



## The Study of Effectiveness of Group Training of Self-talking Control Technique on Improving Educational Self-efficacy in Students

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### ABSTRACT

The Present paper aim is to determining group training efficiency of self-talking control technique on educational self-efficacy (including three subscales; trial, context and aptitude) of third graders in Yazd girl's junior high schools. In this research, the semi-experimental method of pre-experiment and post-experiment types with control group is used. The Applied tool in this research was Educational Self-efficacy Questionnaire. Statistical population was included 150 girl students with 14.2 years old average from 2nd district of Yazd Education Organization which were selected by cluster sampling method and 30 of them who had lowest self-efficacy grade were assigned to two groups, randomly (15 in experimental group and 15 in control group). In order to analyze the collected data, the method of multivariate analysis of variance was used. The finding showed group training of self-talking control technique on girl students was effective and results in educational self-efficacy increases.

**Keywords:** Self-Talking, Educational Self-efficacy, Aptitude, Context, Trial

### INTRODUCTION

Communication organizes the main axis of human life and in most activities by its various forms, it is the very important. Each day, about 80 percent of communications are verbal and the type of content and the way express them has a very important role in individuals success [1.]

Self-talking is a powerful tool that assists in the treatment of mental illnesses, influence behavior and academic achievement. Self-talking is totally in control of each person and can be changed to suit of every individual needs. Self-talking awareness is the first step towards the controlling behavior. Using positive self-talking as a means to improve a person has been one of the most important findings in recent years [2]. Paul and Burnett defined self-talk as "... what people say to themselves, with particular emphasis on the words used to express thoughts and beliefs about oneself and the world to oneself". These automatic thoughts can be positive or negative. If the thoughts that run through our heads are mostly negative, our outlook on life is likely to be pessimistic. If our thoughts are mostly positive, we are likely to be an optimist. Self-talk is our internal dialog, the words we say to ourselves [3].

Recently, by the help of auto didacticism methods, clients are forced to change their internal whispers and repeat the constructive statements to their internal strengthening whispers or positive to cope with mental pressure or reach their goal. Think about their performance and enhance themselves for operation, action and confrontation. These abilities help a person to have an effective handling on confliction and life situations and enable him/her to communicate with other people in a positive and adaptive manner and enjoy the effective and constructive communication with environment by creating the desired changes in his/her behavior [4].

Bandura's [5] self-efficacy theory is applicable to the study of self-talk that has yet to be fully embraced by researchers interested in understanding self-talk. Bandura defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments". Strengths of self-efficacy theory are its testable predictions and parsimony [5]. Self-efficacy theory warrants explicit examination in

relation to self-talk. This is because both instructional and motivational aspects of self-talk may influence self-efficacy.

Jackson et al. [6] carried out a treatment using positive self-talking on adolescents who had low self-esteem. The results showed that using this technique would increase self-esteem, sense of worthiness and competency in adolescents. Dehghani FiroozAbadi [7] carried out a study entitled the effectiveness of positive self-talking training on increasing women public self-efficacy believes. Results showed that positive self-talking training is effective in increasing the public women self-efficacy. Obvious effect of positive self-talking on your behavior to do your best and do what you can. Thoughts that increase your self-esteem and happiness support your goals, and desires. Negative thinking damages our chances achievement. Without consciously positive thought, our results probably would not have changed over the years [8]. Hatzigeorgiadis et al. [9] did research about the impact of self-talking on self-improvement and school success on 48 children between 7 to 9 years old. Results showed an increase in a positive impact of self-talking on self-improvement and educational functions.

If the opinions of those who have low self-efficacy be examined, many of negative thoughts clues will be revealed which is reflected in the negative self-talking. Negative self-talking has more significant impact on personal function than positive self-talking [7]. Self-talking control training based on the use of positive self-talking is in references. According to the results of research, most people who have negative self-talking, have low self-efficacy. Applying self-talking controlling group training is very convenient and beneficial.

Currently, one of the most important issues facing country's education system is student weakness in their lessons. This problem follows a heavy price for education each year. The causes and solutions to this problem require extensive research. But probably one of the main reasons is due to some students with low educational self-efficacy that is very impressive in their efficiency and empowerment, particularly in education. This study seeks to determine whether self-talking controlling group training technique to girl students could be effective in improving their educational self-efficacy. The research hypotheses are:

- Group training of self-talking control technique is effective in to improve self-efficacy of school girls.
- Group training of self-talking control technique is effective in to improve educational aptitude of school girls.
- Group training of self-talking control technique is effective in to improve context of school girls.
- Group training of self-talking control technique is effective in to improve trail of school girls.

