a Hypothetical Play

Participants perform the hypothetical play, showcasing their individual roles and receiving feedback to improve performance.

Session 9: Final Performance

The group presents the play to an audience, followed by a discussion where participants share their emotions and insights from the intervention.

Session 10: Summarization, Conclusion, and Posttest

The intervention concludes with a summary of lessons learned, a group discussion on experiences, and administration of a posttest to evaluate outcomes.

# 2.3.2. Solution-Focused Therapy

SFT emphasizes identifying strengths, constructing solutions, and fostering positive change. This structured approach helps participants focus on achievable goals rather than past problems, cultivating optimism and resilience. By using techniques such as miracle questions, coping

strategies, and exception identification, SFT guides participants in recognizing their capabilities and building actionable steps toward improvement. The intervention aims to enhance problem-solving skills, boost motivation, and foster a solution-oriented mindset.

#### Session 1: Greeting and Introduction

The session starts with introductions, group naming, and outlining the intervention structure and objectives. Participants complete a pretest to establish a baseline for progress evaluation.

# Session 2: Creating Common Mental Constructs

Participants discuss their thoughts from the previous session, engage with miracle questions, and receive assignments to identify goals and envision desired outcomes.

#### Session 3: Engagement and Fostering Optimism

This session focuses on building optimism and exploring current circumstances. Facilitators use thought-provoking questions and incentives to motivate participants, followed by new assignments.

#### Session 4: Discovery of Exceptions

Participants review the session and assigned tasks while identifying past instances when problems were absent or less impactful. Assignments include reflective exercises like "miracles" and "crystal ball" questions.

#### Session 5: Discovery of Solutions (Part I)

The group begins identifying actionable solutions to their challenges, reviewing previous tasks, and setting new objectives.

Session 6: Discovery of Solutions (Part II)

This session continues solution discovery, emphasizing coping strategies, predictive assignments, and refining previously discussed solutions.

#### Session 7: Strengthening Exceptions

Participants focus on reinforcing identified exceptions, learning techniques to reduce unproductive behaviors and increase effective actions. New assignments aim to consolidate progress.

#### Session 8: Conclusion and Posttest

The intervention concludes with a review of progress, feedback from participants, and acknowledgment of changes achieved. A posttest evaluates outcomes, and the facilitator celebrates the group's efforts.

# 2.4. Data Analysis

The data were analyzed statistically using the repeated measures analysis of variance (ANOVA) (mixed models), the Bonferroni test, and Tukey's test in SPSS V.18.

#### 3. Findings and Results

As shown in Table 1, there was no difference between the experimental groups (TRT and SFT) and the control group in the pretest means of social adjustment. However, a significant difference was observed between the experimental and control groups in the posttest mean score.

Table 1

Pretest, Posttest, and Follow-Up Mean Scores for Social Adjustment Subscales

Dependent Variable	Group	Pretest Mean (SD)	Posttest Mean (SD)	Follow-Up Mean (SD)
Dispersion	TRT	14.53 (2.03)	24.40 (6.08)	24.53 (5.34)
	SFT	14.56 (2.96)	17.93 (2.24)	17.96 (3.52)
	Control	14.43 (2.43)	14.60 (3.06)	14.66 (3.21)
No Constraint	TRT	14.19 (2.91)	24.06 (3.22)	24.19 (3.99)
	SFT	13.53 (2.81)	18.06 (3.64)	18.39 (4.51)
	Control	13.93 (1.76)	13.99 (2.64)	14.19 (1.98)
Non-Repression	TRT	12.90 (2.02)	22.80 (3.42)	23.07 (4.17)
	SFT	12.53 (1.85)	17.43 (2.15)	17.47 (2.84)
	Control	12.83 (1.75)	12.87 (1.96)	13.10 (1.72)
Social Adjustment	TRT	41.62 (5.44)	71.26 (9.55)	71.79 (11.02)
	SFT	40.62 (5.50)	53.43 (5.35)	53.82 (8.06)
	Control	41.19 (4.91)	41.46 (5.52)	41.96 (4.68)

When examining the assumptions, the Shapiro-Wilks statistic values for the pretest and posttest scores in students with low academic achievement were insignificant in both the experimental and control groups. This suggests that the distribution of the variables was normal. The statistical analysis, including the analysis of variance, Levene's test,

and Mauchly's test of sphericity, yielded a significance level above 0.05. Thus, the assumption of homogeneity of

variance in the groups was confirmed, supporting the assumptions.

