

Effect of Cognitive and Behavioural Approaches of increasing self-esteem on Responsibility, Anxiety Exam and Educational Achievement of Female Students of Shahrkord's Teacher Training Center

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Abstract

this study aimed to determine the efficacy of cognitive and behavioural approaches to increase self esteem, academic achievement, responsibility and controlling anxiety exam among female students. 54 students were chosen randomly and matched in terms of self-esteem on responsibility, anxiety exam and educational achievement variables. Results showed both the approaches were effective in this regard.

Keywords: self-esteem, responsibility, anxiety exam, educational achievement

1. Introduction

There has been an increasing tendency towards educational professional training during recent decades. The tendency is global and widespread. No doubt that human agent is one of the most important components of any educational programs. Among the human characteristics which are effective in this regard can refer to responsibility. As well as self-esteem. In fact, being human source with the characteristics can guarantee to achieve to the educational goals. According to some writers no judgment is more important than personal assessment of self (Hewitt, 2009). Thus, it can be said that the judgments are the most important element to determine the level of personal mental health.

Teachers have a key role to achieve education goals in the professional and general system of education. Hence, with a group of well-educated, high motivated as well as effective teachers, it can be expected to have a successful system in this regard.

In several studies it was found that cognitive and behavioural approaches of training skills lead to improvement in function of the involved people (Bank, Marlowe, Reid, Patterson, & Weinrott, 1991; Wentzel, 2002; Bierman & Erath, 2007; Vassilaki, 2006).

People with high self esteem have positive attitude and feelings toward themselves as well as others and smile at others during interacting in general. On other side, people with low self-esteem feel cannot do the tasks. In effect, the group loses the opportunities (Ames & Archer, 1988). Some researchers found, low self-esteem can be counted the main reason of abnormal behaviors among people (Zatz & Chassin, 1985).

Anxiety exam is one of the variables which affects on scholar achievement Aydin (2007), Sherman and Wither (2003) define it as a type of disgusting and emotional reaction toward assessment situation at classroom; the situation is accompanied with tension, disorganization and excitement in autonomous nervous system. There are three sources of appearance and severity of the anxiety, personality, family and educational elements.

Responsibility is a social process which people feel them as a part of the society through it (Sinden, 1999). In fact, the variable is the most critical method of conducting to the people behaviour in the society. The quality is transferred to the targeted group via two main sources, family and society (Schmitt & Allik, 2005).

2. Literature review

Watkins, Akande, Cheng and Regmi (1996) found high self-esteem people are more effective and efficient in their social and educational activities. However, people who feel inferiority and less self-worth have higher anxiety scores than a group with higher self-esteem scores. In several studies a negative relationship between anxiety exam and self-esteem was found (Arnold, 2000).

In a study about self-esteem and educational achievement, a significant relationship among them was observed (Horwitz, & Young, 1991). Sloboda, (2000) found a positive correlation between self-esteem and academic achievement. Meece (2003) showed high self-esteem teachers devote more time to scholar activity in classroom. On other side, low self-esteem teachers focused on recreational activity in classroom and scold their students whenever they could not solve problems. Wolfe (2005) concluded students of training teacher centers who have high self-esteem Prepare better design to teach, motivate students to classroom discussions and have control on their classrooms. Lagares and Connor (2009) reported that high self-esteem students have higher position in academic achievement. McCarthy and Widanski (2009) found a positive relationship between self-esteem and academic achievement. Cowden. (2009) reported whenever anxiety increases academic activity of students will reduce.

Connolly, Simpson and Petty (2006) used cognitive-behavioural strategies to reduce exam anxiety in the experimental group than the other group in terms of self-esteem as well as self-concept. Albano (2004) used a cognitive method to reduce exam anxiety of students and found a significant reduction in the experimental than control group in this regard.

3. Methodology

3.1 Statistical community and sampling

Statistical community included all female students in a teacher training centre. With respect to size of the community 54 students were selected randomly. The subjects, then were matched in terms of self-esteem, exam anxiety, academic achievement and responsibility, and finally were assigned to the groups, cognitive, behavioural as well as control randomly.

3.2 Instrumentation

In this study three questionnaires were applied, Coopersmith self-esteem questionnaire (1967), Abolqasemi's anxiety exam test (1985) and Gough's responsibility scale (1952).

3.2.1. Coopersmith self-esteem questionnaire

The questionnaire has 58 items which it was made with using Rogers- Diamond (1954)'s items by Coopersmith (1967). The test has 2 optional, yes- No, choices. Validity coefficient with applying concurrent method was .58, $P < .001$. Reliability coefficient was .80 and .73 for alpha Cronbach and Guttman respectively.

3.2.2. Abolqasemi's anxiety exam test

This is a self report scale with 25 items and 4 options, never, seldom, sometimes, often, which values of 0, 1, 2, and 3 are devoted to the qualities respectively. High score in the test means high exam anxiety for a person. To assess the validity coefficient the scale was administered general anxiety test (Budge, S. (2006) which the result was significant and good, ($r = .55$, $P < .001$) reliability coefficients reported as .91 and .95 for alpha Cronbach and Guttman respectively.

