

The Effectiveness of Self-Acceptance on Stress Reduction among a Group of High School Male Students Expecting University Entrance Exam in Hamadan, Iran

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Abstract

Background: A great number of high school students expecting university entrance exam experience a high level of stress. The purpose of this study was to examine the effectiveness of self-acceptance group therapy on stress reduction in a group of school students expecting university entrance exam in Hamadan, Iran.

Methods: Thirty 12th grade male students participated in this study. Using convenience sampling, the participants were recruited from Farzanegan pre-university center in Hamedan, Iran from April to August 2016. Next, the subjects were randomly assigned into experimental and control groups and they completed the Stress Response Inventory (SRI). The SRI includes different components such as aggression, tension, fatigue, frustration, anger, depression, and somatization. The experimental group attended self-acceptance group therapy while the control group did not participate in any group therapy. To analyze the data, statistical tests such as mean, standard deviation, and analysis of covariance were used via SPSS software.

Results: The findings showed after intervention, the experimental group's means and standard deviations of depression (M=11.33, SD=1.71), tension (M=9.46, SD=1.40), aggression (M=7.86, SD=1.12), fatigue (M=10.73, SD=2.21), anger (M=10.40, SD=1.72), and frustration (M=11.13, SD=1.50) were lower than the control group. Analysis of covariance showed a significant difference between experimental and control group concerning most dimensions of stress responses, including aggression (F="32.88", P="0.003"), tension (F="26.39", P="0.008"), fatigue (F="29.39", P="0.004"), frustration (F="53.78", P="0.001"), anger (F="37.19", P="0.002"), and depression (F="51.39", P="0.001"). In other words, self-acceptance group therapy significantly reduced aggression, tension, fatigue, frustration, anger, and depression in the experimental group.

Conclusions: This study underscored the pivotal role of self-acceptance in reducing stress among pre-university students expecting university entrance exam.

Keywords: High school student, Stress, Self-acceptance

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1. Introduction

Stress is the non-specific reaction of the body to any demand made upon it (1). Many studies have reported that a large number of high school students experience stress (2). Furthermore, the surveys conducted in Iran have also found that a majority of high school students suffer from stress-related problems (3). Adolescence is sometimes associated with excessive amounts of stress and harmful actions such as self-harm and even suicide. School students are faced with many stress-inducing challenges, including fear of failure, academic demands and exams, different responsibilities, social pressure, uncertainty about the future, and concerns about university (4). Some studies have reported that Iranian students preparing for university entrance exam, undergo a huge amount of stress (5). The concept of self-acceptance is grounded (SAGT) in Ellis's rational emotive therapy. Self-acceptance is described as the full

acceptance of oneself regardless of intelligence and correct or competent behavior and with no attention to approval, respect, and love from others (6). In order to boost self-acceptance, some cognitive and behavioral trainings should be performed for stress control and cultivating skills (7). Ellis believed that self-acceptance is an important strength in personality and argued that it is good for children to accept themselves unconditionally (6). According to Dryden, psychological issues stem from irrational beliefs (8). Several studies have examined the impact of self-acceptance on stress reduction (6, 9). Some of these studies have observed a positive relationship between low self-acceptance and psychological disorders and self-depreciation (6). Furthermore, other studies have revealed a positive association between low self-acceptance and anger, anxiety, and the performance of students lacking endeavor in school (9). Moreover, certain investigations have concluded that self-acceptance acts

as a protective factor, reducing the negative outcomes among individuals who experience traumatic events (10). In addition, a number of studies have suggested a relationship between stress and psychological and emotional health. Stress is related to psychopathology and is a significant risk factor in numerous mental disorders, namely anxiety and depression (11, 12). It is argued that stress is able to change the learning styles of students due to the preoccupation with entering university (4). In Iran, 12th-graders preparing for university entrance exam experience a huge amount of stress. An investigation has been carried out among Iranians, reporting that self-acceptance has a significant reducing effect on anxiety and stress (13). The research hypothesis of the present study is that self-acceptance group therapy is able to reduce stress responses such as anger, aggression, tension, somatization, depression, fatigue, and frustration. Numerous studies have investigated the impact of self-acceptance on mental health problems; however, there has been no research on the effectiveness of self-acceptance on stress reduction in high school students undergoing the stress of preparing for university entrance exam.

