

Evaluating Effectiveness of Expressive Group Art Therapy on Decreasing Anxiety among Adolescents with PTSD

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Abstract

Little research exists on using expressive art therapy methods as an anxiety-reducing intervention with children whose parents have died or were injured in war conflicts. In this study, pretest/posttest design was employed with 12 adolescents from Ukraine who visited Turkey to participate in a two-week art therapy program. The program included coloring mandalas, dance therapy, collage making and emotions drawing. The State-Trait Anxiety Inventory (STAI) was used as a pre- and posttest measure. Results revealed a significant decrease in a state anxiety ($p=0.037$) after the treatment, especially among the boys. However, due to a small sample size (boys $N=4$, girls $N=8$) no significant gender interaction was found. Both boys and girls displayed lower scores for state anxiety in the posttest procedure. These results provide evidence that expressive arts work may effectively reduce S-anxiety for adolescents who have survived a traumatic event such as war-related death or injury of a parent.

Keywords: S-anxiety, adolescents, expressive arts, collages, mandalas, diagnostic cards.

Introduction

To date, the problem of children who have experienced a traumatic experience is becoming one of the central problems in child psychology. In times of local wars that often occur in different regions of the world, children and adults have to endure hardships, including genocide, mass extermination of people, destruction of the habitual way of life, disintegration of the community, and family ties (Tarabrina, 2002, Cherepanova, 2004).

From the beginning of March 2014, protests by pro-Russian and anti-government groups took place in the Donetsk and Luhansk oblasts of Eastern Ukraine, together commonly called the "Donbass", in the aftermath of the 2014 Ukrainian revolution of Dignity and the Euromaidan movement. Between 22 and 25 August 2014, Russian artillery, personnel, and a "humanitarian convoy" crossed the border into Ukrainian territory without the permission of the Ukrainian government. These events followed the reported shelling of Ukrainian positions from the Russian side of the border over the course of the preceding month (Gordon, Kramer, 2014)

Overall, Ukrainian government forces have lost a confirmed total of 3,703 servicemen as of mid-June 2017, including 165 foreign-born Ukrainian citizens and 12 foreigners. Another 153 Ukrainian soldiers went missing (Shapovalenko, Vorokh, Hirchenko, 2015). The consequences of war especially for children who have lost their parents may be psychologically very difficult sometimes even unbearable. A child who has survived such a traumatic event might not see a perspective on life (he is not sure what will happen to him the next day, month, year, as a result loses interest in previously attractive activities). Additionally, every child can react differently, even if they are children from the same family (Aleksandrovsky, 1992, Lobastov, 1991, Spivak, 1991, Shchukin, 1991).

In children, the manifestations of posttraumatic stress disorder (PTSD) have some peculiarities. According to the facts described in the literature, adults usually experience fear, horror, a sense of helplessness, children often demonstrate disorganized behavior. It is known that the reactions of children to psycho-traumatic events largely depend on the response to the psychotrauma of their parents and peers significant for children. Separation from parents, stormy discussions of adult tragedies, exacerbation of family conflicts usually aggravate manifestations of post-traumatic stress disorder (PTSD) in childhood.

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Teenagers often complain of physical weakness, become silent, withdrawn, they have destructive tendencies in behavior, growing lack of success in school, decreased appetite and difficulty falling asleep is observed. (Demyanov, 2006). Many of the treatment modalities utilized with child disaster survivors address the possible trauma effects of the disasters. Some of the treatment protocols that have been shown to be especially effective include Group Art therapy, Cognitive Behavioral Therapy (CBT), Eye Movement Desensitization Reprocessing (EMDR), Dance and Movement Therapy, Play Therapy and Physical Activity Program (Murphey, 2014; Taylor & Weems, 2011; Rodriguez, Hoagwood, Gopalan, Olin, McKay, Marcus, Radigan, Chung, & Legerski, 2012; Lee, Lin, Chiang, & Wu 2013; Jordan, Perryman, & Anderson, 2013; Wahl-Alexander & Sinelnikov, 2013).

