

Original Article

The Effectiveness of Self-Compassion Training on Self-Criticism and Academic Achievement among Female Students with Generalized Anxiety Disorder

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Introduction: The purpose of this study was to investigate the effectiveness of self-compassion training on self criticism and academic achievement in 11th grade female students with GAD.

Methods: The present experimental study included pre-test, post-test with the control group design. The statistical population of this study consisted of all female 11th grade students of in the City of Izeh in the academic year of 2015-2016. Screening was conducted and 302 participants completed the Penn State Worry Questionnaires, Then 40 individuals suffering from GAD were identified and assigned randomly to experimental and control groups. The instruments used in this study was Self-Criticism Questionnaire and student's average scores were used to measure academic achievement. The experimental group received self-compassion training for ten 90-minutes sessions, one session in a week lasting for two months. Analysis of the data was done using descriptive and inferential tests such as covariance analysis was conducted.

Results: Experimental group showed significant decrease in self-criticism after being Trained ($P < 0/001$). It also increased academic achievement in experimental group ($P < 0/001$).

Conclusion: Based on the results, self-compassion training is an important factor in reducing self-criticism and to improve academic achievement in students suffer from GAD.

Declaration of Interest: None.

Keywords: Self-Compassion, Self-Criticism, Academic Achievement, Generalized Anxiety Disorder.

Introduction

Anxiety, as part of life, is observed to a moderate extent in all individuals. Anxiety is considered as an adaptive response and remains healthy as long as it does not transform into severe anxiety (1). It is believed that low level of anxiety is necessary for everyday life. However, greater degrees of anxiety can cause serious damage to one's body, mind, social relationships, and academic status and deprive the person from high quality of life (2). Generalized Anxiety Disorder (GAD) is a common mental disorder, which according to the DSM-V, is diagnosed when a person experiences three or more of the following symptoms for at least six months: excessive worry and anxiety, uncontrollable stress, fatigue, impaired concentration,

irritability, feeling on edge, and sleep disturbance (3).

A large number of factors have been related to GAD including self-criticism (4), which is associated with extensive psychological problems. Studies have indicated that self-criticism plays a highly important role in anger, anxiety, and affective disorder (5). When faced with challenges, self-critical individuals usually become vulnerable (6). Furthermore, children and adolescents with GAD tend to be more self-critical (4). Feelings of worthlessness, guilt, and failure are typically observed in self-critical individuals (7). Overall, self-criticism is viewed as a form of inner harassment, which can cause stress and weakness (5). According to Thompson and Zuroff (8), there are two types of

dysfunctional negative evaluations: internalized self-criticism and comparative self-criticism. Self-criticism is defined as negative views of oneself compared to others where in others are considered superior. Another level of self-criticism refers to the criticism of oneself in comparison to one's own standards, which focuses on the shortcomings of the person. Normally, the person's standards are impossible to achieve; however, failure to achieve them is regarded as a weakness or shortcoming by that person (10). Comparative self-criticism has been shown to cause hopelessness and humility while internalized self-criticism leads to self-loathing (8). Many authors argue that self-criticism plays a pivotal role in creating an environment full of tension (9). Stress disorders are among the factors that impact academic achievement (10). Educational systems in many countries are mainly concerned with the academic success of students (11). Researchers believe that students, who experience anxiety at the time of progress, tend to exhibit poor performance (12). Although all students feel some degree of anxiety from time to time, in some cases, it may hinder learning and result in poor performance on tests (13). In students, the disorder may manifest as absenteeism, poor academic performance, and low grades (14). Anxiety is a threat to mental health among students and, as a common phenomenon, may impact both academic achievement and performance during evaluations (15).

