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Original Article

The effectiveness of compassionate mind-based therapy on cognitive and emotional processing deficits of adolescent soldiers aged 18 to 20 years with high-risk behaviors

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Abstract

High-risk behaviors are defined as acts that increase the likelihood of physical, psychological and social disastrous consequences for the individuals. The aim of this study was to evaluate the effectiveness of compassionate mind therapy on cognitive deficits and emotional processing deficits among adolescent soldiers aged 18 to 20 years old with high-risk behaviors. The method of the present study was quasi-experimental with pre-test and post-test design. The population included all adolescent soldiers aged 18 to 20 years who referred to Valiasr Medical Center in Tehran in 2020. The sample consisted of 30 soldiers with high-risk behaviors who were purposefully selected among those who had completed the consent form based on entry and exit criteria. The selected individuals were randomly divided into two groups (15 people in each group). In order to collect data, Iranian adolescents' risk-taking questionnaires, Cognitive Failures Questionnaire and Toronto Alexithymia scale were used. The experimental group was trained for eight sessions of compassion treatment and the control group did not receive any treatment. The data were analyzed using multivariate analysis of covariance and SPSS-23 software. The results showed that compassion-based therapy reduced cognitive deficits ($p < .01$) and emotional processing deficits ($p < .05$). According to the results of the present study, employing compassionate practice and increasing positive emotions can expand an individual's behavioral-intellectual treasury, pave the way for successful problem solving, reduce negative intra-individual emotions, provide interpersonal skills, and thus reduce risky behaviors.

Keywords

Compassionate mind-based therapy
Cognitive deficits
Emotional processing deficits
High risk behaviors

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Introduction

One of the most destructive behaviors among adolescents especially in soldiers is high-risk behaviors. High-risk behaviors are described as acts that increase the likelihood of physical, psychological and social disastrous consequences for the individuals (Yi, Liu, & Qiao, et al, 2020). These behaviors are strongly correlated in adolescents and follow a changing pattern. Due to the self-centeredness and lack of proper understanding in late adolescence and early adolescence, high-risk behaviors have started as an important step (Han, Lee, & Suh, 2017). High-risk behaviors include: drug use, smoking, alcohol consumption, dangerous driving, unhealthy lifestyle, and high-risk sexual behaviors which are common among school-age children and adolescents (Jin, 2014).

Previous researches in other countries have identified and introduced many factors in the occurrence of high-risk behaviors (Deputy, Bryan, Lowry, Brener, & Underwood, 2021; Burgess Dowdell, Noel & 2020; Yellman, Bryan, Sauber-Schatz, & Brener, 2020). However, it should be noted that adolescence and youth is a period in which various aspects of mental health change and as a consequence most adolescents turn to high-risk behaviors, erratic cognitions, low self-esteem, dissatisfaction with life, inability to accept oneself and ultimately lead to the impossibility of expressing emotions (Maleki, Mohagheghi, & Nabibzadeh, 2019; baskin-Sommers & Sommers, 2006). Cognitive failure is the mistake or mistakes that a person makes in performing tasks while he is naturally able to do that. In other words, cognitive failure is a multidimensional structure that includes errors in shaping goals, activating

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schemas and launching actions (Mahdinia, Mirzaeialiabadi, Darvishi, Mohammadbeigi, Sadeghi, & Fallah, 2016). Cognitive Failure includes distraction, memory problems, inadvertent errors, and inability to remember names (Wallace, 2004). Due to interference with daily activities, cognitive failure can lead to the major problems (Voortman, De Vries, Hendriks, Elfferich, Wijnen, & Drent, 2019). It sometimes takes a long time to make up for these mistakes. When these errors occur in the execution of actions, they can lead to the serious injuries and even death (Doorn, Lang & Weijter, 2010). Swanson & Jerman showed that high levels of cognitive impairment have a significant positive relationship with emotional processing deficits. This means that subjects with high cognitive impairment in comparison with subjects with low cognitive impairment had lower performance in education and employment (Swanson & Jerman, 2006). In a study, Taubman showed that there is a positive and significant relationship between cognitive deficits and various components of high-risk behaviors such as alcohol consumption, substance use, dangerous driving accidents, and high-risk sex (Taubman-Ben-Ari, 2008).

