

## The effect of integrating rational emotive behavior therapy and art therapy on self-esteem and resilience

Mahmoud Roghanchi, MA, PhD<sup>a,b,\*</sup>, Abdul Rashid Mohamad, PhD<sup>b</sup>, See Ching Mey, PhD<sup>b</sup>, Khoda Morad Momeni, PhD<sup>a</sup>, Mohsen Golmohamadian, MA, PhD<sup>c</sup>

<sup>a</sup> School of Social Science, Razi University, Kermanshah, Iran

<sup>b</sup> School of Educational Studies, Universiti Sains Malaysia, 11800 USM, Penang, Malaysia

<sup>c</sup> Islamic Azad University, Dezfoul Branch, Iran

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### ABSTRACT

This research explored the effect of combined rational emotive behavior therapy (REBT) and the art therapy (engraving method) on improving self-esteem and resilience. The research method was quasi experimental. The study used the Coopersmith Self-esteem Inventory (SEI) and the Connor–Davidson Resilience Scale as pre- and post-test assessments to assess the effects on a sample of Iranian students. A sample of 24 Iranian university students were randomly placed in two groups, including one experimental group and one control group. This was followed by REBT and art therapy while students in the experimental group were taught for 10 sessions over a 10 weeks period there was no treatment for the control group over this time. The participants in both groups were evaluated before and after 10 sessions. The gathered data were analysed using the *t*-test method through the SPSS package. The results showed that the integration of REBT and art therapy for increase the self-esteem and resilience of students. Further, implications of the study and suggestions for future use are discussed.

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### Introduction

Self-esteem is a central feature of the self-concept (Greenwald, Bellezza, & Banaji, 1988). It has been defined as “how much value people place on themselves” (Baumeister, Campbell, Krueger, & Vohs, 2003, p. 2). One important factor of mental health in university students is self-esteem. Many studies have emphasized that student’s self-esteem is a predictor of different behaviors and psychological adjustments (Leary & MacDonald, 2005). Research findings have shown that there is a significant relationship between low self-esteem and many severe and difficult situations young people face, including dropping out of school (Guillon, Crocq, & Bailey, 2003), and destructive behaviors (Hawton, Rodham, Evans, & Weatherall, 2002). Low self-esteem is considered a factor leading to physical, mental and emotional problems (Kernis, 2005). In addition, high self-esteem inspires a feeling of worthiness and gladness (Branden, 1994). Oguz-Duran and Tezer (2009) described self-esteem as one of the factors that have strong and positive relationships in the well-being of a college student. Saadat, Ghasemzadeh, and Soleimani (2012), indicated that there is a relationship between self-esteem and academic development of

students. In general, low self-esteem can lead to an unpleasant mental state while high self-esteem has many benefits for people (Harter, 1999).

Having a comprehensive understanding of resilience in life can be potentially important for the promotion mental health (Campbell-Sills, Cohan, & Stein, 2006). Resilience has been shown to be a factor of positive well-being in positive psychology. Resilience is defined as the ability of persons to remain healthy when exposed to a negative event (Bonanno, 2004), as well as being able to adapt their conditions according to the problems that challenge them in life (Brenda, 2007). O’Connell Higgins (1994), studied the trait of resilience in adults and expressed that resilient people are proactive, loving, and possess a high level of faith. These people are characterized by optimism, positive coping, hardiness (Connor & Davidson, 2003) and high self-esteem (Rouse, 1998).

Haddadi and Besharat (2010) conducted a study on a sample of 214 university students and revealed that resilience has a positive correlation with mental health and a negative correlation with vulnerability indexes including psychological distress, depression, and anxiety. In contrast, lower and weaker levels of resilience are connected to vulnerability and psychological disorders (Campbell-Sills et al., 2006).

Peng et al. (2012) examined a sample of 1998 students in a survey study to assess the moderating effect of resilience between negative life events and mental health problems, and to investigate the factors that affect the mental health problems of the students.

\* Corresponding author.

E-mail address: [mahmoudroghanchi@yahoo.com](mailto:mahmoudroghanchi@yahoo.com) (M. Roghanchi).

Results showed that mental health problems had a positive relationship with negative life events and neuroticism. Mental health problems have also shown a negative correlation with resilience. Researchers suggested that promoting resilience can be useful for the adjustment of university students in stressful situations.