Possible treatments for self-criticism and poor academic achievement among students suffering from GAD include self-compassion, which involves taking care of oneself in facing difficulties (16). When experiencing negative events, high self-compassion individuals treat themselves with kindness, concern, and gentleness (16). Self-compassion is comprised of three components: (1) self-kindness as opposed to self-judgment (i.e. tendency to protect oneself against harmful judgments); (2) human commons as opposed to isolation (i.e. understanding that all people experience defeat at some point in their lives which should not lead to their isolation); and (3) mindfulness as

opposed to over-identification. High degrees of self-compassion may result in lower self-criticism, mental rumination, and anxiety (17). The effectiveness of this treatment has been demonstrated in several clinical studies. Self-compassion has been proven successful in individuals with high guilt, self-criticism, and blame (7). In another study, Gilbert and Procter used self-compassion on chronic patients having depression, anxiety, self-criticism, and self-blame (18).

Although research on the relationship between self-compassion and academic achievement is scarce, there is emerging evidence that the treatment may positively influence academic achievement. Students with high level of self-compassion are able to accept failure as part of their learning process, which in turn prevents them from experiencing self-criticism and isolation (19). In a study on the impact of self-compassion on academic achievement among low-income female college students, a positive association was reported (20). Furthermore, self-compassion is positively linked to mastery goals including enjoying learning, interest in developing one's skills, content mastery and understanding while being negatively associated with performance goals. High self-compassion students are more proficient in understanding learning situations (19). Due to the novelty of the self-compassion construct in psychology, it must be investigated in further depth. To the best of our knowledge, a similar study has not been conducted in Iran. Thus, combining the aforementioned observations, this paper sought to answer the following question: Does self-compassion training have a positive impact on academic achievement among female students with GAD in the 11th grade in the City of Izeh?

Methods

The sample populations of this study were consisted of all female students in the 11th grade in the City of Izeh in the academic year of 2015-2016. The study involved two phases. Firstly, an identification phase was performed in which 302 participants were selected through multistage cluster sampling. In doing so, 5 of the 28 high schools in the city were

selected at random and, in each one, two classes were once again randomly selected. Penn State Worry Questionnaire (PSWQ) was administered to all of the students in the selected classes to identify students with above average scores. In the second stage (i.e. the subject selection phase), students whose scores were higher than the cutoff point were identified and the semi-structured K-SADS-PL interview was administered for the diagnosis of GAD. Finally, a total of 40 students were chosen as the subjects of the study who were randomly divided into experimental and control conditions. The experimental condition attended ten weekly group sessions of 90 minutes for a period of two months using Gilbert's compassion focused therapy (21), while the control group received no intervention. A post-test was performed on both groups. The following instruments were used for data collection purposes.

Kiddie-Schedule for Affective Disorders and Schizophrenia-present and life-time (K-SADS-PL): The instrument by Kaufman, Birmaher, and Brent (1997) was used to evaluate current and previous GAD psychopathology in children and adolescents between 6 and 17 according to DSM-III-R and DSM-IV. Kaufman et al. reported a reliability coefficient of 0.80 using a test-retest approach in a period of one to five weeks. Moreover, an internal correlation of 0.90 is reported with the Beck anxiety instrument (22). Iranian studies have reported reliability values of 0.47 to 0.85 using Kapa coefficients (23).

Penn State Worry Questionnaire (PSWQ): the instrument by Molina and Borkovec (1994) is comprised of 16 items that acts to screen GAD. Internal consistency coefficients of the instrument have been reported between 0.88 and 0.95 while the retest reliability coefficient falls between 0.74 and 0.92 (24). Cronbach's alpha and retest coefficients in an Iranian sample are 0.88 and 0.79 respectively. Finally, correlation of the scores with trait anxiety and depression indicate convergent validity of the instrument ($p < 0.01$, $r = 0.68$) (25).

Levels of Self-Criticism Scale: The scale by Thompson and Zuroff (2004) was used to measure the level of self-criticism among

students. It consists of two components: comparative self-criticism with 12 items and internalized self-criticism with 10 items that are rated on a seven-point Likert scale. Thus, the total score ranges between 22 and 154. The alpha coefficient for the two subscales equals 0.78 and 0.84 respectively. Also, the two subscales are correlated with the self-worth scale, having coefficients of -0.66 and -0.52 respectively (8). An Iranian study has reported an alpha coefficient of 0.83. Furthermore, the scale has a significant positive correlation with the interpersonal problems scale ($p < 0.001$, $r = 0.36$) (26).