“Art Therapy is a way to provide distance from the intense affect associated with the disaster, and a way to work around and through the natural defenses that arise when trying to link affect with cognition” (Orr, 2007). Art therapists aim to provide a safe holding environment, creative platform for children to help them reduce the influence of negative experience, regain emotional control, and reduce stress (Roje, 1995; Orr, 2007; Chilicote, 2007; Howie et al, 2002).

Limited research exists that focuses on art therapy with group therapy for disaster survivors. There is a number of benefits of art therapy in a group therapy setting: it creates a sense of ritual that provides psychological safety and promotes interpersonal emotional risk-taking, it reduces isolation and creates a sense of community, it fosters a sense of personal and communal empowerment (Moon, 2010). In one study The Bridge Drawing was used as an assessment instrument to evaluate the capacity of orphaned kids in Ukraine to visualize and draw their future life, goals, and hopes. The Bridge Drawing proved to be an effective instrument that provided the orphans with the opportunity to verbally and visually reflect in a safe and therapeutic environment their past and present life as well as future adult goals outside of the orphanage (Darewych, 2013).

Overall, the findings suggest that a brief period of expressive art making can significantly reduce a person’s state of anxiety, which may have implications for art and art therapy programs that offer methods for helping orphaned children coping with stress (Kheibari, Anabat, Largany, Shakiba, & Abadi, 2014). Art therapy undertaken with the orphan children of Ugarchin, Bulgaria resulted in fewer conflicts among the children. Participants also showed an increased interest toward each other’s work, higher self-esteem, more independence, greater concentration and eagerness for artistic expression (Ivanova, 2004).

Method

Participants

The participants in this study were selected from the client pool of Poltava Battalion of Concerned, a nonprofit organization based in Poltava, Ukraine that helps soldiers from the war zone in Eastern Ukraine. The inclusion/exclusion criteria for the participants in this study are:

- The child must have a parent who participated in Donbass war and died or was injured in it;
- The child must be 10 to 15 years old during the period between pretest and post-test.
- The child must not have cognitive impairments
- The child must not have received any therapy for PTSD prior to this study

12 children volunteered to take part in the study. Of these children 12 children in total completed the therapy meaning took part in all 8 sessions. Due to logistical challenges, there were no children assigned to the control group in this study. The mean age of the complete participants was 13,08 (SD= 1,56) for the therapy group. The gender distribution for the complete participants was 66,7% female and 33,3% male in the therapy group.

Instrument

The State-Trait Anxiety Inventory (STAI; Spielberger, 1983), a self-report measure that provides measures of anxiety for adolescents and adults, was used before and after the intervention. An increase in S-Anxiety score suggests a response to psychological stress and/or physical danger; a score may decrease due to a relaxation response. This scale has been used to detect state anxiety changes before and after counseling, psychotherapy, behavior-modification programs, and other interventions. The S-Anxiety scale has 20 questions rated with a Likert scale, 10 of which are anxiety-present (e.g., “I feel nervous”), the other 10 being anxiety-absent (e.g., “I feel calm”). The weighted score ranges from 20 to 80, with the average normative score for working adult men being 35.72, and for women 35.20.

The age of the children who participated in the research varied between 10 and 15 years so not all of them fall in the adolescence category. However, considering that the education system is different in Ukraine, namely children

enter middle school at the age of 9-10 and by that time, they normally have mastered their reading ability. Application of the standard version of State-Trait Anxiety Inventory (STAI; Spielberger, 1983) adopted by Yuriy Hanin into Ukrainian was administered in this study.

