

The Effectiveness of Instructing How to Control Stress in Decreasing Students' Anxiety and Depression

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Abstract: Defining the effectiveness of the way instructing how to control stress in students' universe. This method is a half – experimental work by dividing randomly 320 subjects into eight groups (Four experimental and four criterion groups into two sexual groups) by virtue of eight sessions to instruct the subjects how to control stress in order to decrease anxiety and depression. They were tested by the anxiety and depression questionnaires before and after the sessions. The second study findings indicate the considerable effectiveness of the control way decreasing the subjects' anxiety and depression. It seems that the community policy makers should consider the stress control plus the official subjects at schools to decrease anxiety and depression.

Key words: Stress control • Anxiety • Depression • Student

INTRODUCTION

By virtue of psychology stress means ' too much expectations' or 'organism adaptation'. We need some stress to be aware. Hans Selieh [1] who is stress specialist considers such stress rate curative, but if it is long and intense, it can paralyze one's adjustment ability and dispirit persons. Nowadays stress is considered as an important factor of the diseases. Mental and cardiac diseases cancer, accident and educational frustration have significant relation with stress.

[2] by virtue of the physicians' estimations 75 percent of the medical complaints are because of stress [3].

Behavioral/cognitive reciprocal methods including adjusting and correcting cognitive errors, replacing illogical thoughts with the logical ones, daily listening to relaxant cassettes are taught to students to decrease the effects of different types of stress ; so they learn to have a logical program for study and life and consider necessary time for unforeseeable affairs and add relaxant music and exercises to their daily affairs (Such as meal, sleep, purchase and sport). The relaxant programs help them to relax and to execute their programs effectively. Such changes are very effective in the programs, motive promotion, concentration and learning and increase the ability to confront stress [4].

Many studies have been done about the vulnerability because of exams conditions and the effectiveness of the way confronting stress. An efficient study examined the way instructing students how to confront frustration; so 48 high school students on the threshold of some frustration were divided randomly into three groups: one group benefited from the confrontation skills (First group), one group with counselor intervention (Second group) and one control group (Third group). After three weeks treatment the first group were improved significantly in comparison with other groups to solve social problems, adjust individually and socially with high self – control [4].

Lazarus and Folkman believe that when people believe they have other aids sources to confront stress they are less vulnerable to stress. So one's vulnerability depends on persons conception about stress and the stress sources and each source to confront can decrease the stress factors [5].

One study compared the grades of a high school students' stress (In U.S.A.) after training gradual muscles relaxation with the control group. The findings showed that the students benefited from relaxation instruction had less stress in comparison to the ones without such programs [6].

By virtue of different studies in different communities the relation between the adjustment rate and exams stress and also academic efficiency were examined. Although individual and personality factors play some role in the adjustment rate with stressful events [7] some studies concluded that the only parameter which has a significant relation with academic efficiency is 'Distancing oneself' from exams stress and it is a cognitive process so one confronts with the exam subject as a daily usual affair. Also some studies indicate that regardless the way and approach to gain such adjustment power the main factor decreasing exam stress is social – mental adjustment power promotion [6].

It seems that the most effective factor in the students' success and their more protective behavior than others is their emotional regulation which is possible to learn it through some special training program [8]. Nowadays some models are presented based on special instruction method and its application to promote some students' behaviors led to improved educational and social behavior and less stress about exam [9]. By virtue of some short term educational programs with less cost without any interference with other students' subjects it is possible to teach some of these models and hence the students' coping efficiency increases and their negative attributions decreases. Thus, the student select more logical and positive purposes and if he people confronted some problem during the study concerning such purposes, he (she) comes to terms with it easily [10]. The efficiency of above methods and models in different levels of education have been shown though it is necessary to have different educational program in different level [11]. Also by virtue of different studies the short term educational program has been as efficient as the long term stress control program [12]. In present study having used an educational package for the experimental group it was attempted to test its influence on the students' adjustment skills and mental welfare. The main purpose was to define the influence of the 'stress control' method on the subjects' anxiety and depression.

The Research Method: The study was semi-experimental in which cluster sampling method was done in four educational districts of Shiraz in several steps. First two districts were selected randomly including four schools (Two girls' and two boys' schools). Then two classes were selected randomly at each school. The subjects were 320 ones. The experimental group learned how to confront

with stress and assessed before and after it. The training included eight sessions weekly (Each session 90 minutes) and the exercises were directed by following pamphlets.