Since high-risk behaviors are related to emotion, many studies on high-risk behaviors have focused on emotion and its expression (Kusev, Purser, Heilman, Cooke, Van Schaik, Baranova, & Ayton, 2017). Studies have shown that emotionally capable people recognize their feelings, understand their implications and express their emotional states to others more effectively (Housman, 2017; Oshri, Sutton, Clay-Warner, & Miller, 2015). Compared to people who are not able to understand and express emotional states, these people are more successful in dealing with negative experiences and show better adaptation in relation to the environment and others (Goleman, 1995). Inability to interpret and express emotions has been linked to defects in emotion processing. The term emotional processing is defined as the methods of individual assessment of stressful life events (Goleman, 1995). These distortions lead to other behaviors and experiences of the individuals towards illness and disorder (Kirisci, Tarter, Ridenour, Reynolds, Horner & Vanyukov, 2015). Emotional processing deficits are believed to be a risk factor for many mental disorders because people with the disorder are under a lot of pressure from emotionally correlated physical correlations (Ogłodek, 2022). This insufficiency prevents the regulation of emotions and makes it difficult for a person to adapt (Oshri, Sutton, Clay-Warner, & Miller, 2015).

Compassion-Focused Therapy (CFT) is one of the treatments whose effectiveness on cognitive deficits and emotional processing deficits in high-risk behaviors has not yet been studied. The word compassion has its roots in the Latin term kampati, which means "to suffer with". Probably the best definition of the concept of compassion is provided by the Dalai Lama; being sensitive to the suffering of oneself and others along with a deep commitment to alleviate it. In other words, it can be defined as a deep intelligent attention to motivation (Gilbert, 2014). It was originally designed to help individuals to develop accepting feelings about themselves, as well as helping them to expand a compassionate inner voice (Gilbert, 2014). Neff (2011) is another pioneer in self-compassion research who has developed her own model and tools. In his view, self-compassion includes three basic components which are: 1. acceptance and mindfulness of one's personal suffering. 2. being kind to self and not condemning or blaming oneself. 3. awareness of sharing experiences of suffering with others instead of feeling shame and loneliness, acceptance (openness) to the common sense of humanity. Compassion-oriented therapy is sort of the concept of compassion owed to many Eastern teachings (especially sensitivity to suffering and motivation to overcome it), but the roots of this approach are derived from the evolutionary approach, neuroscience, social psychology and neurophysiology which is related to caring and being cared for (Gilbert, 2014). Feelings of caring, acceptance and a sense of belonging to others are critical to our physiological maturity and well-being. Compassion-focused therapy encourages individuals to motivate compassion and practice compassionate behaviors to gain access to soothing systems (Leaviss and Uttley, 2015).

Social, developmental, and Buddhist psychology as well as many other models of therapy are concerned with mental health problems (Sommers-Spijkerman, Trompetter, Schreurs, Bohlmeijer, 2018). As a result, it promotes positive emotional states such as security, peace of mind, and satisfaction while at the same time alleviating negative emotional states through enabling people to experience the unpleasant or frightening emotions that characterize the threat system including anger, anxiety, shame and guilt and dealing with them (Gilbert, 2014).

It is important to study the influencing factors and variables involved in high-risk behaviors. Also, conducting intervention-oriented experimental research is one of the most important research activities of researchers, psychologists and physicians. A review of the literature shows that the high risk and prognosis of some disorders and the lack of necessary facilities and psychological research during the treatment of these disorders are very important. The success of circuit psychotherapy will also be able to provide important information on the preventive planning of specialists, because recognizing the important psychological variables of these disorders and considering them from the very beginning of the treatment path can not only affect the course of treatment, but also it will have the potential to protect adolescents from experiencing a variety of traumas and psychological disorders in the future. In addition, given the severity of these disorders, it seems likely that interventions that target the entire existential structure of the disorders will be successful. In this study, based on previous research literature, the probability of success of compassionate mind-based cognitive therapy will be tested. It is hoped that the results of this study can clarify the intervention path of

this disorder and pave the way for more effective and sustainable treatments. In addition, due to the fact that timely interventions can be effective in preventing high-risk behaviors, conducting such research will be able to improve the quality of related interventions. Also, from a practical point of view, the results of this research can provide useful information for physicians, clinicians, counselors and psychiatrists. In general, based on what was presented, the aim of this study was the effectiveness of compassionate mind-based therapy on cognitive deficits and emotional processing deficits in adolescent soldiers aged 18 to 20 years with high-risk behaviors.