Procedure

The institutional review boards of the sponsoring educational institution approved the study prior to implementation. Participants were selected from the client pool of Poltava Battalion of Concerned, a nonprofit organization based in Poltava, Ukraine. Children as well as their parents signed informed consent form prior to arrival to Turkey. Upon their arrival to Turkey each participant completed a demographic questionnaire asking about age, gender then, completed the S-Anxiety portion of the STAI. Each participant received the package with materials that included an album for drawing, markers, pencils, paints, scissors and glue. As the therapy proceeded, participants were provided additional material such as fake money, masks and soft caramel. They also were given a brief demonstration on how to make caramels, some elements of folk dance and how to create their own mandalas. Lastly, the post-intervention S-Anxiety measure was administered.

Session 1. Diagnostic cards "Color your feelings".

In the first session students were asked to imagine a magical country in which Joy, Sorrow, Anger, Awareness, Antipathy, Fear, Shame, Guilt, Surprise, Interest, Love and Indifference live and create their own city of feelings by coloring houses on the cards that they were given (Figure 1).

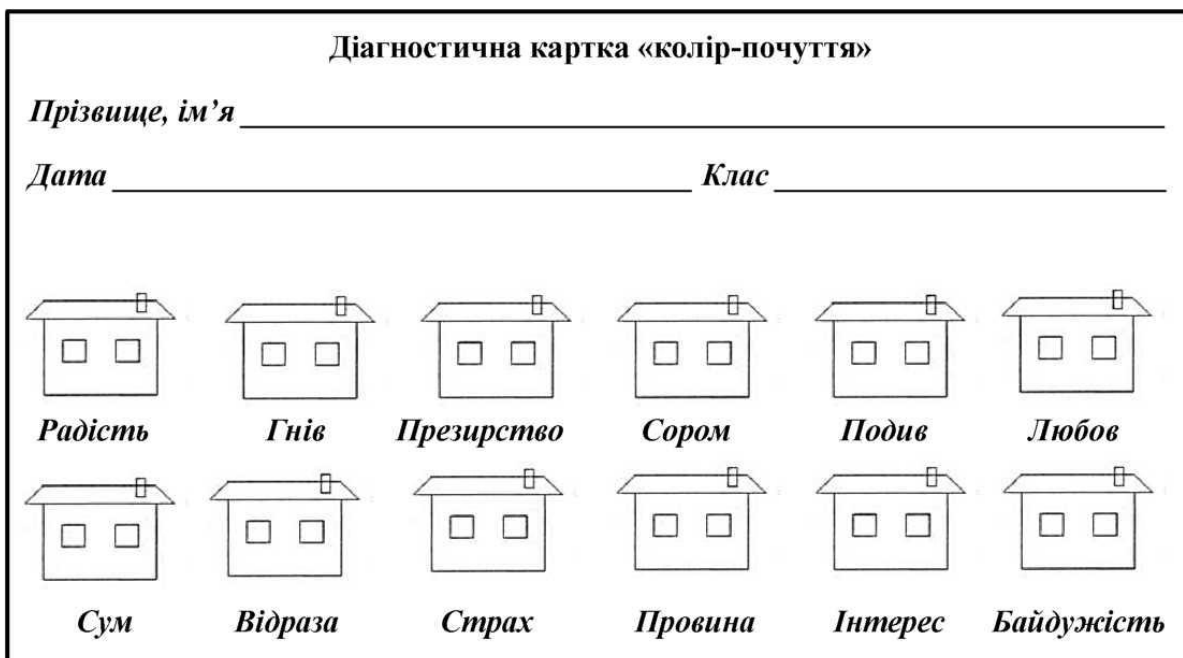


Figure 1. Diagnostic Card “Colour-Feeling”. First line includes first and last name; second – date and grade participant have finished.

Houses’ names from left to right: Joy, Anger, Contempt, Shame, Surprise, Love, Sorrow, Disgust, Fear, Guilt, Interest, Indifference.

Session 2. “Mask of my inner Self”.

This activity was designed to encourage each student to recognize the masks he/she might wear, acknowledge the masks that others put upon him/her, to view other students with more compassion in regard to the masks they wear. Every student received a mask of a neutral type, which they had to colour accordingly to their inner state and spectrum of emotions they were experiencing.