Cognitive behavior therapy (CBT) is described as a broad range of psychological approaches and methods. REBT is considered an important view to CBT as the approach uses cognitive (thinking), emotive (feeling), and behavioral (acting) techniques for the improvement of clients and treatment of mental disorders (Jena, 2008). The REBT approach has been seen as an effective approach for changing the self-esteem among students (Lim et al., 2010). CBT has been used effectively in the treatment and improvement of a broad range of disorders as well as for individuals and groups to treat or improve the level of mental health (Harrington, Whittaker, Shoebridge, & Campebell, 1998; Jena, 2008). CBT supports clients that are willing to cope, and realize for themselves the challenges in the external world and the problems the future may bring (Chen, Lu, Chang, Chu, & Chou, 2006). Previous research has described the usefulness of CBT, showing marked improvement for depression (Jamal & Kordi, 2006; Scott et al., 2000), increasing self-esteem in depressed clients (Chen et al., 2006), improving aspects of self-awareness, self-esteem, and resilience (Coholic, 2011), raising levels of self-esteem (Lim et al., 2010) while decreasing anxiety disorders (Lorian, Titov, & Grisham, 2012).

Art therapy refers to an application all of arts in therapy with all ages, families, and groups to increase healing, and the well-being in individuals (Malchiodi, 2005). Art therapists frequently report the arts as facilitating self-expression, self-actualization, reaching a more integrated self, preparing a sense of autonomy, decision making, self-worth (e.g., Case & Dalley, 1992; Payne, 1992; Reynolds, 2000, 2002), and increasing self-esteem (Langner, 2009; Mahmoudi, Dalvandi, Rahgoi, Rahgozar, & Zadehmohammadi, 2010). Rubin (2005) argued that the therapeutic effect is within all the arts and many people have found crafts very healing. The art used in this study is called engraving. Engraving is described as the art of filigree and creative engraving upon soft metals is accomplished by cutting grooves into the material with a chisel and hammer (Haghshenas, 2003). Engraving is a 3000 year old art history in Iran (Ramazani, 2001).

Iranians have used arts such as music, storytelling, theater, painting, and cinema to enhance their mental health. Art has had a valuable place in Iranian culture and has been very influential in the lives of Iranians throughout history. Iranian art is meaning centered, cooling and trust worthy. It has always played the role of self-awareness and discovering of creative representations for Iranians. There are a numerous cases in Iranian literature, poetry, drama, traditional arts, handicraft, and music to use in experimental studies in the field of art therapy. Nevertheless, art theory is rarely used in Iran and it seems necessary that Iranian universities should pay more attention to this field of study. Some Iranian researchers in recent years, have carried out investigations on using music, telling story, theater, painting, poetry, and cinema as art therapy techniques in mental health improvement, and they have confirmed the positive effects of art therapy on a wide variety of mental health including depression reduction in university student (Afrooz et al., 2006; Biglari, 2006; Mohammadian et al., 2011); reduction of anxiety and stress (Mohammadian et al., 2011); improving mental health (Arabi, 2006; Toluie et al., 2009); increase self-esteem (Noein, 2009), improvement of self-confidence (Mokhtarnia, 2012).

Nevertheless, little attention has been paid to the crafts, especially handy crafts and traditional arts. With the exception of a few cases, handicrafts, such as engraving and miniature are not usually practiced. Research on cross-cultural counseling and psychology recommends that classical approaches of psychotherapy

may be adapted to accommodate different cultures to best serve clients from a various range of backgrounds (Atkinson, Hackett, & Sue, 1995). Art itself can be an essential aspect of culture which plays an important part in psychological functioning (Sato, 2011). Therefore, the interventions designed in this paper have incorporated perspectives and conceptions of engraving as a traditional Iranian art into the methods of psychological intervention (REBT interventions).

### Integrating REBT interventions and art therapy

Despite the long history of CBT and art therapy, they have not been widely used in the field of art therapy (Rubin, 2001). Leibowitz-Levy (2005) described art therapy particularly suited to CBT, because making art is an inherently cognitive process. Research has revealed that such an approach has been used with adults suffering a variety of mental health problems, including eating disorders (Matto, 1997), mental retardation (Bowen & Rosal, 1989), chronic pain (Camic, 1999), and grief (Reynolds, 1999).