Table 2

Repeated Measures ANOVA (Mixed Models) for Grouping, Treatment Stages, and Interactions

Variable	Source of Change	Sum of Squares	df	Mean Squares	F-value	Sig.	Effect Size	Test Power
Dispersion	Group	1009.181	2	504.591	28.278	0.01	0.574	1
	Treatment Stage	464.669	1	464.669	43.953	0.01	0.511	1
	Mutual Interaction	372.439	2	186.219	17.615	0.01	0.456	1
No Constraint	Group	1051.244	2	525.622	59.673	0.01	0.739	1
	Treatment Stage	572.544	1	572.544	53.636	0.01	0.561	1
	Mutual Interaction	355.622	2	177.811	16.657	0.01	0.442	0.999
Non-Repression	Group	1002.744	2	501.372	67.044	0.01	0.761	1
	Treatment Stage	590.336	1	590.336	91.457	0.01	0.685	1
	Mutual Interaction	367.939	2	183.969	28.501	0.01	0.576	1
Social Adjustment	Group	9172.637	2	4586.319	79.197	0.01	0.790	1
	Treatment Stage	4869.378	1	4869.378	103.312	0.01	0.711	1
	Mutual Interaction	3267.039	2	1633.519	34.658	0.01	0.623	1

According to Table 2, the F-value obtained for the effects of the pretest, posttest, and follow-up stages were significant (p=0.01). Indeed, the interaction between the groups and intervention stages changed. Therefore, there was a significant difference between the pretest, posttest, and

follow-up scores of social adjustment in students with low academic achievement. The Bonferroni test was performed to examine the difference between the mean scores in various stages.

**Table 3**Bonferroni Test Results

Variable	Stage Comparison	Mean Difference	Standard Error	Sig.	
Dispersion	Pretest - Posttest	4.467	0.698	0.001	
	Pretest - Follow-Up	4.544	0.700	0.001	
	Posttest - Follow-Up	0.078	0.070	1	
No Constraint	Pretest - Posttest	4.822	0.629	0.001	
	Pretest - Follow-Up	5.044	0.687	0.001	
	Posttest - Follow-Up	0.222	0.220	1	
Non-Repression	Pretest - Posttest	4.944	0.492	0.001	
	Pretest - Follow-Up	5.122	0.536	0.001	
	Posttest - Follow-Up	0.178	0.175	1	
Social Adjustment	Pretest - Posttest	14.233	0.768	0.001	
	Pretest - Follow-Up	14.711	0.797	0.001	
	Posttest - Follow-Up	0.478	0.455	1	

According to Table 3, the social adjustment scores of the subscales in students with low academic achievement were significantly different between the pretest and posttest and between the pretest and follow-up. However, there was no significant difference between the posttest and follow-up

scores, probably due to the stability of the interventions. The results showed that the posttest and follow-up mean scores of the social adjustment subscales in students with low academic achievement were significantly different from the pretest scores.

Table 4

Tukey's Test Results for TRT and SFT Groups

Variable	Group	Mean Difference	Standard Error	Sig.
Dispersion	SFT - TRT	4.333	0.891	0.01
No Constraint	SFT - TRT	4.156	0.627	0.01
Non-Repression	SFT - TRT	3.378	0.577	0.01
Social Adjustment	SFT - TRT	12.27	1.604	0.01

According to Table 4, there was a significant difference between the TRT and SFT groups in the mean score. The mean scores and effect size suggest that TRT was more effective than SFT in improving the social adjustment of students with low academic achievement.

#### 4. Discussion and Conclusion

The findings confirmed the research hypothesis proposing a significant difference between the effects of TRT and SFT on the social adjustment of students with low academic achievement. The results also corroborated the significant difference between TRT and SFT in their effects on academic procrastination in such students. These findings are consistent with prior studies (Amiri Majd et al., 2022; Brockman et al., 2016; Oclaudya & Sulistyarini, 2021; Sadeghi Sayyah, 2012; Shahi & Ojinejad, 2014). This can be explained by the common aspects of cognitive signs in the TRT and SFT interventions. Based on cognitive theoretical foundations, social adjustment encompasses both cognitive and behavioral components, which are considered significant and widespread factors. Therefore, despite differences between the present study and previous studies, time, and location, the cognitive foundations of the studied variables confirm the consistency of the results.

