

## **Effectiveness of Self-Differentiation Training on Self-Differentiation, Test-Anxiety and Self-Efficacy among Students in Saveh City**

**Sara Naimi (MA)**

saranaimi45@yahoo.com

Department of Psychology, Saveh Branch, Islamic Azad University, Saveh, Iran  
and

**Fahimeh Rezai Niaraki (PHD)**

Department of Psychology, Saveh Branch, Islamic Azad University, Saveh, Iran

### **Abstract**

The main objective of this study is to evaluate the effectiveness of self-differentiation training on self-differentiation, test-anxiety and self-efficacy among girl students. Research method is quasi-experimental including pretest - posttest with control group. The participants were girl students of high school in the fourth year. In this study, sampling was done randomly. Among them, 40 students were chosen and randomly divided into two groups of 20. Then, the experimental group was taught for 10 sessions. At the end of training, both groups were taken post-test. The instruments used by researcher in this experiment include Self-differentiation, Test anxiety and Self-efficacy questionnaire. Research data were analyzed by ANCOVA and independent t-test method. Results of study showed that the training method has been effective in reducing the problems of test-anxiety and increasing students' self-efficacy.

### **Introduction**

Anxiety as a part of human life, in all societies, is considered as a suitable response. Absence of pathological anxiety or anxiety may confront individual with a lot of difficulties and dangers. Anxiety in moderate and constructive amount forces individuals to make effort appropriately and timely in performing their affairs and thus makes their life more durable and fruitful. Test anxiety is a type of anxiety that occur in the position of evaluating or problem solving and its axis, is the uncertainty about the performance and its outcomes, clear vision of the ability to cope with the situation. In other words, this anxiety places the incidence level of performance more reduced than individual's real level. The more anxious about school effectiveness decreases academic achievement. Exam results have a significant effect on various aspects of life. Following the promotion of students' level through the educational system, they are faced with more frequency of exams. This issue brings higher pressures and expectations of parents and the educational system about their performance and gradually increases test-anxiety (McDonald, 2001, as cited in Eizadifard, 2010)

In fact, it seems that the reason of academic failure of many students is not learning disabilities or intellectual weakness. It is caused by high levels of test-anxiety. Therefore test-anxiety reduces individuals' performance and efficiency level and reduces their beliefs about self-efficacy. Self-efficacy refers to perceived competence beliefs about ourselves and what we believe that we have ability to do a work well or at least appropriately (Bandura, 2001). So, the test anxiety and repeated failures leads to negative judgments about their competence. Lack of attention to recognition of test anxiety in children and its treatment, as well as endangering their mental health, may also threaten their physical health. One of the most effective ways to reduce test anxiety of

students is the training of self-differentiation. The self-differentiation refers to a state in which individual is able to balance between his rational and emotional function or intimacy and autonomy in his relationships. In fact, self-differentiation can increase one's knowledge and awareness of his personality characteristics and this can effect on academic performance of students.

### **Rationale for the study**

Differentiation is the most important concept of family systems theory which is presented by Bowen and show individual's ability in separating his rational and emotional processes from others. Differentiated individuals have clear definition of their beliefs and themselves. Differentiated individuals define themselves and their beliefs and can choose their direction in life and can control themselves in highly emotional situations that cause many unusual behaviors and failed decisions in others (Bowen, 1978). In fact, self-differentiation is emotional development rate. In fact, self-differentiation can increase one's knowledge and awareness of his personality characteristics and this has positive effect on academic performance of students. Generally, individuals who are aware of their abilities, limitations, strengths, weaknesses and are able to differentiate themselves from others, can find much success in solving their problems. On the other hand, anxiety is the most common psychological state that is associated in some way with self-differentiation. Anxiety is a state that occurs almost in life of all the humans in varying degrees. Test anxiety often appears in person with exams approaching, so everyone has experienced this feeling at least once in their lives. Existence of a bit of anxiety in human is necessary and natural. But if it goes higher, will be problematic for him, so that with information and skills cannot acquire required points (Nastazy, 2008). Test anxiety level is different in individuals and can indicate a person's attitude toward his or her knowledge and lessons learned. One of the issues which associate with the anxiety refers to self-efficacy. Individuals, who have high anxiety, cannot indicate their self-efficacy power or in other words, individuals who have low anxiety, are more engaged in problem of anxiety. Because these people do not have positive images of themselves and this adds to their anxiety. Self-efficacy refers to individuals' judgments in relation to their abilities to accomplish designed performance levels. According to Bandura, self-efficacy or personal effectiveness includes feelings of competence, efficiency and ability to cope with life (Schultz, 2002). Therefore, in this study, the main issue refers to whether self-differentiation education is essentially effective in reducing problems of test anxiety and self-efficacy beliefs among students in senior high school in Saveh city or not.

### **Review of literature**

Abolghasemi (2011) in a research with the title of evaluation of the effectiveness of two teaching methods, cognitive – behavioral and emotion regulation skills on self- efficiency and academic adjustment of students with test anxiety concluded that employing this instructional methods is significantly effective on reducing test anxiety and improving academic self-efficacy.