Coholic (2011) conducted qualitative research in young people to investigate the benefits of integrating CBT (mindfulness approach) and an arts-based approach. Results showed that the integration improved the aspects of self-awareness, self-esteem, and resilience. Degges-White and Davis (2010) described that the arts can be effectively incorporated in a variety of settings from schools to clinical centers and on clients of all ages, children to older adults. This combination can be allowed to be used by counselors to help improve unique creative techniques. Jamal and Kordi (2006) examined the effects of CBT and music therapy on students with depression from Gorgan University. Results showed the integration of CBT and music therapy had a higher impact on reducing depression. Sato (2011) conducted a case study to combine Morita Therapy with an art therapy technique. This treatment was effective and useful for clients and revealed decreased anxiety.

Self-esteem is considered one of the most important psychological concepts (Guillon et al., 2003), and seen in a sense of the ability and capability to undertake and effectively react to everyday life problems (Berk & Churchill, 1996). Some approaches have recommended that high self-esteem leads to adaptive activities and mental health; therefore, they have stressed the importance of increasing a person's self-esteem (Okada, 2010; Taylor & Brown, 1988). Resilience has also been known to support people in their ability to thrive in the face of everyday stress. Improving resilience must be an important goal for healing and overall prevention of stress (Dmitry, Robert, Karen, & Isabelle, 2010). Stressful events in life may cause mental health problems such as depression or anxiety, but a person's high level of resilience may give them the ability to cope with these problems more effectively, and live a healthier life (Peng et al., 2012).

The present quantitative research focuses on the integration of REBT as a means of verbal therapy and art as a medium of nonverbal therapy in order to help improve self-esteem and resilience. The main research hypothesis presented here is as the follows: Combined REBT with art therapy will have a positive effect on improving self-esteem and resilience in university students.

### Method

#### Participants

Twenty-four participants (16 female and 8 male), who were first year undergraduate students admitted into the counseling center at Razi University participated in this study. Their ages ranged from 19 to 24 years, with a mean of 21.5 years ( $SD=0.79$ ). They were randomly divided into two groups: the experimental group and

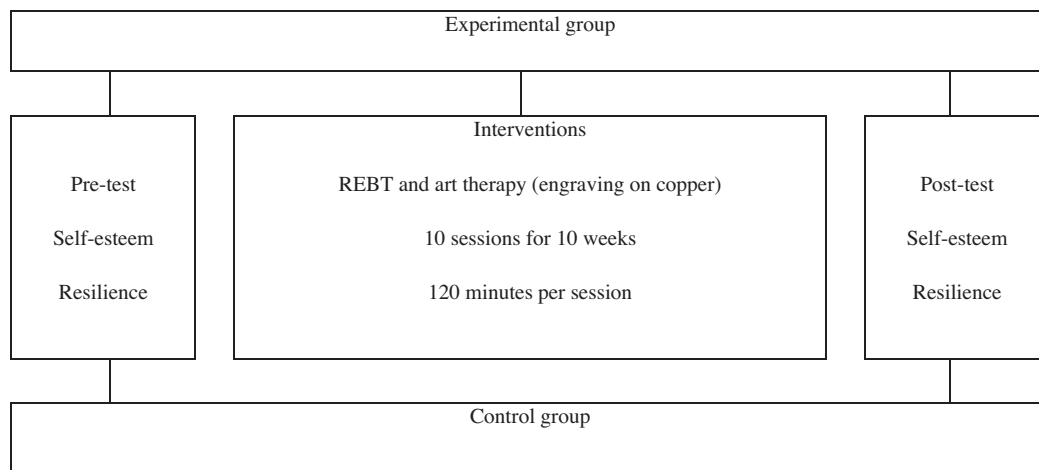


Fig. 1. Research design.

the control group followed by the administration of a pre-test. The participants in the “no intervention” (control) group were placed on a waiting list accordingly, 10 following weeks the counselors were obliged to arrange the interventions for them.

#### Instrument

##### Self-esteem

Self-esteem was measured with the Persian version of the Coopersmith's Self-esteem Inventory (SEI) in its adult form. The SEI has been widely used in psychological research. The validity and reliability of this instrument are well confirmed. It is comprised of 58 unambiguous trait-descriptive sentences to which participants respond by indicating whether the sentences describe them (either “like me” or “unlike me”). These statements describe feelings, opinions, and reactions typical of the various everyday situations experienced by a college student (Coopersmith, 1975).