To explain this finding, it can be stated that TRT may be more effective than SFT in enhancing social adjustment due to its reliance on creative and symbolic techniques in the development of group exercises, dramas, and stories (Oclaudya & Sulistyarini, 2021). TRT has the potential to motivate individuals to engage in social interactions and also to comprehend and experience a wide range of roles in society (Valachiné et al., 2021). It facilitates the acquisition of communication skills, understanding of social norms and mutual respect, and comprehension of group dynamics. Hence, TRT can greatly enhance an individual's social adjustment (Sadeghi Sayyah, 2012). TRT may be more effective than SFT in enhancing social adjustment due to its ability to provide an interactive and profound experience for individuals (Snir, 2022). Role plays, dramas, group

exercises, and theatrical observations can lead to the development of a profound comprehension of social communication and the experience of social realities in an educational environment. TRT offers an opportunity to create a secure and unrestricted environment where people can use their creativity to explore different social experiences and practice social interactions in simulated situations (Sheikholmolouki, 2016). This method enhances communication skills and fosters a heightened awareness of social norms, cooperation, and problem-solving abilities through the use of role-playing and interpersonal interaction (Besar et al., 2020). Moreover, the sense of affiliation and collaboration within an artistic group can enhance one's sense of community membership and active engagement with the community (Rahimi Pardanjani et al., 2021). TRT enables individuals to actively engage in the therapeutic process. This process provides individuals with a practical and profound experience, enabling them to confront their problems and challenges in a secure environment (Rowe et al., 2017). This practical experience is indispensable for making constructive changes as it enhances self-awareness and realism. TRT offers the chance to collaborate and communicate in a group (Demahri et al., 2019). This cooperation and interaction in an artistic environment helps individuals improve their communication and social skills and strengthen their social adjustment (Oclaudya & Sulistyarini, 2021). TRT helps individuals be more creative and use their imagination (Mokhtarnia et al., 2013). This process helps come up with new ways to solve problems and enhances innovative ideas. This experience of imagination and creativity has the potential to enhance the social adjustment of individuals. Consequently, TRT may be more effective than SFT in enhancing social adjustment as a result of its emphasis on social interactions and creativity. The findings also suggested that TRT was more effective than SFT in improving social adjustment in the participants. This can be explained by the fact that TRT facilitates profound emotional experiences and interpersonal connections by utilizing creativity and symbolism (Valachiné et al., 2021).

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This approach offers an individual a comprehension and experience of society and the various roles that may be played by individuals in society. While SFT prioritizes the analysis of problems and the identification of precise solutions, TRT increases selfawareness of one's emotions and experiences to establish deeper relationships by expressing them in communication with people (Dehnavi & Sherafati, 2020). Conversely, SFT prioritizes behavior changes and largely disregards emotional aspects and artistic creativity. TRT utilizes creativity and symbolism to facilitate one's engagement in various social roles and interactions (Latif et al., 2021). It enables individuals to mentally simulate diverse experiences by employing creativity and engaging in simulated social interactions. On the other hand, SFT prioritizes the development and reinforcement of particular strategies for social adjustment enhancement.

Since this study was conducted on female students with low academic achievement in Districts 5 and 7 of Tehran Municipality, the findings should be cautiously extended to male students, students in other cities with different sociocultural contexts, and other populations. This study employed a questionnaire to collect data. Although they are valuable tools, questionnaires may elicit responses from respondents that are influenced by social desirability. TRT can help adolescents improve their social adjustment and perform better in both daily life and education over time by using consistent, intentional exercises and activities. The TRT intervention can be customized to meet adolescents' requirements.

# **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.

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#### **Declaration of Interest**

The authors report no conflict of interest.

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#### **Ethics Considerations**