Moreover, in order to measure academic achievement, their GPAs in the first and second semesters of the academic year were used for post-test purpose.

In this study, subsequent to obtaining the necessary permits, the PSWQ was administered and the students whose scores exceeded the cut point were clinically interviewed. Participants that fulfilled the diagnostic criteria were identified and a total of 40 students with GAD were randomly selected and divided into two groups of experiment and control. The self-criticism questionnaire was administered to both groups as a pre-test. The self-compassion training package by Golpour et al. (27) was used with the experimental condition. The training was given by a therapist. The students in the control group received no training. In the following, a brief description of the activities in each training session is given.

Session 1: The students introduced themselves and got acquainted with the instructor, the rules, and the concept of self-compassion. The notion of sympathy was then introduced.

Session 2: The student learned about styles of treating oneself (i.e. criticism vs. compassion) and the definition of self-criticism as well as its causes and consequence.

Session 3: Acceptance of mistakes and forgiving oneself to accelerate change was discussed. Later on, the students practiced self-appreciation by for example stating ten traits that they love about themselves.

Session 4: The session involved acceptance to be able to endure difficult and challenging situations that are inevitable in one's life.

Session 5: The students learned about developing valuable emotions in themselves to be able to effectively deal with their environment.

Session 6: The students were taught mental visualization in groups (images of colors, places, and compassionate characteristics).

Session 7: The role of self-compassion in guiding one's thoughts and actions was emphasized in this session, which was followed by compassionate thoughts training to overcome criticism. Finally, students were given group assignments in the class and at home.

Session 8: The inner dialogue among the three selves (i.e. the criticizing self, the criticized self, and the compassionate self) was defined and practiced. The students were asked to

occupy different seats and communicate with contradicting parts of themselves.

Session 9: The students learned about self-compassionate letters and wrote to an imaginary friend who was well aware of their strengths and weaknesses. In doing so, they imagined a conversation and wrote it down.

Session 10: The topics discussed in the previous nine sessions were reviewed.

Results

Table 1 shows descriptive statistics (mean and standard deviation) for both conditions at pre-test and post-test. As evident, the self-criticism variable has been shown to have significant decrease at post-test for participants in experimental condition. Furthermore, the increase in the academic achievement variable was significant in experimental condition compared to the control condition.

Table 1. Mean and standard deviation in both experimental and control groups

	Group	Mean	Standard Deviation	Quantity
Pre-test				
Self-criticism	Experiment	81.80	11.71	20
	Control	77.30	14.47	20
Academic Achievement	Experiment	15.68	1.20	20
	Control	16.73	1.45	20
Post-test				
Self-criticism	Experiment	60.05	8.14	20
	Control	77.25	12.95	20
Academic Achievement	Experiment	17.40	1.27	20
	Control	16.08	1.22	20

Following the formation of necessary hypotheses, covariance analysis was performed to determine the significant differences between the variables. Homogeneity of variance indicated that the significance of Levene's test is established for self-criticism and academic achievement scores at both pre-test and post-test ($p > 0.05$).

Thus, the variance is assumed to be homogenous, justifying the use of covariance for statistical analysis. As shown in Table 2, all significance levels are valid for performing the MANCOVA and the difference between the dependent variable in the experiment and control group is equal to 0.57.

Table 2. Results of multivariate analysis of covariance on Self-criticism and Academic achievement Multivariate Tests

		Value	F	Error df	P	Partial Eta Squared
Group	pillais	0.577	23.86	35	0.000	0.577
	Wilks Lambda	0.423	23.86	35	0.000	0.577
	Hotelling	1.63	23.86	35	0.000	0.577
	Roy's Largest Root	1.63	23.86	35	0.000	0.577

MANCOVA in Table 3 shows that self-compassion training is able to create a significant decrease in the self-criticism of subjects in the experiment condition ($p < 0.001$,

$F = 23.90$). The increase in the academic achievement of the group is also significant ($p < 0.001$, $F = 20.87$).