To estimate the reliability coefficients of the inventory version in Iran, a test–retest analysis was done on Iranian high school students. Results showed that the coefficient for the girls was 0.90 and coefficient for the boys was 0.92. Findings of the study also showed that the validity coefficient of the inventory test was 0.69 for boys' respondents and 0.71 for the girls. Furthermore, the coefficient of reliability for Coopersmith's SEI was reported as 0.82 (Cronbach alpha), and its internal constancy of the Inventory test was nearly the same to be after six weeks (Shokrkon & Nisi, 1987). In addition, Poursharifi (1992) utilized spilt-half reliability method in testing the instrument. It was successfully used on a group of adolescent respondents where a coefficient is 0.83 was observed.

##### Resilience

For measuring resilience, the Persian translated version of the Connor–Davidson Resilience Scale (CD-RISC) (Connor & Davidson, 2003) was used. This 25 item scale is designed to assess one's ability to cope with stress and adversity. For example, “I am able to adapt when changes occur,” “I tend to bounce back after illness, injury, or other hardships,” and “I am able to handle unpleasant or painful feelings like sadness, fear, and anger.” Respondents indicated their view on a 5-point Likert scale from (0 = not true at all, 1 = rarely true, 2 = sometimes true, 3 = often true, and 4 = true nearly all of the time). A higher score indicates greater resilience. The total scores ranged from 0 to 100; the higher the score, the higher is the level of resilience (Connor & Davidson, 2003).

A pilot study of the psychometric features of the CD-RISC for people in general resulted in the clinical samples appearing to have sufficient internal consistency, test–retest reliability, and

convergent and divergent validity (Connor & Davidson, 2003). Jafari, Eskandari, Sohrabi, Delavar, and Heshmati (2010), and Mohammadi (2005) have reported a Cronbach  $\alpha$  of 0.92 and 0.93 among Iranian population respectively.

#### Design

##### Data collection and study procedures

The intervention group took part, once a week, in 10 sessions of combined REBT interventions and art therapy (engraving). The level of significance was set at 0.05 for all tests. Pre-tests were administered at orientation meetings before the experiment began; both groups completed the Inventory. After the treatment sessions, post-tests were conducted with the same Inventory for both groups.

#### Combined REBT interventions and art therapy for the experimental group

The researchers carried out the processes of REBT interventions in 10 sessions, with 2 h per session, for 10 weeks (Fig. 1). Listen read phonetically Dictionary

1. preposition
  1. as regards
  2. as respects

According to Waller (1993), group art counselling should be based on both client's artwork and the group dynamics between group clients; so the time of the sessions was divided into two parts. The purpose of the REBT interventions in this research was to change cognitive (thinking), emotive (feeling) with behavioural (acting) techniques for the improvement of clients and to assist them in the development of their individual adaptive behaviour (Jena, 2008). The overall structure of a REBT sessions included presenting the program of REBT for 50 min and summarizing for 10 min (Kramer, Bernstein, & Phares, 2009). Each session of intervention was split into two parts: (a) explaining the aims of the session, presenting and sharing information and instruction with one another, finally, homework tasks would be presented.

(b) Art therapy was based on the Liebmann approach (2004): warming up, art making, and discussion (Table 1).

#### Data analysis

The data were analyzed using the SPSS software version 16, and the level of significance was set at 0.05 for all tests.  $\chi^2$ -test,