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

#### References

- Alfonso, S. V. (2019). Trait Anxiety and Children's Academic Achievement: The Role of Executive Function. https://repository.lib.fsu.edu/islandora/object/fsu:760016
- Alfonso, S. V., & Lonigan, C. J. (2021). Trait anxiety and adolescent's academic achievement: The role of executive function. *Learning and Individual Differences*, 85, 101941. https://doi.org/10.1016/j.lindif.2020.101941
- Amiri Majd, M., Tajali, P., & Kalantari, M. (2022). Effect of an Art Therapy Program (Theater and Drama) on Social Adjustment of Boys with Intellectual Disability. *Journal of Disability Studies*. https://maherpub.com/jndd/article/view/7
- Amirkhani, S., Salimi Bajestani, H., & Noein, A. (2014). Effects of Drama Therapy on Moral Reasoning. *Journal of Military Medicine*, 16(2), 77-82. https://pubmed.ncbi.nlm.nih.gov/35050954/
- Bakhtiarzadeh, M., Safavi, M. A., & Pashakhan, T. (2020). Effects of Art Therapy on Signs of Aggression in Working Boys Aged 7-11 Years in Karai, Iran.
- Baptista, J., Osório, A., Martins, E. C., Verissimo, M., & Martins, C. (2016). Does social-behavioral adjustment mediate the relation between executive function and academic readiness? *Journal of Applied Developmental Psychology*, 46, 22-30. https://doi.org/10.1016/j.appdev.2016.05.004
- Besar, T. N. T., Ahmad, N. S., & Hashim, S. (2020). VALIDITY
  AND RELIABILITY OF SOLUTION FOCUSED BRIEF
  ART THERAPY MODULE FOR STUDENT
  ADAPTATION.
  - https://www.researchgate.net/publication/345312358
- Brockman, M., Hussain, K., Sanchez, B., & Turns, B. (2016). Managing child behavior problems in children with autism spectrum disorders: Utilizing structural and solution focused therapy with primary caregivers. *The American Journal of Family Therapy*, 44(1), 1-10. https://doi.org/10.1080/01926187.2015.1099414
- Closson, L. M., & Boutilier, R. R. (2017). Perfectionism, academic engagement, and procrastination among undergraduates: The moderating role of honors student status. *Learning and Individual Differences*, 57, 157-162. https://doi.org/10.1016/j.lindif.2017.04.010
- Dehnavi, A. F., & Sherafati, M. (2020). Effects of Drama Therapy Techniques on Symptoms of Children and Adolescents with Autism Spectrum Disorder. *Shafaye Khatam Journal of Neuroscience*, 9(1), 139-151. https://doi.org/10.52547/shefa.9.1.139



- Demahri, F., Saeedmanesh, M., & Rozban, S. (2019). Effects of Painting-Based Art Therapy on Eating Habits and Adjustment of Children in Malayer, Iran. *Journal of Disability Studies*, 9(1), 16. https://www.researchgate.net/publication/355172196
- Eftekhari Moghadam, N. (2020). Effects of Solution-Focused Therapy on Internalized Behavioral Problems (Depression, Anxiety and Withdrawal) of Adolescent Girls.
- Faber, J. (2019). The role of executive function in childhood anxiety disorders University of Minnesota]. https://conservancy.umn.edu/items/e3e5f3b0-1e49-464e-b541-9a46cdba5e33
- Fredricks, J. A., Filsecker, M., & Lawson, M. A. (2016). Student engagement, context, and adjustment: Addressing definitional, measurement, and methodological issues. https://doi.org/10.1016/j.learninstruc.2016.02.002
- Garba, H. K., & Tanko, B. A. (2022). Effect of Solution-Focused-Brief Counselling Technique on Procrastination Behaviour Among Primary School Teachers in Bauchi Metropolis. Kashere Journal of Education, 3(1), 26-32. https://doi.org/10.4314/kje.v3i1.4
- Gardner, S., Nesi, H., & Biber, D. (2018). Discipline, level, genre: Integrating situational perspectives in a new MD analysis of university student writing. Applied Linguistics, 10. https://doi.org/10.1093/applin/amy005
- Garland, E. L. (2016). Restructuring reward processing with Mindfulness-Oriented Recovery Enhancement: novel therapeutic mechanisms to remediate hedonic dysregulation in addiction, stress, and pain. Special Issue: Advances in Meditation Research, 1373, 25-37. https://doi.org/10.1111/nyas.13034
- Grant, A. M. (2011). The solution-focused inventory: A tripartite taxonomy for teaching, measuring and conceptualising solution-focused approaches to coaching. *The Coaching Psychologist*, 7(2), 98-106. https://doi.org/10.53841/bpstcp.2011.7.2.98
- Gregory, A., Clawson, K., Davis, A., & Gerewitz, J. (2016). The promise of restorative practices to transform teacher-student relationships and achieve equity in school discipline. *Journal* of Educational and Psychological Consultation, 26(4), 325-353. https://doi.org/10.1080/10474412.2014.929950
- Hsu, K. S., Eads, R., Lee, M. Y., & Wen, Z. (2021). Solution-focused brief therapy for behavior problems in children and adolescents: A meta-analysis of treatment effectiveness and family involvement. *Children and Youth Services Review*, 120, 105620. https://doi.org/10.1016/j.childyouth.2020.105620
- Jones, P. (1996). *Drama as therapy: Theatre as living*. Psychology
  - https://api.pageplace.de/preview/DT0400.9781134119530\_A 24932133/preview-9781134119530\_A24932133.pdf
- Mokhtarnia, I., Pazhouheshnia, H., & Fallah Tafti, A. (2013). Effects of Group Art Therapy with a Topic-Oriented Approach on Behavioral Problems of Preschool Children.
- Oclaudya, K., & Sulistyarini, R. I. R. (2021). Art Therapy for Adjustment Disorders in Adolescent with Systemic Lupus Erythematosus (SLE) and Pulmonary Tuberculosis (TB). Sains Humanika, 13(2-3). https://doi.org/10.11113/sh.v13n2-3.1912
- Pham, Y. K., & Murray, C. (2016). Social relationships among adolescents with disabilities: Unique and cumulative associations with adjustment. *Exceptional Children*, 82(2), 234-250. https://doi.org/10.1177/0014402915585491
- Pourdel, M., & Samari Safa, J. (2021). Effects of Solution-Focused Therapy on Academic Emotions and Academic Vitality of Students with Low Academic Achievement. *Journal of*