## MATERIALS AND METHODS

The study sample includes all girl students who were studying in the third grade of Yazd guidance schools during 2011-2012. This population has been reported about 4,052 people in the mentioned year. This study did on a randomized cluster sampling. A total of 30 persons were in experimental groups ( $n = 15$ ) and control groups ( $n = 15$ ) that they were girl students in third grade of guidance school with an average age of 14.2 years. Present study is an applied research. In this study, we used semi test of the pre-test and post-test by a control group. Both groups were three times measured. For both groups pre-test was done in the first session and post-test carried out after the sessions. The follow-up test was conducted one month after the end of sessions. 150 students completed the academic self-efficacy questionnaire that 30 individuals among them who received the lowest score, were randomly assigned to the two groups of test and control. The experimental group was trained on controlling self-talking technique in 10 sessions of 90 minutes and the control group did not receive any training method. The sessions were held weekly that lasted for 10 weeks. For data analysis, we have used multivariate variance analysis test.

Data collection tool in this study is Jinks and Morgan's self-efficacy scale [10]. This questionnaire was designed by Morgan and Jinks with 30 questions in three subscales of talent, effort and context. The primary form of the questionnaire has 53 locutions that the makers asked the three groups including: university professors, teachers and students to evaluate the locutions and then remove or replace items were inappropriate or vague, in order to investigate its content validity. To evaluate the validity of scale factors, by analyzing the factors, we extracted three factors of talent, effort and context. Finally, the number of items was reduced to 30. Jinks and Morgan reported the reliability of this questionnaire using Cronbach's alpha for whole questionnaire and each subscale of talent, context and effort respectively: 0.77, 0.69, 0.81 and 0.67

## RESULTS

In this study, a group variable with two levels (control and experimental groups) and four continuous variables (educational self-efficacy, aptitude, context and trial.) each measured in three stages (variable with three levels: pre-test, post-test and follow-up tests) were used. Therefore, multivariate analysis of variance with repeated measures chosen to use. Table 1 shows the results of this test. In this table, the statistics Pilla's Trace has positive value between zero and one. As the values of this statistic are close to one the grouping variables have a significant effect on the dependent variables. Also the significant value is less than 0.01. Thus the test variable (repeated variable), group variable and the interaction of these two variables (group  $\times$  test) effected the dependent variables at the significance level of 0.01.

**Table 1.** Result of multivariate analysis of variance with repeated measures

Effect	Statistics	Values	F	Sig
Test (repeated)	Pilla's Trace	0.974	150	0.000
Groups	Pilla's Trace	0.964	157	0.000
Test*Groups	Pilla's Trace	0.972	148	0.000

To investigate this effect was on which of the dependent variables, the ANOVA tables for each of the dependent variables is investigated. Result of MANOVA test in each of the dependent variables is listed in table 2.

**Table 2.** Results of MANOVA test for the variable of the research

Effect	Aptitude		Context		Trail		Self-Efficacy	
	F	Sig	F	Sig	F	Sig	F	Sig
Test (Repeated)	98	0.000	301	0.000	301	0.000	348	0.000
Group	34	0.0004	141	0.000	141	0.000	983	0.000
Test*Group	4.56	0.021	156	0.000	156	0.000	303	0.000

Table 2 shows the effect of group variables ( test variable, group variable and the interaction between these two variable (group × test) ) at alpha level of 0.01 on self-efficacy, Context, Trail and Aptitude is significant. Significant effect of group variable shows the mean scores of dependent variables (self-efficacy, Context, Trail and Aptitude), have significant difference between control and experimental groups. Because the mean of these variables in experimental group is larger than the mean of the control group in the post-test, we conclude that group training of self-talking control technique on girl students was effective and results in educational self-efficacy and its subscales increases. Also significant the effect of test variable with three levels (pre-test, post-test and follow-up tests) shows that the mean of dependent variables have significant difference in three times that scores measured. In table 3 Using LSD post hoc-test indicated that the differences in which levels of test have been different.