Method

Participants

The method of the present study was quasi-experimental with pre-test and post-test design. The population of this study included all adolescent soldiers aged 18 to 20 years who referred to Valiasr Medical Center in Tehran in 2020. The sample selection process in the present study consisted of two stages: In order to design a purposeful sampling method, a high-risk behaviors questionnaire was used in order to screen soldiers who referred to Valiasr Medical Center in Tehran. By targeted 50 people, from those who had a score higher than 60% as well as completing the consent form to participate in the research and entry and exit criteria, 30 participants were selected and randomly divided into 2 groups (15 people in the experimental group and 15 people in the control). Admission criteria included: 1. Soldier aged 18 to 20 referring to Valiasr Medical Center in Tehran, 2. Willingness to participate in the study, 3. Obtaining a high score in the Iranian Adolescents' Risk Behaviors Questionnaire, 4. Do not suffer from acute mental disorders such as bipolar disorder, schizophrenia, etc. (filtered in bad entry with MMPI test) 71 questions at entry. Exclusion criteria: 1. Absence in more than one intervention session, 2. Participating simultaneously in other intervention programs, 3. Not wanting to continue collaborating in the study.

Procedure

The method of this research was as follows: First, a letter of introduction was obtained from the relevant faculty to submit to the management of Valiasr Medical Center in Tehran. From the soldiers who referred to Valiasr Medical Center, the researcher (Ph.D. student in psychology) selected purposefully 30 soldiers who had obtained a high score in the high-risk behaviors questionnaire and also had completed the moral satisfaction file based on the entry and exit criteria. These 30 soldiers with high-risk behaviors were randomly assigned to two groups (15 in the experimental group and 15 in the control group). The experimental group was exposed to the 8 weekly sessions of compassion-focused treatment, each for 90 minutes in a group, and the group did not receive a certificate of treatment. Also, for the participants of the control group to observe ethical issues in the research and thanking and appreciating them for their cooperation in the research process after the end of the research, treatment sessions were held. The research was conducted for three months. It should be noted that in this study, in order to obtain the satisfaction of the study subjects, the Helsinki Declaration which is the main supporter of the rules of research ethics was employed. The provisions presented in the Helsinki Declaration can be explained by the objectives of the research and the informed consent of the units under study, the option to participate in the research, the right to withdraw from the study, respond to the results without harming the intervention, Pointed to desire (World Medical Association, 2013).

Descriptive statistical methods including frequency table, graph, mean and standard deviation were used to analyze the collected data. Analysis of covariance was used to test the hypotheses. The analysis was performed using SPSS software version 23. It should be noted that the subjects were assured that participation in the study is completely optional and they will be free to refuse to participate in the study and their names will not be recorded in the questionnaire, also their information will remain confidential and only the results were published. Then the form of moral satisfaction of participating in the research was presented to them for signing.

The content of compassion-focused treatment sessions was adjusted based on Gilbert's concepts and treatment plan in eight 45-minute sessions (Kirisci et al, 2015). A summary of the content of compassion-focused treatment sessions is provided in Table 1.

Instrument

Iranian Adolescents 'Risk Inventory (2008):

This questionnaire with the help of valid and popular tools in the field of adolescents such as adolescent risk questionnaire (ARQ) and youth risk behavior control questionnaire (YRBSS) and taking into account the cultural conditions and social constraints of Iranian society, Iranian adolescents risk scale was built by Zadeh Mohammad and Ahmadabadi in 2008 in order to assess the risk of Iranian adolescents (Zadeh Mohammad & Ahmadabadi, 2008). This scale has 38 items to assess adolescents' vulnerability to 7 categories of high-risk behaviors (violence, smoking, drug use, alcohol use, sexual intercourse and behavior, and heterosexual orientation). In the answering method of this study each response was assessed using a 5-point scale and the respondents agree or disagree with these items from strongly agree (= 5) to strongly disagree (=1). The range of scores varies from 38 to 190 and the cut-off score of the questionnaire is a score higher than 50%, e.g. higher than 76. A higher score means high-risk behaviors. Cronbach's questionnaire was standardized in the study of Zadeh Mohammadi et al. 0 and sexual relationship and behavior was 0.87 (Zadeh Mohammad & Ahmadabadi, 2008).

