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The Effectiveness of Emotion Regulation Therapy for Adolescents with Non-Suicidal Self-Injury Disorder: A Case Report

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Abstract

Introduction: According to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), the self-injury syndrome is defined as a disorder on which more studies should be conducted. Given the prevalence and consequences of the non-suicidal self-injury disorder (NSSID) among adolescents and the introduction of a new class of NSSID in DSM-5, certain interventions are required for dealing with such behaviors among adolescents with NSSID. Emotion regulation group therapy (ERGT) is a novel treatment specific to Deliberate Self-Harm. The aim of this study was to analyze the effectiveness of emotion regulation therapy among adolescents with NSSID. Case Presentations: The case was a 15-year-old female student of the ninth grade diagnosed with NSSID. She received 14 sessions of emotion regulation therapy weekly. She filled out the Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS), the Deliberate Self-Harm Inventory, Difficulty in Emotion Regulation Scale (DERS), the Beck Depression Inventory (BDI-II), and the Beck Anxiety Inventory (BAI) at baseline in addition to undergoing the intervention and follow-up. Conclusion: According to the research findings, the proposed treatment method decreased the participant's scores on BDI-II, BAI, and DERS. It also reduced the frequency of self-injury behaviors. These effects lasted in the follow-up, too. The research findings indicated that emotion regulation therapy had a positive effect on adolescents with NSSID.

Keywords: Emotion Regulation, Non-Suicidal Self-Injury, Adolescents, Psychotherapy, Deliberate Self-Harm.

Introduction

Nowadays the phenomenon of self-injury has drawn the attention of many researchers. Self-injury behaviors were considered one of the 9 diagnostic criteria for the borderline personality disorder (BPD) in Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV). Nevertheless, previous studies indicated that it could occur in people without BPD (Selby et al.,2015). It could also be comorbid with many disorders such as eating disorder, substance abuse, unipolar depression, bipolar depression, posttraumatic stress disorder (PSD), generalized anxiety disorder (GAD), social anxiety disorder (SAD), and obsessive-compulsive disorder (OCD) (Briere & Gil,1998; Claes et al.,2010, Nock et al., 2006). Many years after researchers demanded that the self-injury syndrome be added to Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), non-suicidal self-injury disorder (NSSID) was introduced as a condition for further study (Selby et al.,2015). non-suicidal self-injury (NSSI) is highly prevalent among adolescents and the youth. It has also become very common in nonclinical populations (Lloyd-Richardson et al.,2015). Recently, Gratz and Roemer's emotion regulation model has empirically confirmed risk factors in the growth of NSSI among adolescents and adults (Gratz & Roemer,2004). Chapman, Gratz, and Brown proposed experiential avoidance model for the prevention of NSSI in 2006. According to that model, individuals use self-injury behaviors as an instrument to avoid experiencing unwanted emotions (Chapman et al.,2006). Research and theoretical backgrounds emphasize the role of emotional dysregulation (ED) creating and maintaining unintentional self-injury. In-time prevention and intervention are very important because they deal with the barriers to the improvement and NSSI risk factors among adolescents. Acceptance and Commitment Therapy (ACT, Hayes & Strosahl,1999) and DBT (Linehan,1993) reduce reduces experiential avoidance. but these treatments are not easily implemented. an emotion regulation group therapy (ERGT, Gratz & Gunderson,2006)

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developed to meet the need for brief, efficacious interventions for self-harm in adults with BPD. ERGT (Gratz et al.,2014; Gratz & Gunderson,2006) targets unintentional self-harm and its underlying mechanism directly. Gratz et al. (2014) analyzed the mechanism for changing the ERGT among women with BPD and self-injuries. According to their results, ED improvement could intermediate the reduced emotional and cognitive symptoms at the time of treatment (Gratz & Gunderson,2006). In fact, they analyzed the effectiveness of an emotion regulation therapy in adults with BPD. More studies are required for investigating the effectiveness of such interventions in individuals without any considerable symptoms of BPD (Brackman & Andover,2017). Although NSSI is regarded as a psychological and physical welfare risk factor among patients, few studies have been conducted on NSSI. A fewer number of such studies dealt with the therapeutic interventions of NSSI among adolescents. However, such behaviors are more prevalent in this age group (Klonsky & Muehlenkamp,2007). Considering the increased number of adolescents and young people in Iran's population, no studies have been found on the effectiveness of interventions directly targeting such behaviors in adolescents with NSSID. Thus, the aim of this study was to investigate the effects of an emotion regulation therapy individually in adolescents with NSSID.