**Table 3.** LSD post hoc test

Groups		Aptitude		Context		Trail		Self-Efficacy	
		F	Sig	F	Sig	F	Sig	F	Sig
Experimental group	Pretest – pos test	178	0.000	107	0.000	63	0.0003	133	0.000
	Follow-up tests – post test	1.35	0.28	2.15	0.24	2.12	0.33	1.2	0.23
Control group	Pretest – post test	1.39	0.26	1.45	0.53	2.39	0.13	3.34	0.65
	Follow-up tests – post test	0.98	0.48	0.46	0.62	2.45	0.12	6.45	0.45

The result of LSD test shows that in the experimental group the mean of the dependent variables in the post test and follow-up test is significantly larger than the mean of the pretest. But in control group the means have no significant difference in three times that measured. This indicate

## DISCUSSION

This study examined the effectiveness of group training technique of controlling self-talking on educational self-efficacy improvement in girl students. According to the results, Hypothesis 1 at  $p < 0.01$  were accepted. This result indicates that training technique of controlling self-talking, interferences the cognitive styles and group irrational believes, is effective in reducing the negative and critical assessment and makes the self-efficacy improve in girl students. The results of the present study on the above hypothesis are agreed to the findings of Kendall & Kimberly [11]; Debra et al. [12] and Surya [13].

Meanwhile Dehghani Firouzabadi [8] research results show that training positive self-talking is effective on increasing women public self-efficacy believes, would support this finding. The results of this study are also consistent with findings of Crites [14], whom said we can increase the self-esteem by controlling the internal stressful self-talking. It was found in follow-up study that there is a significant difference between pre-test , post-test and follow-up tests in experimental group at  $p < 0.01$ . This implies that controlling self-talking in group training technique would improve self-efficacy in academic subjects effectively and so its effects are sustainable.

Hypotheses 2 at  $p < 0.01$  were accepted. Confirm the hypotheses 2 means that performance of control and experimental groups are different in post-test. It shows that self-talking controlling group training technique could improve student educational talents. Talent is a cognitive capacity that can be changed in environmental education. Therefore, the self-talking control training could affect effect on student educational talent significantly.

Debra et al [12] found that as much as students have the ability, they have self- efficacy. It is clear that negative thoughts cause students find themselves disable and without talent. Self-talking controlling group training technique helps a person reach his/her highest potential, which is consistent with the above hypotheses. In addition, Kendall et al. [11] findings, support this that says people with strong believes about their abilities compared with people who are skeptical about their ability are more persistent in making effort .

Follow-up study determined that there is significant difference at  $p < 0.01$  between experimental group pre-test and follow-up test. These results show that self-talking controlling group training technique has been sustainable in improving the students' educational talent .

Hypotheses 3 were accepted at  $p < 0.01$ . Confirming hypotheses 3 means that the performance of test and controlling groups in post- test were different and self-talking controlling group training technique has been able to improve girl's educational context. Students' perception of the time and place conditions changes through affecting self-talking controlling skills and we can say that part of educational self-efficacy has influenced by situation is changeable affecting the self-talking control trainings.

Findings of Pajars [15], which is believed to provide a positive context for the development of positive self-efficacy can be grounds for educational success, is consistent with the main positive self-talking hypothesis as well as the research results of the Fall et al. [16] who believe teachers can create strong implications for behavior that would facilitate the achievement of self-controlling and would prevention educational failures. In follow-up study it became clear that between pre-test and follow-up tests in the experimental group,  $p < 0.01$  is significant. This shows that the effect of group training technique on self-talking controlling is sustainable.

Hypotheses 4 at  $p < 0.01$  were accepted. It means that the performance of experimental group and control group in posttest are different and self-talking controlling training technique could increase the student's educational effort. These results are corresponded with Ciarrochi et al. [4] findings that state self-talking management training using changes on negative self-talking to positive self-talking and problem solving skills to make life more efficient. Also the mentioned results are consistent with Bunker et al. [17] who found that subjects participating in the positive self-management training did their best practices and have confidence to their ability and worthiness and against the control group; they don't think that progress is associated with their efforts. Having significant difference between pre-test and follow-up tests in the experimental group, at  $p < 0.01$  means that the effect of self-talking controlling technique training have been sustainable to improve girl students efforts in educational field.

self-talking controlling group training technique has been able to create an trustful and confidence atmosphere through the interference in the internal thought and speech correction, be effective in increasing self-esteem and self-efficacy in rational believes and to get rid of destructive thoughts. Thus it is recommended that self-talking controlling group training technique be held in the form of workshop in clinics, schools, for school counselors and therapists, because it can be useful in mental health.

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