**Table 1**  
Art therapy group: REBT interventions, art therapy (engraving on copper).

| Session | REBT interventions   | Engraving on copper  |
|---------|--|--|
| 1       | Introducing, “Quick Autobiographies” technique, aims and process group, consent and contract forms, summary and conclusion   | “Breathing” technique, talking about craft, engraving and art therapy, process of engraving, disputing about selected images, summary <sup>a</sup>   |
| 2       | “name games” technique, reviewing previous session, “here and now”, presenting A-B-C model: A (activating events), B (behavior), and C (consequence), “self-talk”, “Shame-attacking” technique and role playing, summary and conclusion  | Practicing “Mirroring” technique and role playing, pasting pictures onto plates of wood, appearing feeling and thinking about art making, summary  |
| 3       | Recalling A–B–C model, representing A–B–C–D–E, “should”, “ought”, and “musts”, presenting homework about A–B–C–D–E model and self-help form, summary and conclusion  | Presenting “Self-portraits: Realistic Tools” technique, making chisel, engraving into wood, encouraging members to express their feelings and thinking about process of the meeting and presenting feedback to each other, summary   |
| 4       | Recalling A–B–C–D–E model, learning of Ellis’s 15 main irrational, monitoring negative automatic thoughts and presenting homework assignments, summary and conclusion  | “Masks” technique, continuous engraving on the wood and pasting pictures on copper plates, disputing, summary  |
| 5       | Presenting a summary of previous week sessions, monitoring homework assignment, “cognitive disputing” technique, and role playing, presenting homework, summary and conclusion   | Training “Advertisements” technique and role playing, starting engraving onto copper, discussing about artwork, presenting feedback, summary   |
| 6       | Reviewing the previous session; monitoring homework assignment; “Reframing” technique, role playing and feedback; “Coping self-statements” technique, role playing, feedback; presenting homework; summary and conclusion  | Presenting “Aspects of Self” technique, role playing; continuous engraving onto plates of copper, discussing about artwork, feedback; Summary  |
| 7       | Reviewing the previous session; monitoring homework assignment, training “imaginal disputing” technique, role playing, feedback; presenting homework about “imaginal disputing” technique, summary   | Presenting “self-statements” technique and role playing; continuous engraving, discussing about artwork and presenting feedback; summary   |
| 8       | Reviewing the previous session; monitoring homework assignment, training “behavior disputing” technique, role playing, feedback; presenting homework about “behavior disputing” technique, summarize   | presenting “good or bad” technique, role playing; continuation of engraving, discussing about artwork, feedback; summary   |
| 9       | Reviewing the previous session; monitoring homework assignment, explaining “cost-benefit analysis” technique, “lifeline” technique; presenting a design for change in future life; summarize and conclusion  | Presenting “Losses” technique and role playing; continuation of engraving, discussing about artwork presenting feedback; summary   |
| 10      | Reviewing the previous session; expressing final sentences by the counselor, sharing thoughts and feelings concerning the final of the group; encouraging members to express changes, understanding, and insights themselves during the process of REBT; participants wrote a letter about themselves to important people in their lives | Describing “Reviewing Artwork”; separating images created from the pitch; the facilitator closed the group session with arguments of tenderness, presenting positive feedback; post-tests assessments (Self-esteem and Resilience Questionnaire) were completed by clients |

<sup>a</sup> All of the techniques are derived from “art therapy for groups” (Liebmann, 2004).

the Fisher’s exact test and *t*-test were used to compare the baseline measurements of demographic characteristics and dependent variables between the two groups.

## Results

The test for homogeneity of the general characteristics of the two groups is shown in Table 2. The table indicates that there were no statistically significant differences between the two groups with respect to participants’ native or of non-native origin, age, field or type of residence.

The score for “self-esteem” of the experimental group increased more than that of the control group. This difference was statistically significant ( $t = -2.17$ ,  $df = 22$ ,  $p = 0.037$ ) (Table 3).

**Table 2**  
The homogeneity test of general characteristics between experimental and control groups ( $N = 24$ ).

| Characteristics | Group              | Measure    | Experimental ( $N = 12$ ) | Control ( $N = 12$ ) | <i>t</i> -Value | $\chi^2$ | <i>p</i> -Value    |
|-----------------|--------------------|------------|---------------------------|----------------------|-----------------|----------|--------------------|
| Native          | Native             | Number     | 8                         | 7                    | .00             | .00      | 1.000 <sup>a</sup> |
|                 |                    | Percentage | 66.7                      | 58.4                 |                 |          |                    |
| Non-native      |                    | Number     | 4                         | 5                    |                 |          |                    |
|                 |                    | Percentage | 33.3                      | 41.6                 |                 |          |                    |
| Age             |                    | Mean (SD)  | 21.50 (1.93)              | 21.56 (1.87)         |                 | .00      | 1.000 <sup>a</sup> |
| Field           | Technical college  | Number     | 5                         | 6                    |                 | 125      | 1.000 <sup>a</sup> |
|                 |                    | Percentage | 41.7                      | 50                   |                 |          |                    |
|                 | Humanistic college | Number     | 7                         | 6                    |                 |          |                    |
|                 |                    | Percentage | 58.3                      | 50                   |                 |          |                    |
| Residence       | Dormitory          | Number     | 10                        | 8                    |                 | .000     | 1.000 <sup>a</sup> |
|                 |                    | Percentage | 83.3                      | 66.7                 |                 |          |                    |
|                 | Family or relation | Number     | 2                         | 4                    |                 |          |                    |
|                 |                    | Percentage | 16.7                      | 33.3                 |                 |          |                    |

<sup>a</sup> Fisher’s exact test.