Eizadifard (2010) in his study entitled “reducing test anxiety and increasing students’ efficiency” used cognitive - behavioral therapy method and concluded that teaching such skills are considered as effective strategies in reducing test anxiety and improving academic performance of students.

In another study, KarimiSani et al (2010) in a research entitled “the effectiveness of life skills training on enhancement of students' self-differentiation” concluded that life skills training is effective in increasing girl students' self-differentiation. Also, results showed that life skills training is effective on emotional reaction decreasing, increase and decrease of emotional faults and also decrease of mixing with others.

Finally, Shakibai (2008) in a study entitled "the examination of the effects of self-differentiation training on reducing psychological problems of women" came to this conclusion that this method of education was effective in promoting the differentiation of divorced women and reducing psychological problems in nine subscale of questionnaire (SCL 90 = R).

### **Hypotheses**

By taking the above-mentioned objectives, the following hypotheses were suggested:

1. Do self- differentiation training lead to a change in students' self- differentiation in experimental group compared to the control group?
2. Do self- differentiation training lead to a reduction in students' anxiety in experimental group compared to the control group?
3. Do self- differentiation training lead to an increase in students' self-efficacy in the experimental group compared to the control group?

### **Methodology**

#### ***Sample and design***

The sample of study refers to all girl students of high school who are enrolled in school year 2001-2002 in Saveh city. The selection of required sample of this study was done by simple random sampling, in a way that, at first among all schools of Saveh city, some schools and then among these schools, some classes and among these classes, two classes randomly selected. Then, for performing self- differentiation training, 40 students randomly selected from the two classes and divided them by matching method in two groups of control and experimental. Finally, 20 students were placed in the experimental group and 20 students in the control group. Finally, the test steps were accomplished on experimental group.

#### ***Instrument***

*A. Self- differentiation questionnaire:* Primary form of questionnaire is prepared by Skorn and Friedlander and the final exam is made up of 46 items based on Bowen theory. This is a self-report questionnaire and is used to measure individuals' self-differentiation and its main focus is on important communication of life and individuals' relationships with major family (Skorn, 2003, as cited in Eskiyan, 2005). This questionnaire is rated by Likert scale in a range of 6 options. The mentioned questionnaire consisted of four subscales including emotional, mixing with others, situations of personal status, emotional faulting.

*B) Test Anxiety Questionnaire of Sarason:* This scale is a short questionnaire of 37-items, which must be answered by participants in the form of "right or wrong" and thereby based on self-reporting methods can be achieved to the individual's mental states and psychological experiences during the test, before and after it.

*C) Self-Efficacy Scale of Children and Adolescents (SEQ-C):* This questionnaire is prepared by Morris (2001) to evaluate the self-efficacy of children and adolescents which consisted of 23 items. This questionnaire is provided based on Bandura's self-efficacy questionnaire (1996).

#### ***Procedure***

At first, after selection of schools and determining the number of students ( $n = 40$  for both control and experimental groups of 20), the testing execution process started. In the first meeting, after familiarity with students, self-differentiation questionnaire was implemented on all students (experimental and control). In the second and third session, the Sarason's anxiety questionnaire and self-efficacy SEQ-C were performed. Questionnaires were graded and control and experimental groups were selected through matched method. After selecting experimental and control groups, training sessions of self-differentiation were conducted on experimental group. In the first session, after familiarity with students and checking their attendance, our aim of implementation of this

project, self-differentiation training and application of this skill in life were presented and we provided them with some training materials. Our training sessions conducted at school for 10 sessions (2 sessions per week), each session lasting 1.5 hour for experimental group. After 10 sessions, again the test of self-differentiation, test anxiety, self-efficacy were performed on both the control and experimental groups. Questionnaires were graded and after one month, these three tests were carried out on both control and experimental groups.

### Results and discussion

The obtained results are presented in the following tables:

**Table 1. Comparison between Experimental and Control group on self-differentiation in posttest**

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	2.421	1	2.42	.831	.368	.023
Error	104.903	36	2.914			

By looking at the above tables, we can conclude that there is no significant difference between mean scores of self- differentiation posttest of experimental and control group and that the self-differentiation training does not effect on students' self- differentiation in the experimental group.

**Table 2. Comparison between Experimental and Control group on anxiety in posttest**

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	197.778	36	5.494	23.070	.000	.391
Error	9480.000	40				

According to table 2, the rate of ETA coefficient was .391, It means that self -differentiation training was 39 % effective in decreasing the anxiety. It can be concluded that there is a significant difference between mean scores of academic anxiety post-test of experimental and control groups and self- differentiation is effective in reducing anxiety. In explaining these results, it can be said that presence of high anxiety will have negative impact on test performance. When the individual's stress level is high, individual's attention is related to variables associated to him and also to variables that are related to the test. But if the level of test anxiety is low, the individual's attention is more related to test variables. Therefore, we should try to teach techniques to reduce the anxiety of students. One of these techniques refers to self-differentiation that reaches this anxiety to normal levels. Self-differentiated people have security about their identity, and presence of this security will prevent pathological anxiety.