Case presentation

The participant was a 15-year-old female student of the ninth grade. She was the firstborn of a four-member family. Accompanied with her mother, the girl complained to a counseling center about anxiety, anger, and self-injury behaviors. During the last year, she inflicted superficial injuries on her body intentionally for five or more days. Due to her injuries, she was prone to bleeding, scars, or pain. She scratched herself with a razor. She also scratched her head and body so badly that it could cause injuries. Her self-injuries occurred usually before anger and anxiety. She inflicted self-injuries on her body in an effort to get rid of a negative feeling or negative cognition. Interpersonal issues with her parents and brother or negative emotion and thoughts such as depression, anxiety, tension, anger, pervasive inconvenience, and self-criticism were reported immediately before self-injuries. It should also be noted that she always tried to conceal such behaviors from others. The Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS), current diagnosis, and lifetime were used to evaluate current and previous episodes of mental disorders. The participant did not have any suicidal tendencies in the last six months. According to the evaluation of her interview, the participant had major depression disorder two years ago. She did not have any history of pharmaceutical or psychological treatments. After interviewing the participant and her mother and receiving a participation consent, the questionnaires were given to her under the surveillance of the researcher. Then she was asked to fill out a demographic questionnaire, the Deliberate Self-Harm Inventory, Difficulty in Emotion Regulation Scale (DERS), the Beck Depression Inventory (BDI-II), and the Beck Anxiety Inventory (BAI). All of them were high in psychometric properties (Gratz & Roemer,2004; Beck et al.,1988; Beck et al.,1996; Beck etal.,1988; Gratz,2001). After that, the participant received a treatment based on emotion regulation for 14 sessions. Every therapy session lasted for 45 minutes weekly. Moreover, the questionnaires were filled out in three baseline sessions, treatment sessions (4, 8, and 12), and immediately after the intervention. When the intervention was done, three follow-ups were carried out in every 15 days.

ERGT was derived from the adoption ACT and DBT. There was emphasis on the themes of potential paradoxical effects of emotional avoidance, acceptance and emotional willingness consequences in emotion regulation and the importance of controlling behaviors instead of controlling emotions (Linehan,1993). The first therapy session dealt with the functions of the self-injury behaviors. It was also clarified that self-injuries were effective in the short term; however, they were much less effective in the long term. On the other hand, they might surprisingly increase emotional pains. The participant stated that her self-injury behaviors would lessen her anger and make her feel pleased. However, the pleasure would not last much, and then she would start blaming herself. In the second session, the participant was helped to identify her emotions prior to the desire for self-injury and her negative beliefs on emotions. Her negative beliefs included, "Negative feelings are bad," and "Anxiety and anger should be avoided." Accordingly, she was provided with a psychological training in the adaptive nature of every emotion and the modification of negative beliefs. In the third and fourth sessions, she was provided with a psychological training in different components of emotional responses and different levels of emotional awareness. The participant was aware of her own physical feelings; however, she was unable to identify and label her emotions accurately. To increase her awareness, she was told to ask herself the following questions after experiencing every emotion: 1) What situations cause such emotions? 2) What thoughts are associated with these emotions? 3) What physical feelings are associated with these emotions? 4) What tendencies are associated with these emotions? And 5) How do I tend to respond to these emotions? Then her last experienced emotion was dealt with as an exercise in the same session. In the fifth session, she was provided with a psychological training in the difference between primary and secondary emotional responses. The secondary emotional responses were identified as various emotions such as sadness, anger, fear/anxiety, and happiness. The participant was helped to identify the thoughts leading to the secondary emotional responses. She stated that her secondary emotional response to anger was shame. In the sixth session, she was provided with a psychological training in the difference between clear and cloudy emotional responses. She stated that getting no sleeping, having no food, and the fear of encountering her mother would cloud her emotions. She was then told that cloudy emotional responses were normal and that she should not judge them. She was helped to identify adaptive response methods based on the information provided by clear emotional responses. The seventh and eighth sessions dealt with dissatisfaction and emotional avoidance against satisfaction and emotional acceptance. The participant was asked to remember some experiences in which she had tried to control or avoid her emotions. She stated that she would scratch her body or head, sleep, or hurt her arm with a razor to control her emotions.