Session 3. Hand-made caramels.

In their third second session, children went to the caramel candy shop “Just a Candy” located in Antalya old city, where each of them had an opportunity to create a caramel candy of any shape with their own hands.

Session 4. Dance therapy

The fourth session was a combination of free style and elements of Ukrainian folk dance "Hopak" led by the soloist of the Turkish dance ensemble "Lights of Anatolia" and the administrator of this research.

Session 5. Mandalas

This session included an introduction to the concept of mandalas and exposure to a variety of mandala designs. Group participants had an opportunity to color a mandala from a selection of preprinted mandalas as well as a mandala of their own design.

Session 6. Auction of needs.

Each participant received 250 fake Turkish liras to be able to buy the lots they liked.

Below are some of the lots that were offered to the participants of the program (Table 1).

№	Lot	Initial price	Lot	Initial price
1	Food	200 TRY	Necessary things of everyday life	200 TRY
2	Clothes	200 TRY	Realization of a dream	500 TRY
3	Safety and Security	400 TRY	Housing	300 TRY
4	Health care	300 TRY	Ability to change someone's life	500 TRY
5	Education	200 TRY	Professional psychological help	400 TRY
6	Self-fulfilment	400 TRY	Care. Attention	200 TRY
7	Love	500 TRY	Self-development	200 TRY
8	Faith	500 TRY	Opportunity to say unsaid	400 TRY

Table 1. Needs and their prices offered at the auction.

Session 7. Collage.

After instructing participants what anxiety, depression and stress meant, they were divided into three groups (4 people in each group). First, each group named a few emotions associated anxiety, depression and stress. Then they came up with the antipodes to those negative emotions and created collages with advices they would give to people who suffer from anxiety, depression or stress.

Session 8. Drawing self-essence.

As a final project, participants were offered to draw answers for three questions:

1. What is your essence?
2. What keeps you from living in the essence of who you are?
3. What do you need to do to transcend these obstacles to live more fully, more completely, and being more exactly who you truly are?

Results

A one-way within-subjects (or repeated measures) ANOVA was conducted to compare the effect of structured artwork on participants' S-Anxiety score. An ANOVA test was used to analyze the data and in order to check for interaction effects between the S-Anxiety scores and the participant's gender. As shown in Figure 2, the total mean pretest score was 47,5, whereas the total mean posttest score was 35,4. Therefore, a statistically significant ($p=0.037$) main effect of the art therapy intervention on the decrease of state anxiety was found.

According to the results of the study, boys had significantly lower S-anxiety score in the posttest. The treatment was significantly helpful for the children in terms of S-anxiety score. However, there was no statistical evidence that the therapy was discriminately better for one gender over the other. Moreover, there was no statistically significant difference found between the levels of anxiety among children whose fathers died and those whose fathers were injured in the war. The treatment was equally helpful in terms of S-anxiety score. Both boys and girls displayed lower S-anxiety score in the posttest procedure.

In addition, to the statistical results, there is an anecdotal support of the findings. When children went back home, a few parents contacted Poltava Battalion of Concerned saying that they saw positive changes in their children's behavior. For example, the mother of one girl, who was refusing to draw in the beginning of the program, said her daughter became much calmer after she attended the program and began to draw almost every night.