2. Objectives

This study aimed to examine the effectiveness of self-acceptance on stress reduction in a group of high school male students in grade 12 expecting university entrance exam in Hamadan, Iran.

3. Methods

The research design of this study was quasi-experimental, with pre-test, post-test, and a control group. Primarily, using convenience sampling, 12th grade male students expecting university entrance exam were recruited from Farzanegan's pre-university center in Hamadan, Iran from April to August 2016. The stress was assessed among the students and 30 eligible subjects scoring below average on a stress questionnaire were randomly selected and assigned to experimental (n=15) and control (n=15) groups. Both groups received the pre-test; the intervention was carried out in the experimental group, and all participants were examined for final assessment. The subjects in the experimental group participated in 10 sessions of self-acceptance group therapy while the control group did not participate in any sessions. The intervention programs included ten 90-minute sessions of self-acceptance group therapy over the course of ten weeks. Prior to the intervention, the experimental group was taught the ABC model (A- activating event B- belief,

and C- consequence). The second author ran the group therapy sessions. The G power software was employed to calculate the research sample size (statistical power of 0.80, a large effect size, $f^2=0.80$, a moderate correlation $R=0.50$, and an overall significance level of 0.05). The research proposal was approved by the Research Ethics Committees of Shiraz University. Informed consent was obtained from the students and the school principal. The participants were granted the freedom to quit the study at any time. The purpose of the research was elucidated for the students. The inclusion criteria were: attending governmental high schools, no history of mental disorders, willingness to participate in the study, and being in the 12th grade. Statistics methods such as means, standard deviations, and analysis of covariance (ANCOVA) were utilized in SPSS software version 20.

3.1. Research Instrument

Stress Response Inventory (SRI)

The SRI was developed by Koh and colleagues to assess emotional, somatic, cognitive, and behavioral stress responses (14). This scale is comprised of 39 items and six dimensions, including tension (6 items), aggression (4 items), somatization (3 items), anger (6 items), depression (98 items), fatigue (5 items), and frustration (7 items). The responses are rated on a five-point Likert scale from 0 (none) to 4 (completely). The authors of this scale reported the good reliability and validity of this scale. The results from Cronbach's alpha were reported to vary from 0.76 to 0.91 for the subscales and 0.97 for the scale's total score. Furthermore, Koh and colleagues examined the validity of this scale based on the SRI correlation with the Symptom Checklist-90 and reported a significant association between these two scales ($P<0.01$). The sensitivity of the SRI and the predictive value were 0.57 and 0.71, respectively. This scale has been employed in Iran, and research has indicated a Cronbach's alpha for different dimensions ranging from 0.82 to 0.93; therefore, SRI can be utilized for an Iranian sample (15).

4. Results

The descriptive findings of this study showed that the mean age of school students was 18.2 (SD=4.5). Table 1 shows the means of experimental and control group on the components of stress response. As observed, after intervention, the mean scores of experimental group on depression (M=11.33, SD=1.71), tension (M=9.46, SD=1.40), aggression (M=7.86, SD=1.12),

Table 1: Pre-test and post-test score means on the stress responses for experimental and control group

Group	Experimental Group		Control Group	
	Pre-test	Post-test	Pre-test	Post-test
Tension	17.20	9.46	15.80	12.73
Aggression	10.86	7.86	10.93	11.46
Somatization	8.00	6.20	7.26	6.53
Anger	17.60	10.40	16.40	16.33
Depression	20.60	11.33	20.86	20.80
Fatigue	14.80	10.73	14.00	13.86
Frustration	19.20	11.13	19.46	18.26

Table 2: Summary of covariance analysis regarding the effectiveness of self-acceptance on stress response

Source	SS	df	MS	F	P
Tension					
Pre-test	1.18	1	1.18	0.43	<0.51
Group	71.83	1	71.83	26.39	<0.001
Error	73.47	27	2.72		
Aggression					
Pre-test	3.21	1	3.21	1.03	<0.30
Group	97.72	1	97.72	32.88	<0.001
Error	80.25	27	2.97		
Anger					
Pre-test	0.31	1	0.31	0.04	<0.83
Group	248	1	248	37.19	<0.001
Error	1180.62	27	6.69		
Depression					
Pre-test	0.28	1	0.28	0.02	<0.88
Group	665.9	1	665.9	51.39	<0.001
Error	351.45	27	13.01		
Fatigue					
Pre-test	22.24	1	22.24	7.65	<0.01
Group	85.49	1	85.49	29.33	<0.001
Error	78.42	27	2.90		
Frustration					
Pre-test	0.265	1	0.265	0.037	<0.84
Group	380.06	1	380.06	53.78	<0.001
Error	194.4	27	7.20		
Somatization					
Pre-test	0.044	1	0.044	0.024	<0.87
Group	0.87	1	0.87	0.47	<0.49
Error	50.08	27	1.85		