Following these comments, she was provided with a psychological training in the paradoxical consequences of direct efforts to avoid emotions. Then she reported her experience of avoidance and self-injury behaviors. At that time, her distress was lessened; however, she then blamed herself. Then several metaphors were used to introduce acceptance/willingness as the substitute to avoidance/unwillingness. In the ninth session, non-emotionally avoidant emotion regulation strategies were identified. At the beginning of this session, emotion regulation was introduced as the most important skill. Then she was trained in the adaptive strategies of emotion regulation. She pinpointed certain methods of avoidance and distraction, which she would use in different situations. She would use distraction and avoidance strategies more often when she was alone at home. She was trained to use the following acceptance strategies more often: taking daily notes, having conversations, doing artistic work, listening to music, playing musical instruments, mindfulness, meditation, deprivation, paying attention to emotions, and distraction strategies including watching TV, doing the daily routine, exercise, running, listening to music, watching movies, chatting with a friend (about different topics), and reading a book. At the beginning of the tenth session, the participant stated different strategies of emotion regulation. Then the best strategy was described to her. Furthermore, she was provided with explanatory comments on impulsive behaviors and different impulsive-control strategies such as distraction, delaying impulsive behaviors, remembering the consequences of impulsive behaviors, and similar techniques. She suggested sweeping the floor, washing dishes, reading books, and chatting with friends for distraction. Moreover, certain flashcards were provided with the help of the participant to remind her of the consequences of impulsive behaviors such as causing body sores, blaming others, blaming herself, and controlling emotions difficulty. In the eleventh session, the participant reported that she would perform impulsive-control strategies very well, except for one technique. In the eleventh and twelfth sessions, she was provided with a psychological training in the importance of identifying values. Various metaphors such as mountains and gardening were used to explain values and goals and their differences. The participant believed that values were the same spirituality and ethics. After providing her with explanatory comments on values, she introduced education, occupation, familial relationships, and recreation as her most important values. In the thirteenth and fourteenth sessions, the participant stated her values along with the consistent actions. After that, she was helped to identify performable actions by concentrating on simple and small actions in a short period of time. Then she reported the value actions she had done in the previous week. She pointed out a series of internal and external barriers such as peer pressure and negative thoughts, implying that her parent would not take such actions. In the same session, barriers were dealt with. She was also provided with a psychological training in commitment. At the end, she received a review of the 14 sessions. Then three follow-ups were carried out in every 15 days.

The aim of this study was to evaluate the effectiveness of an emotion regulation therapy method in the reduced frequency of self-injury behaviors, depression, anxiety, and difficulty in emotion regulation. According to the results, the frequency of NSSI decreased from the baseline to the end of the therapy. Moreover, the emotion regulation therapy method decreased the participant's scores in BDI-II, BAI, and DERS. Such effects lasted in the follow-up, too (Figure 1, 2). At the end of the therapy, the participant did not meet DSM-5 criteria for the diagnosis of NSSID. It should also be mentioned that the positive effects of treatment lasted in the follow-up. The descending tangent of Figure 1 indicates the reduced anxiety score. Only in the eighth session, an increase was observed in the anxiety score which was due to the participant's final exams, causing her anxiety and depression scores increase. However, the results indicated the positive effects of the emotion regulation therapy method on the reduction in anxiety and depression scores among people with NSSID.

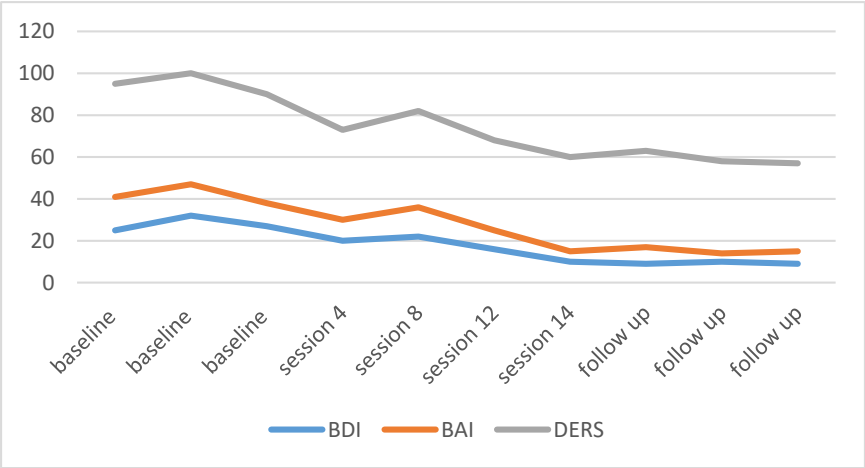

Fig. 1: result BDI and BAI and DERS scores during the study
Note: BDI: Beck Depression Inventory, BAI: Beck Anxiety Inventory, DERS (Difficulty in Emotion Regulation Scale)