**Table 3. Comparison between Experimental and Control group on total Self-efficacy in posttest**

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	46.344	1	46.344	2.272	.140	.059
Error	734.217	36				

There is no significant difference between mean scores of self-efficiency post-test of control and experimental group and it can be concluded that self-differentiation training does not have any effect on self-efficacy of students in the experimental group. However, Izadi (2010) in his study entitled reducing test-anxiety and increasing self-efficacy of students used cognitive - behavioral therapy methods and concluded that such skills are considered as effective strategies in reducing test anxiety and improving academic performance of students. In exploring this hypothesis, it can be stated, according to Bowen's idea, individuals are born in the form of "diffuse mass". Their discrimination level grows based on the effort that is formed to establish the interaction between personality and zeal in the family interactions. Self-differentiation is personal emergence process that his boundaries of "self" is well defined. Those people, who have most mixture between their thoughts and feelings, have the weakest performance. They are probably dominated by automatic or involuntary emotional reactions, and often even in the low level of anxiety, have malfunction. Since they are not able to distinguish thoughts from feelings, have difficulty in distinguishing self from others, too. Therefore, they are easily solved in dominant or ongoing emotions of family. Since the self- differentiation training has no role in improving students' self-efficacy, their test-anxiety is reduced. Therefore, it can be concluded that self-efficacy of these individuals may be influenced by other factors such as family, peers, etc.

### Conclusion

The main objective of this study was to evaluate the effectiveness of self -differentiation training on female students' self-differentiation, test-anxiety and self-efficacy. Research method refers to quasi-experimental of pretest - posttest with control group. The participants were high school students in the fourth year. In this study, sampling was done by simple random sampling. Among students, 40 students were selected and randomly divided into two groups of 20. Then, experimental group received 10 sessions of training. After training, both groups were taken post-test. Results showed that this training method has been effective in reducing students' test-anxiety and increasing self-efficacy. Differentiation in Bowen's idea refers to individual's ability to isolate him emotionally and physically from the major family, Also, his ability to achieve emotional growth and independence without losing the capacity of emotional connection with the family. An individual is differentiated when the emotional and security needs force him to lose his personality to make sure of others love and acceptance or limit it. On the other hand, a differentiated person has security about their identity and can freely enter into intimate relationships. As he pursues meaningful objectives and more likely is successful in all aspects of his life. Differentiation itself indicates individual's ability rate to think realistically about the emotional issues in family. Anxiety is created as a result of lack of distinction of oneself from emotional system of family (Prochaska,

1975, translated by Saied Mohammadi, 2002). Those people who have most mixture between their thoughts and feelings, have the weakest function, they are probably dominated by automatic or involuntary emotional reactions, and often even in the low level of anxiety, have malfunction. Since they are not able to distinguish thoughts from feelings, have difficulty in distinguishing self from others, too. Therefore, they easily are solved in dominant or ongoing emotions of family. In such circumstances, one fails to separate himself from family and converting to a person who has effective function. (Kelandberg, 2000, translated by Naghshbandi et al, 2006).

### **Limitations and suggestions for further research**

With regard to the current study, the following limitations can be suggested:

- Effective psychological factors such as anxiety, fatigue and apathy should be considered towards answering the questionnaire due to excessive distribution of such questionnaires by other students or other government agencies, etc.) that make the possibility of collecting accurate information and the time spent on this job longer.
- The presence of inclinations, biases, past experiences may have an influence on the results.
- It is suggested that future research examine this method on the students of different educational levels.
- It is recommended that a period of self-differentiation training held for students' families in family training sessions.

### **References**

Skiyan, P (2007). Examination of psychodrama's effect (psychodrama) on enhancement of individual's differentiation from original family in female high school students in region 5 of Tehran, Master Thesis of Consulting, Faculty of Psychology and Education, Tarbiat Moallem University.

IzadiFard, R., & Sepasi Ashtiyani, M. (2010). Effectiveness of cognitive - behavioral therapy with problem-solving skills training to reduce test-anxiety symptoms. *Magazine of Behavioral Sciences*, 4(1), 23-27.

Abolghasemi, A. (2010). Examination of efficacy of two methods of cognitive - behavioral training and emotional regulation skills on self-efficiency and academic adjustment of students with test anxiety. *Journal of Educational Psychology*, 22 (7).

Prochaska, J. AV, & Norkeras, J. SI (2002). Mental health systems. Translation: Seyed Mohammad Yahya. Roshd publications, Tehran.

Schultz, D. & P. Schultz, Sydney E. (2005). Theories of personality. Translated by Seyed Mohammad Yahya (2002) 12th print, 8<sup>th</sup> edition, Tehran.