- *Psychology Development*, *10*(8), 149-160. https://eprajournals.com/IJSR/article/11435/download
- Przybylski, A. K., & Mishkin, A. F. (2016). How the quantity and quality of electronic gaming relates to adolescents' academic engagement and psychosocial adjustment. *Psychology of Popular Media Culture*, 5(2), 145. https://doi.org/10.1037/ppm0000070
- Rahimi Pardanjani, S., Jalali, D., Nejatifar, S., & Arabi, E. (2021). Effects of Painting-Based Art Therapy on Aggressive Behavior of Female Students with Hearing Impairment. *Journal of Measurement and Research in Counseling and Psychology*, 3(3), 1-12. https://doi.org/10.52547/jarcp.3.3.1
- Regueiro, B., Núñez, J. C., Valle, A., Piñeiro, I., Rodríguez, S., & Rosário, P. (2018). Motivational profiles in high school students: Differences in behavioural and emotional homework engagement and academic achievement. *International journal of psychology*, 53(6), 449-457. https://doi.org/10.1002/ijop.12399
- Roth, S. (2019). Heal the world. A solution-focused systems therapy approach to environmental problems. *Journal of Cleaner Production*, 216, 504-510. https://doi.org/10.1016/j.jclepro.2018.12.132
- Rowe, C., Watson-Ormond, R., English, L., Rubesin, H., Marshall, A., Linton, K., & Eng, E. (2017). Evaluating art therapy to heal the effects of trauma among refugee youth: The Burma art therapy program evaluation. *Health Promotion Practice*, *18*(1), 26-33. https://doi.org/10.1177/1524839915626413
- Sadeghi Sayyah, A. (2012). Effects of Art Therapy on Academic, Social, and Emotional Adjustment of Children with Learning Disabilities. *Journal of Exceptional Education*, 4(112), 37-44. https://exceptionaleducation.ir/article-1-387-en.html
- Saeedi, Z., Ghorbani, N., & Sarafraz, M. (2016). Short Form of Weinberger Adjustment Inventory (WAI): Psychometric Characteristics and Confirmatory Factor Analysis. *Journal of Psychological Sciences*, 15(59), 335-347. https://psychologicalscience.ir/article-1-212-en.html
- Sh, Z. (2014). Effectiveness of training methods solution focused therapy to increase girl's adolescence Social adjustment and resolve crises identity. *Quarterly Journal of Women and Society*, 5(17), 21-40. https://jzvj.marvdasht.iau.ir/article 513.html?lang=en
- Shahi, Z., & Ojinejad, A. R. (2014). Effects of Solution-Focused Therapy on Social Adjustment and Identity Crisis in Female Adolescents. *Journal of Women and Society*, *5*(17), 21-40.
- Sheikholmolouki, N. (2016). Effects of Painting-Based Art Therapy on Problem-Solving Skills of Children aged 5-7 Years in Tehran.
- Snir, S. (2022). Artmaking in Elementary School Art Therapy: Associations with Pre-Treatment Behavioral Problems and Therapy Outcomes. *Children*, 9(9), 1277. https://doi.org/10.3390/children9091277
- Tanyi, M. E. (2002). The student's adjustment inventory manual. TFE Psychological Journal, 10, 1-14. https://doi.org/10.4314/ifep.v10i1.23470
- Valachiné, Z. G., Pócza, L., Dukits, D., & Cserjési, R. (2021). Art Therapy Intervention Short Programs in Different Educational Settings: Elementary School, High School and University Students.
- Van Raalte, L. J., & Posteher, K. A. (2019). Examining social support, self-efficacy, stress, and performance, in US Division I collegiate student-athletes' academic and athletic lives. *Journal for the Study of Sports and Athletes in Education*, 13(2), 75-96. https://doi.org/10.1080/19357397.2019.1635419

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