Table 3. Results of covariance analysis of Self-criticism and Academic achievement Tests of Between-Subjects Effects

Dependent variable	Stage	Sum of squares	df	Mean squares	f	P	Partial Eta Squared
Self-criticism	Pre-test	160.33	1	160.33	1.38	0.246	0.367
	Group	2758.04	1	2758.04	23.90	0.001	0.367
Academic achievement	Pre-test	14.60	1	14.60	11.83	0.001	0.247
	Group	25.76	1	25.76	20.87	0.001	0.367

Conclusion

The objective of this paper was to investigate the impact of self-compassion training on self-criticism and academic achievement among female students in the 11th grade in the City of Izeh. The results showed that self-compassion training reduces self-criticism in the subjects. This is consistent with (25) and (7). Self-criticism is regarded as a form of internal harassment which can cause stress and weakens to the person (7). Researches by Thompson and Zuroff (8) have indicated that self-critical individuals always hold strictly high standards. Thus, achieving these standards is a big problem. These individuals constantly evaluate different situations, which causes anxiety and discomfort as well as negative emotions (28). However, self-compassion helps individuals maintain their health since they learn to treat themselves more gently, be aware of their conditions, and face different situations with judgment (29). Through self-compassion, one is able to achieve emotional security allowing him/her the opportunity to understand and modify dysfunctional thought, emotional, and behavioral patterns (30). Self-compassion potentially has the appropriate coping resources for people to deal with negative events in their lives (31). This approach considers self-kindness which leads to both positive and negative emotional changes and helps the patient evaluate his/her judgments while intelligently accepting his/her emotions and thought; this in turn increase the person's ability to overcome self-critical confusions and tendencies (18). Some authors have argued

that compassion is analogous to a shield which protects against the impacts of negative events. High self-compassion individuals are more comfortable accepting negative life events since they are less strict on themselves; their reactions are more accurate and based on their actual performance (32). Our findings also showed that cognitive self-compassion enhances academic achievement as evidenced by the increase in the experiment condition vs. the control condition. This is in line with (19) and (20). Anxiety is a critical motivational and cognitive variable, which significantly impacts academic achievement, learning, performance, attention, and retrieval in learners (33). Steinmayer et al. (34) reported anxiety as one of the best predictors of academic achievement. It has also been introduced as a strong predictor of mental health in many studies. Mental health positively influences people's lives by reducing their sensitivity to tension, anxiety, and depressive disorders. Therefore, self-compassion is most advantageous to the person's health. The training in this study gives students the emotional resiliency to face failure and adjust to academic goals (19). This positive attitude toward oneself helps students maintain their confidence as capable learners (20).

Our results showed that the subjects in the experimental condition experienced a significant decrease in self-criticism after the training sessions. Moreover, compared to the control group, they had superior academic achievement. Therefore, this paper has found new evidence supporting the role of self-

compassion training in self-criticism and academic achievement. Overall, the results showed that self-compassion training reduces self-criticism while promoting academic achievement among students with GAD. This is done by decreasing negative emotions while experiencing failures to limit negative self-evaluations. Also, with respect to education, it enhances resilience and intrinsic motivation to improve academic performance. Self-compassion highlights the significance of coping with negative events to increase mental health. It can be used for a variety of clinical problems both individually and in groups and result in better health as well as adaptive reactions which can be explored in future studies. The limitations of this study included the fact that only female high school students were examined. Thus, the impact of the treatment on males and other age groups remains to be determined. Furthermore, the sample only included GAD patients, which precludes generalizing the results. Thus, to improve generalizability, it is recommended that similar studies be carried out with different demographics.

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