Cognitive Failures Questionnaire Broadbent et al. (1982):

This questionnaire was developed in 1982 by Broadbent, Cooper, Fitzgerald and Parkes to measure cognitive failures. It has 24 items and the subject responds to these items with a five-point scale (from "never" to "always"), the range of scores is from 25 to 125, a high score means more cognitive impairment. In Wallace, Popp, and Mondore (2006) study, Cronbach's alpha coefficient of this questionnaire was 0.96 and its validity coefficient was 0.51. In a study, Abolghasemi et al (2009) reported Cronbach's alpha coefficient for the whole scale as 0.84 and for the subscales as 0.79, 0.64, 0.66 and 0.62.

Toronto Mood Disorder Scale 20:

This scale was developed by Taylor in 1986 and revised in 1994 by Bagby, Parker and Taylor (Bagby, Parker, & Taylor, 2003). The second revised version of the Toronto Mood Dysfunction Scale was 20 questions which seemed a breakthrough for early test makers. The instrument measures mood dyslexia on a five-point Likert scale from a score of 1 (strongly disagree) to a score of 5 (strongly agree). The minimum score of the participant in this questionnaire is 20 and the maximum is 100. Besharat also calculated the Cronbach's alpha coefficient for the whole mood malaise questionnaire and three components of difficulty in describing emotions and thinking with external orientation 0.85, 0.82, 0.75 and 0.72, respectively, which is a sign of good internal consistency (Besharat, 2007). Mazaheri and Afshar (2010) in a sample of 80 students calculated the reliability of this scale using Cronbach's alpha method. Cronbach's alpha was 0.75 for the whole scale, 0.72 for difficulty in recognizing emotions, 0.72 for difficulty in describing emotions, and 0.53 for external orientation thinking

Table 1. A summary of the content of compassion-focused treatment sessions

sessions	Aims	Content of each session	Homework
First session	Familiarity with the general principles of treatment	Performing pre-test, familiarizing the therapist and group members with each other, discussing the purpose of the sessions and its overall structure, reviewing the expectations of the treatment plan, grouping, reviewing the structure of the sessions, familiarity with the general principles of compassion-focused therapy; Assessing the level of shame, self-criticism and self-efficacy of members, conceptualizing self-efficacy education.	Record cases of shame and self-criticism in daily activities and challenges
Second session	Understanding the components of self-critical compassion	Identifying and introducing the components of compassion, examining each component of compassion in the members and identifying its characteristics, getting acquainted with the characteristics of people with compassion and reviewing the self-compassion of the members.	Record the components of self-sufficiency in daily activities.
Third session	Self-education of members	A review of the tasks of the previous session, cultivating a feeling of warmth and kindness towards oneself, cultivating and understanding that others also have flaws and problems (cultivating a sense of human commonalities) in the face of self-destructive feelings and shame, teaching self-compassion, forming and creating more emotions, And more diverse in relation to people's issues to increase care and attention to their health.	Record the components of self-sufficiency in daily activities
Fourth Session	Self-knowledge and identification of self-critical factors	Reviewing the exercises of the previous session, encouraging subjects to self-knowledge and examining their personality as a "compassionate" or "non-compassionate" person, identifying and applying "cultivating a compassionate mind" exercises (the value of self-compassion, empathy and compassion for oneself and others, Physiotherapist metaphor training), accepting mistakes and forgiving oneself for mistakes to accelerate change.	Record daily mistakes and identify the causes
Fifth Session	Correction and expansion of compassion	Review of the previous session, familiarity and application of "compassionate mind training exercises" (forgiveness, non-judgmental acceptance, flu metaphor training and tolerance training), problem acceptance training; Accepting the changes ahead and enduring difficult and challenging conditions due to the changing nature of life and people facing different challenges.	Forgiveness and acceptance without judgment in challenging daily activities and recording these cases
Sixth Session	Teach styles and methods of expressing compassion	Review the practice of the previous session, practical practice of creating compassionate images, teaching styles and methods of expressing compassion (verbal compassion, practical compassion, intermittent compassion and continuous compassion), applying these methods in daily life and for family and friends, Transcendental.	Apply compassion in daily activities
Seventh session	Techniques for expressing compassion	Reviewing the practice of the previous session, learning to write compassionate letters for oneself and others, teaching the method of "recording and daily diary of real situations based on compassion and one's performance in that situation."	Write compassionate letters to yourself and those around you
The eighth session	Evaluation and application	Training and practice skills; Review and practice the skills presented in the previous sessions to help the subjects to cope with different life situations in different ways. Strategies for maintaining and applying this treatment method in daily life, summarizing and concluding and answering members' questions and evaluating all sessions, thanking and appreciating members for participating in sessions, conducting post-tests, coordinating follow-up sessions in the next month.	Keep notes of what you learned from the process

As it can be seen in Table 1, a summary of the content of compassion-focused treatment sessions is reported.