1-Stress decrease techniques 2-Knowing life stresses 3-Regulation and programming 4-Applied relaxation 5-Mindfulness on breath 6-How to keep one's balance. Meanwhile, some home exercises were given to the experimental group subjects as the supplement of the training program to confront with stress. The classes held with 25 – 35 students. Books and CDs were given to the experimental group as follows 1-Profound relaxation CD – book [13]: It includes four steps to relax muscles and mind and used as an effective way controlling stress.

2 - Profound relaxation CD – book (3) [14]: It helps to confront with anxious thought (As main anxiety factor) based on.

All above pamphlets and home exercises were issued on the basis of the cognitive – behavioral techniques and cognition treatment way was issued on the basis of mind knowledge. The home exercises influence was shown in some studies [15]. Depression and anxiety questionnaires were completed by the experimental group subjects before and after the test.

The Subjects: They were divided into two experimental and criterion girls' and boys' groups (Of four persons), but the remainder (By virtue of their sexuality) was as follows: Girls' experimental group: 57 persons; Girls' control group: 61 persons; Boys' experimental group : 67 persons; boys' control group: 77 persons.

If a subject disagree with the program, he (she) could quit the group. If he(she) agreed with the study, he (she) learned primary instructions explications about the plan purposes and its methods and then the plan performers certified that they kept the subjects' secrets completely.

The Devices Collecting Related Information:

1-demographic questionnaire includes the subjects' age, sex, educational field, etc. 2 – BDI (Beck Depression Inventory) (Beck & Steer, 1984): It includes 21 items of four choices (Zero to three) and each one assesses one sign. The test signs into three groups of seven items including sensual, affective, motivational, cognitive, physical and vegetative signs are separated from each other. Generally sBDI is a short and easy device to assess the depression rate in clinical studies. The questionnaire has been assessed vastly in psychometric viewpoint since its appearance. By virtue

Table 1: The subject's distribution in experimental and criterion groups separately

	Experimental	Criterion	Total
Girls	57	61	118
Boys	67	77	144
Total	124	138	262

of a study done in Tehran Science University (Roozbeh Hospital) its stability was shown in a healthy and clinical universe [16]. 3-BAI (Beck Anxiety Inventory) [17]: It was issued on the basis of 21 anxiety signs and by virtue of Likert scale (Zero to three for each question) the higher grade indicates higher anxiety. This questionnaire was assessed in validity and stability viewpoints.

Findings: The studied sample distribution is seen in sexual and educational subgroups in Table 1. The data from second study was analyzed statistically by statistical package SPSS for Windows (Version 16). The Tripartite variance method with repeated sizes was used to examine the changes in a manner that the group factors (Experimental, criterion) and sexuality (Female, male) and step factor (Before and after test) were entered into the evaluation as intergroup and in-group variables, respectively. The test was done for both dependent variables (The depression and anxiety rate) separately.

Considering the sexual factor had no significant main or interactive influence it was eliminated from the study and the statistical test was done bilaterally.

Figure 1 shows the depression changes in experimental and criterion groups before and after the tests. The findings show one main influence [$F(1 \text{ \& } 219) = 100.84 \text{ } \varphi < 0.001$] and one interactive influence [$F(1 \text{ \& } 219) = 130.90 \text{ } \varphi < 0.001$].

Also the average difference was calculated in an independent student t – test between the two groups before and after the test to measure separately depression and anxiety rates in order to measure the treatment influence. The test showed a significant difference ($p = 0.001$, $t = 11.44$).

Figure 2 shows the anxiety changes in experimental and criterion groups before and after the tests. The findings show one main influence [$F(1 \text{ \& } 219) = 105.72 \text{ } \varphi < 0.001$] and one interactive influence [$F(1 \text{ \& } 219) = 137.11 \text{ } \varphi < 0.001$].

T-test shows that the anxiety decrease is significantly more in the experimental group than the criterion one ($p = 0.001$, $t = 11.70$).