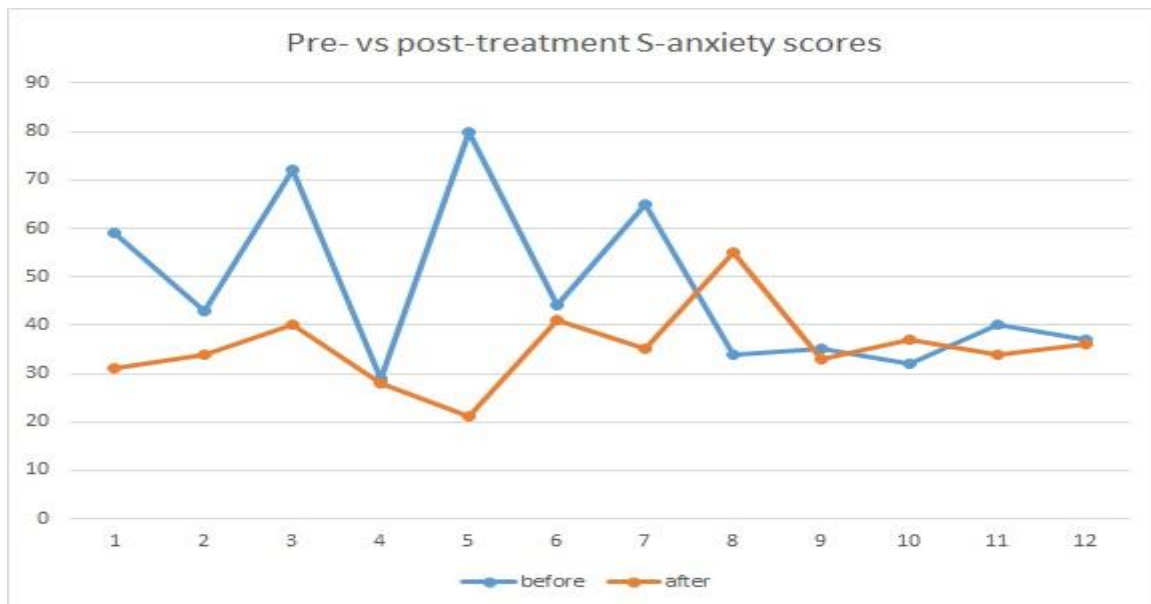


Figure 2. Pre- vs Post-treatment S-anxiety Scores.

Discussion

The results of our study support the hypothesis that expressive art modalities decreased state anxiety in adolescents whose fathers died or were seriously injured in war. This provides preliminary data supporting the use of art therapy methods for adolescents who are patients in psychiatric facilities or who have serious mental health diagnoses with anxiety symptoms. It also is congruent with the results reported by Spielberger, 1983; Steer et al., 2003. It is important for art therapists to be aware of the anxiety experienced by children influenced by traumatic events, as well as to develop interventions to quickly and effectively help these individuals manage anxiety. The small group expressive art activities are presented here in such a way that any school counselor could immediately utilize these activities in his or her own students. These activities require a minimal investment in materials and are easily implemented.

Limitations of this study should be taken into consideration. Despite the significant results, the lack of a control group hinders the validity of the results, which is our study's strongest limitation. Because children were brought out of their normal settings, other factors that possibly contributed to the decrease of anxiety still remain a possibility. Future research might utilize control groups in order to further develop effective interventions to reduce anxiety. Redirection control groups (e.g., playing computer games, watching television) could also be effectively used to rule out the possibility of simple distraction reducing anxiety.

Control groups in future research may prevent the occurrence of additional confounds including the novelty effect, which implies that the treatment may have been effective simply because it was new for the participants. A control group could have also eliminated an experimenter effect, with intervention effectiveness being linked to the treatment administrator. Because participants talked frequently during data collection and sometimes were not following researcher's instructions properly, it is difficult to determine the role that this may have played on the overall decrease in anxiety. The replication of this study with different samples and new researchers will allow for stronger validity.

Conclusion

Despite our study's limitations, the statistically significant results suggest that applying expressive art therapy modalities with children whose fathers died or seriously injured in a war conflict is an effective intervention that may prove beneficial for reducing anxiety in both clinical and nonclinical population. In addition, because the intervention timeframe was only 45 minutes, this task may be practical in real-world settings. For example, as part of an education curriculum in the middle school or after school program. The anecdotal evidence supports the statistical results and is strong enough for psychological counselors to implement it in their work. Further research should be conducted on

different expressive art therapy methods with this population and others to provide further evidence on the effectiveness of expressive arts for decreasing anxiety.

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