There were also significant differences between the experimental group and control group for resilience (Table 4). This difference was statistically significant ( $t = -2.17$ ,  $df = 22$ ,  $p = 0.037$ ).

## Discussion

The results of this study have demonstrated that self-esteem and resilience can be increased through the participation of combined REBT interventions and art therapy through group counseling. In addition, findings have shown that the medium of engraving on copper can be combined with REBT interventions in an effort to increase psychological variables of as self-esteem and resilience.

The use of crafts has been shown to promote well-being (Reynolds, 1999, 2000, 2002) in individuals. Reynolds (2000, 2002)



**Table 3**

Comparison of self-esteem between experimental and control groups (N = 24).

| Variable    | Group | Pre-test | Post-test | Difference  | T     | DF | p-Value |
|-------------|-------|----------|-----------|-------------|-------|----|---------|
|             |       | Mean     | Mean      | Mean (SD)   |       |    |         |
| Self-esteem | Exp.  | 18.87    | 28.56     | 9.68 (3.78) | -2.17 | 22 | 0.037*  |
|             | Con.  | 18.25    | 25.00     | 6.75 (3.84) |       |    |         |

Exp.: experimental; Con.: control.

\*  $p < .05$ .**Table 4**

Comparison of resilience between experimental and control groups (N = 24).

| Variable   | Group | Pre-test | Post-test | Difference   | T     | DF | p-Value |
|------------|-------|----------|-----------|--------------|-------|----|---------|
|            |       | Mean     | Mean      | Mean (SD)    |       |    |         |
| Resilience | Exp.  | 56.68    | 72.31     | 15.63 (6.68) | -4.59 | 22 | 0.001*  |
|            | Con.  | 57.12    | 59.25     | 2.13 (9.66)  |       |    |         |

Exp.: experimental; Con.: control.

\*  $p < .05$ .

reported that participants involved in self-selected art activities aided in the psychological relaxation and calming of the participants. It must be pointed out that engraving art has been used for thousands of years in Iranian society. Despite this popularity, little advantage has been taken to use engraving in counseling and art therapy in Iran. In this study the art of engraving was used in Iran to aid in healing and improvement of a client's life for the first time.

Results of the present study have shown that combined REBT interventions and the art therapy helped improve self-esteem and resilience of the participants. These findings are in line with those reported by Coholic (2011) and Jamal and Kordi (2006), although more research is required to the effect of the theories of art therapy and various psychotherapy approaches.

The purpose of art applications is not only to create artwork and teach art, but also to provide unique opportunities as an experience to recognize the beauty of a client's designs, feelings, emotional, needs, as well as their knowledge and free will. Atkins and Williams (2007) described creating a work of art as a bridge between the internal world and external realities. The artwork acts as a medium between the conscious and unconscious, in other words, a bridge between the past, present, and future trends of the individual.

## Conclusions

In conclusion, it should be said that the main limitation of our findings was small sample size as well as the lack of a suitable workshop (studio art therapy) for engraving and other art work. Despite this, all the students completed their work and members continued the program until the end of the process.

Nevertheless, combined REBT interventions and art therapy is useful as an intervention tool to increase self-esteem and resilience in university students. The results add up to a very limited body of quantitative research on the subject of art therapy on self-esteem and resilience in the related literature. This study involves university students in one region of Iran and, therefore, it is difficult to generalize to all university students in Iran or the students beyond the borders of Iran. It is necessary to apply art therapy group in various branches that in university life in order to increase self-esteem and the resilience of students to help them in improve their mental health.

From the results of the current research the following suggestions can be made. First, considering the fact that there was a change in the self-esteem and resilience of the participants, with little distinction between art therapy and the REBT interventions, studies that this issue and determine the effects of their integration seem

necessary. Second, it is essential to evaluate the stability of the change shown as a result of art therapy through follow-up study. Third, it is necessary to utilize counseling sessions with various approaches as REBT and CBT, in addition to art therapy, for clients who have symptoms of low self-esteem and resilience. Finally, it is critical to compare this method with other methods. Using creative art as engraving and miniature with traditional verbal methods is also recommended.

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