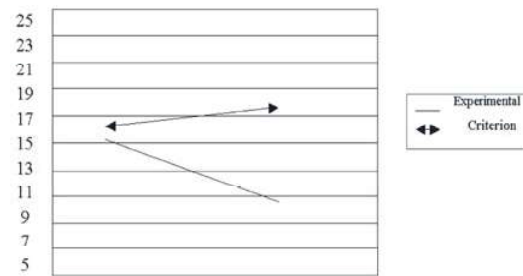


Fig. 1: The depression grades average in experimental and criterion groups in two steps.

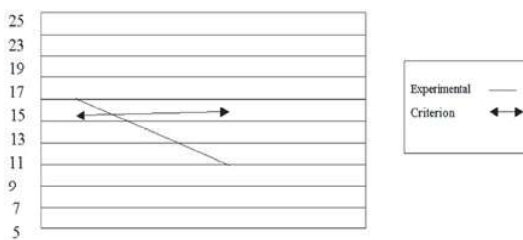


Fig. 2: The anxiety grades average in experimental and criterion groups in two steps

DISCUSSION

This study was done into a semi – experimental model in order to measure the influence of the methods controlling stress on the mental condition. In the study by virtue of an educational package for the experimental group it was attempted to examine its influence of the adjustment skills controlling stress and mental welfare. The findings shoed that the used method decreased anxiety and depression of the group. Although other factors play dome role in students' mental health considering the importance of above subject and the attitude focused on the problem some approaches were proposed to promote mental health of this class of the society [18]. In actual conditions it seems that the most practical and important action is stress control plan to be executed as a primary preventive step. In theoretical view the cognitive – behavioral methods used in training stress control can be considered as a factor effective on students. By virtue of Lazarus and stress transaction model [19] the stress is due to one's knowledge and environment interaction. In fact, the one's conception about the events (Environment) and his (her) comment from the situation have important role. Stress is created when it is considered dangerous or challengeable. Also Beck believes that the one's conception from the events and situations influences his (her) behavior; for instance, if a student considers people exam negative, his

(her) negative assessment increases his (her) anxiety [20]. Thus, as Holmes believes when one is nervous and anxious his (her) is inclined to weak behavior [21]. So when he (she) changes his (her) assessment it is expected to have less perceived stress. However, this study findings show that the individual cognitive assessment plays an important role to confront with anxiety and stress, their emotional responses and adjustment [22]. By virtue of the Singer's theory [23] when one is aware of stress and learns the strategies to confront with stress he (she) can adjust better and cognitive assessment plays an important role in this regard. Kiecolt & Glaser trained randomly 34 medical students' relaxation four weeks before their exams and compared them with the criterion group. They showed that the relaxation and mental image could increase their body security system power and promote their concentration [24]. So the present study findings are significant in this regard. The studies showed that the emotion adjustment has been the factor for being more successful and have more protective behavior than others ; the researchers have proved that it is possible to have it by special trainings [8]. Nowadays more than eight models have been presented with their special strategies by which it is possible to improve educational and social behavior and decrease the effects of stress [25].

By virtue of some short term trainings with less cost and without any interference with other students' subjects it is possible to teach some of these models to confront better with mental problems and decrease their negative attributions. So the student selects more logical and positive purposes and if he (she) confronted some problem during the study concerning such purposes, he (she) comes to terms with it easily [10].

Above methods and models have been efficient in different levels of education though it is necessary to have different training programs in different levels [26]. Also it was shown that the short term educational program has been as efficient as the long term stress control program [12]. Unfortunately in recent years little researches were published in relation to the methods decreasing anxiety during exam [27]. It is interesting that most of such researches have been published in the magazines which were not psychological.

Suggestions:

- Control stress session held in group: In fact, one of the advantages of the used method was the training stress control in group which is less expensive than the individual strategies. So it is both cheaper and

more effective. Considering the limits concerning special consultation in Iran the effectiveness of the method can be a useful solution.

- Considering the criterion group was influenced by no non-special remedial interference in the study probably someone criticizes that because of lack of assessing non-special remedial factors the remedial effects of the study are not due to special factors. So it is proposed that the next studies to be planned in a manner that the non-experimental group confronts with non-special remedial factors in order to control non-special factors.

Limits: Lack of similar studies in Iran. Lack of cooperation of some students in the control program led to the samples with less sizes.

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