SS – Sum of square, MS=Mean square

fatigue (M=10.73, SD=2.21), anger (M=10.40, SD=1.72), and frustration (M=11.13, SD=1.50) were lower than the control group. The normalization hypothesis was assessed by Kolmogorov-Smirnov test, revealing that the data was normally distributed. Furthermore, the Levin results on the consistency of variance showed no significant difference between the experimental and control groups regarding the performance of the participants. As far as the effectiveness of group therapy is concerned, analysis of covariance (ANCOVA) showed

a significant difference between the experimental and control groups (F=26.39, P=0.01) regarding tension (F=26.39, P=0.008), aggression (F=32.88, P=0.003), anger (F=37.19, P=0.002), fatigue (F=29.43, P=0.004), depression (F=51.39, P=0.001), and frustration (F=53.78, P=0.001) (Table 2). To put it otherwise, group therapy based on Dryden's self-acceptance significantly reduced the tension, aggression, anger, frustration, fatigue, and depression symptoms in the experimental group. In terms of somatization, there were no significant

differences between the two groups, meaning group therapy did have effects on somatization ($F=0.47$, $P=0.49$).

5. Discussion

In this research, a significant difference was observed in certain dimensions of stress response such as tension, depression, anger, aggression, fatigue, and frustration following self-acceptance intervention in high school students. The results of this study support the previous research, indicating the positive impact of self-acceptance group therapy on a number of emotional disturbances (16). These studies have reported that self-acceptance reduces emotional problems, including depression, anger, emotion-dysregulation, loneliness, and shame (7). Prior research has also shown that self-acceptance group therapy enhances the quality of life (7). Most studies have corroborated the impact of self-acceptance as a mechanism to help students cope with their stress. In addition, findings of the current study confirmed the previous studies, indicating the reducing influence of self-acceptance on depression symptoms (17). Our results were also consistent with Maxwell's research who reported the protective role of self-acceptance in reducing the negative outcomes of stress (18). Similarly, Chamberlin and co-workers observed a negative correlation between unconditional self-acceptance and anxiety symptoms (19). The present research also showed that self-acceptance reduced the aggression, which is in agreement with some other studies (20). In this research, we also found that self-acceptance had a significant reducing effect on somatic symptoms, frustration, fatigue, and anger, which is consistent with another study (21). This study revealed that high school students receiving self-acceptance education were able to cope with their anger and frustration compared to those in the control group. Indeed, the school curriculum may put huge pressures on the students, possibly leading to frustration and fatigue. Group therapy among Asian girls has also shown increased self-acceptance (20). Cultural factors and familial structures may further shape the perception of self-acceptance. Our research suffered from several limitations, the first one being the difficulty associated with gaining access to school students. The second drawback was that the researchers were not able to control certain potential variables such as previous mental health problems, which might have influenced the results. Future studies should examine the influence of self-acceptance on various negative outcomes such as bullying, delinquency, and isolation as well as positive outcomes, including happiness,

social-emotional development, and good academic performance. Teachers can also prepare activities for students to enable them to appreciate their positive qualities. The results of the present study cannot be generalized to female school students. Our findings might be conducive for educational administrators and planners in implementing self-acceptance strategies to enhance the mental health of students. Moreover, it may be useful to incorporate self-acceptance in the school curriculum. Self-acceptance strategies can further provide insight for adolescents to manage their negative emotions. Obviously, further research is to be conducted so as to shed more light on the relationship between self-acceptance and mental health problems.

6. Conclusions

This study highlighted the important role of self-acceptance in reducing stress and tension in school students expecting university entrance exam. This research showed that self-acceptance is very important for the psychological well-being of school students, and acceptance should be incorporated as a psychoeducation plan within the curricula of educational institutes. Furthermore, by applying this intervention in schools, students will no longer base their worth on the views of others or their own performance

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Conflict of interest: The authors declared no conflict of interest.

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