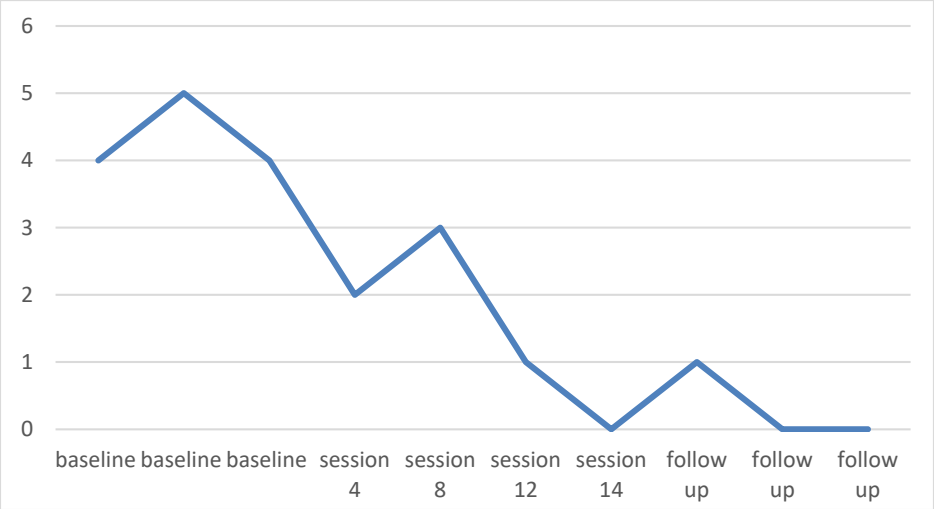

Fig. 2: result NSSI frequency (DSHI) during the study
Note: NSSI frequency (DSHI), non-suicidal self-injury frequency (Deliberate Self-Harm Inventory)

Discussion

The research findings indicated the effect of emotion regulation therapy on NSSID. The reduced symptoms of depression, anxiety, and difficulty in emotion regulation and the reduced frequency of NSSI were consistent with the findings of other studies conducted in this area. Gratz and Ganderson (2006) analyzed the effect of an emotion regulation group therapy on women with BPD and deliberate self-injuries. Their findings indicated the significant effect of ERGT on self-injury behaviors, emotional dysregulation, and the symptoms of anxiety and depression (Gratz & Gunderson,2006). Bjureberg et al. (2017) analyzed the effect of singular emotion regulation therapy on people with NSSID. Their findings showed that the frequency of NSSI was significantly reduced by average from the baseline to the end of the treatment. Moreover, a reduced frequency of NSSI was observed between the baseline and follow-up. Other destructive behaviors such as difficulty in emotion regulation were significantly improved by average from the baseline to the end of the treatment. Such behaviors were highly improved from the baseline to the end of the treatment (Bjureberg et al.,2016).

Generally, the research results were consistent with the empirical avoidance model (Chapman et al.,2006). According to this model, people use self-injury behaviors as an instrument to avoid experiencing unwanted emotions such as anxiety and depression (Holly,2011). Therefore, increasing emotional tendencies, especially emotions such as anxiety and depression, can eliminate the deficit cycle of emotional avoidance and self-injury (Chapman et al.,2006). The emotion regulation therapy (Gratz & Gunderson,2006; Gratz et al.,2014) targets unintentional self-injury and its underlying mechanism directly. It also decreases empirical avoidance by reducing accustomed behaviors, increasing emotional tendencies, and training patients in paradoxical consequences with an effort to control and avoid emotions and increase valuable actions. In this study, a research constraint was the fact that there was only one participant. Therefore, the generalizability of the research results would decrease. Another research constraint was the fact that a 45-day follow-up could not be appropriate. However, it is suggested that future studies analyze the effect of such treatment in 3-month and 6-month follow-ups.

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