Results

The results of the analysis of demographic findings in 45 participants indicate that the mean (and standard deviation) age of the participants in the experimental and control groups were 18.20 (8.93), 18.31 (8.18), respectively. Also, according to the education variable in the experimental group, 13.3% of them had an elementary degree, 26.7% had an undergraduate degree and 60% had a diploma. Also in the control group, 13.3% had a primary degree, 20% had a post-diploma degree and 66.7% had a diploma degree. As well as their minimum and maximum ages were 18 to 20. Also in socio-economic terms in the experimental group 13.33% (2 people) in very good condition, 20% (3) good, 33.33% (5 people), moderate, 26.66 (4 people) Weak and 6.66% were in very poor condition and in the control group 13.33% (2 people) very good, 20% (3 people), good, 33.33% (5 people) moderate, 13.33% (2 people) were weak and 20% (3 people) were very weak.
Kolmogorov-Smirnov test was used to check the normality of the distribution. According to the results of the relevant table, the level of significance obtained from cognitive failure in the pre-test of cognitive failure (p = 0.798, Kolmogorov-Smirnov Z= 0.646), in the post-test of cognitive failure (p = 0.646, Kolmogorov-Smirnov Z= 0.739) and for the variable Mood disturbance in pre-test (p = 0.981, Kolmogorov-Smirnov Z= 0.467) and mood distress in post-test (p = 0.884, Kolmogorov-Smirnov Z= 0.584) were greater than 0.05. Therefore, the data of all variables were normal and therefore parametric test was used to test each of the variables with normal distribution. To evaluate the homogeneity of variance of research variables, Loon's error parity test was used. Based on the significance level obtained in this test, it is possible to judge the homogeneity or inhomogeneity of the variances. Thus, if the significance level obtained is greater than 0.05, the variances are equal and vice versa. Therefore, according to Table 2, the condition of homogeneity of variances for cognitive deficits (p = .0204) and for emotional processing defects (p = 0.767) is established.
Box test was also used to determine the homogeneity of these covariance matrices. Its results showed that the probability value of each of the research variables was greater than 0.05 (p < .05).

Table 2. Mean and standard deviation of pre-test and post-test of cognitive deficits and emotional processing defects in two groups

Variable		Experimental		Control	
		Mean	Standard Deviation	Mean	Standard Deviation
Cognitive deficits	Pre- test	68.400	3.561	68.533	4.657
	Post-test	60.733	3.195	68.600	5.011
Emotional processing defects	Pre- test	83.600	8.279	84.666	6.873
	Post-test	78.600	5.422	85.533	5.655

As it can be seen in Table 2, cognitive deficits and emotional processing defects in the pre-test and post-test in the experimental group are different.

Table 3. Results from multivariate analysis of variance (Wilks' Lambda) for intergroup and intragroup effects

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Group	Pillai's Trace	0.633	6.257	4.000	54.000	0.000	0.317
	Wilks' Lambda	0.374	8.253	4.000	52.000	0.000	0.388
	Hotelling's Trace	1.652	10.328	4.000	50.000	0.000	0.452
	Roy's Largest Root	1.640	12.141	2.000	27.000	0.000	0.621

According to Table 3, the results of Wilkes lambda test showed that the effectiveness of compassionate mind-based therapy is significant in at least one of the variables (p < .001, Wilks' lambda = 0.374). Therefore, the condition of using multivariate analysis of variance (MANCOVA) is observed.

Table 4. Separation results of multivariate analysis of covariance

Variable	Sum of squares	Df	Mean Square	F	Sig	Effect size	Observed Power
Cognitive deficits	476.696	2	238.348	13.352	0.000	0.497	0.995
Emotional processing defects	368.503	2	184.251	5.843	0.008	0.302	0.832

According to the results of Table 4, considering the pre-test scores as confusion scores, the difference between cognitive deficits and emotional processing defects in the experimental and control groups is significant (p < .05); therefore, it can be said that according to the ETA square in each of the variables of cognitive deficits (49%) and emotional processing defects (30%), the changes are explained according to the treatment intervention based on compassionate mind.

Discussion

The aim of this study was to evaluate the effectiveness of compassionate mind therapy on cognitive deficits and emotional processing deficits in adolescent soldiers aged 18 to 20 years in high-risk behaviors. Based on the first results of this study, it was found that the effectiveness of compassion-based treatment due to cognitive deficits of adolescent soldiers aged 18 to 20 years has been associated with high-risk behaviors. This finding is consistent with the results of research by Sheshboloki and Haroonrashidi (2021), BarghiIrani et al. (2016) and Torbati et al. (2020). For example, in a Sheshboloki study by Harun Rashid, it was found that compassion therapy is associated with a reduction in emotional dysfunction and dysfunctional metacognitive beliefs. Other studies have shown that compassion-based interventions reduce cognitive responsiveness in individuals with suicidal behaviors (Bagian Kulehmarzi, Karami, Momeni, & Elahi, 2002).

Explaining such a finding can be attributed to the fact that compassion therapy replaces kindness and compassion with negative emotions by targeting "shame and self-criticism" which are at the core of most emotion problems. Reducing negative emotions which is associated with increased mental health and the spread of positive emotions, launches a phenomenon known in "positive psychology" as the "theory of making and spreading positive emotions." According to this approach, the development of positive emotions expands the behavioral-cognitive treasury of individuals, which can be a prelude to reducing cognitive deficits. Findings also indicate that low cognitive function is associated with high negative emotions and low positive emotions (Galvez-Sánchez & Reyes Duschek, 2018).

According to another study, compassionate mindfulness therapy improves emotional processing deficits in soldiers. A review of the background of the researches also shows that the present finding is in line with the previous researches (Tajdin, AleYasin, Heydari, & Davodi, 2021; Adibizadeh & Sajjadian, 2019). Tajdin et al. (2021) also compared the treatment of compassion and reality therapy and confirmed the effectiveness of compassion-based therapy in reducing emotional dysfunction (mood dysphoria) that is in consistent with the findings of Bahadori, et al (2021).

The explanation for this finding can be attributed to the fact that some emotional exercises such as writing a compassionate letter and focusing on elements such as compassion, compassionate reasoning to find a valid reason for each event, adopting a compassionate tone instead of aggression or anger, avoid wandering mind Which causes mental rumination, and compassionate sensory experiences, help soldiers improve their emotional processing by practicing anxiety tolerance and increasing well-being motivation. As a result, by controlling their minds, they direct their mental path towards empathy, and sensitivity to suffering which can reduce sensitivity and negative emotions in emotional distress (Bahadori et al, 2021). On the other hand, given the tense situation in military settings, soldiers can be expected to have a greater need for positive experiences such as self-compassion or empathy that can increase their desire for self-compassion.

Conclusion

According to the findings of the present study, it seems that with compassionate exercises and increasing positive emotions, the behavioral-intellectual treasury of the individual expands which can be the basis for solving the appropriate problem and reducing conflicts between interpersonal and interpersonal emotions, and thus provided a reduction in high-risk behaviors.

The present study, like any other research, has limitations that can express the findings and suggestions of the research and be helpful for future studies. Due to the statistical population and the limited sample that included only 18 to 20 years old adolescent soldiers who referred to Valiasr Medical Center in Tehran in 2020, so the selected samples cannot be representative of all soldiers in the country and the results can be extended to other cities. Another limitation is the lack of control over underlying and individual factors. It is possible that participants overestimated the effectiveness of the program due to some underlying factors. Another possible assumption is that people have overestimated the effectiveness of the program due to personal preference, optimism, and the like. Also in this study, the experimental method was performed by a therapist that the therapist's skill, his personal perception of these educational methods and the interaction of techniques and principles of these methods with the therapist's personality and characteristics, is something that should not be ignored. Therefore, due to these limitations, it is suggested that this research be conducted in a different statistical comprehensive and in other cities. It is also suggested that in future researches, the experimental method be performed by several therapists. It is also suggested that counseling centers, psychotherapists and hospitals use group and affordable therapies such as compassion treatment for individuals, soldiers and adolescents.

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Disclosure Statement

The authors declare that there was no commercial or financial relationship that could be construed as a potential conflict of interest in their research.

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