3.2.3. Responsibility scale

This is a part of California Psychological Test which was designed by Gough, McClosky and Meehl (1952). The scale has 42 items. The scale has 2 optional choices, agree and disagree. Validity coefficient with counting relationship between the scale and another responsibility test was reported $r = .56$, $P < .001$. Reliability coefficients with applying alpha Chronbach and Guttman were achieved .73 and .81 respectively.

3.3. Statistical and research methods

An experimental group with two pre and post tests were applied in the study, one group had cognitive, another one behavioural and the last control means no intervention was administered. As there were three groups in the study a multivariate ANOVA was used to analyse data.

3.4. Intervention

There were two different types of interventions, cognitive and behavioural. In the following the approaches will be described in details.

Cognitive method of increasing in self-esteem

The intervention consisted of eight sessions each lasted for one hour in weekly intervals. The content included introducing purposes, a definition of self-esteem and its effect on the human, giving cognitive tasks, introducing maladaptive cognitive response and beliefs and how they can handle them.

Behavioural approach of increasing in self-esteem the intervention like the other method had eight one-hour sessions in weekly order. The components of the intervention included the below details: giving a definition of self-esteem, the importance of it, giving some tasks in order to know self-esteem, applying reinforcement mechanisms against the finished tasks, knowing self-worth of personal success.

4. Findings

All subjects were female students who will recruit by education ministry as teachers at the end of their bachelor degree. Their age range was between 18-22 and mainly (85%) came

from the middle class with mean family population of 5.2. No disability was observed among the group as having physical health was a prerequisite of entrance to the position.

As according to the design, subjects were matched in terms of the main variables, self-esteem, exam anxiety as well as academic achievement, thus a test of homogeneity of variances administered to determine if they are homogenous in this regard or not. Results are shown in table 1.

Table 1. homogeneity tests: Duncan and Student-Newman-Keuls

Tests	Duncan		Student-Newman-Keuls	
Self-esteem	52	2.426	52	2.329
Exam anxiety	54	.312	54	.348
Responsibility	51	.911	51	.896
Academic achievement	52	1.523	52	1.612
Significant Value	$p(.088)$		$p(.091)$	

With respect to the content of the table, no significant difference can be observed between the groups. Thus it can be said that they are homogenous in terms of the related variables.

TABLE 2. Results of Multivariate ANOVA for Variables

Tests	MS*	Df	F	P	PES**
Self-esteem	548/41	53	86.26	.001	.076
Exam anxiety	3465/59	52	32.62	.001	.028
Responsibility	4421/36	53	45.86	.001	.016
Academic achievement	418/66	54	23.3	.001	.046

* Means of Squares ***Partial Eta Squared

According to content of table 2, a significant difference can be seen between the groups. Thus a Scheffe test was done to determine what groups were changed significantly. Results showed both of the groups, cognitive as well as behavioural improved in terms of self-esteem, exam anxiety, responsibility and academic achievement.

5. Discussion

With respect to $F(2,52)=32.62, P<.001/$ it can be said that there is a significant difference between the groups in terms of self-esteem. This finding is in line with Bank et al. (1991), Budge, (2006) and Little and Perclova (2001). Thus, it can be said that high self-esteem students have realistic attitude toward themselves. For the reason, in stressful situations like exam a balance between their abilities and the task is made, situation which in turn leads to reduction in level of anxiety.

A significant difference was also found between cognitive and behavioural groups from one side and control group on the other side in terms of responsibility $F(2,53)=23.3, p<.001$. The result is in line with Bierman, and Erath (2007) Connolly, Simpson, and Petty (2006), Huberty (2009) and Vassilaki (2006). Again the above mentioned explanation can be used to understand the involved mechanisms.

The results, $F(2,53)=45.86$, $P<.001$, and $F(2,53)=86.26$, $P<.001$ were observed for academic achievement and exam anxiety respectively. Again the explanation can be used to understand the situation.

In sum, these findings prepared a strong support for both of the approaches, cognitive as well as behavioural interventions.

6.Limitations

Lack of gender variable is an important deficiency. Also, assigning field of study like math, science and literature subgroups to each main group is necessary which is suggested to do for future studies.

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8. References

Abolqasemi.H. (1985). Construction and validation of an anxiety exam test, psychological journal of social science faculty, 5(2)145-158.

Albano, E. (2004). Cognitive-Behavior Therapy with children and adolescents in Ed. Jesse H. Wright, Cognitive-Behavioral Therapy. American Psychiatric Publishing Inc. Washington: DC.

Ames, C., & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology*, 80(3), 260-267 doi:10.1037/0022-0663.80.3.260

Arnold, J. (2000). Seeing through listening comprehension exam anxiety. *TESOL Quarterly*, 34 (4), 777 – 786.

Aydın, S. (2007). How can teachers reduce test anxiety of L2 learners? *Humanizing Language Teaching* 4. <http://hltmag.co.uk/jul07/sart05.htm>.

Bank, L., Marlowe, J., Reid, J., Patterson, G., & Weinrott, M. (1991). A comparative evaluation of parent-training interventions for families of chronic delinquents. *Journal of Abnormal Child psychology*. 19(1): 15-33.

Bierman, K.L. & Erath, S.A. (2007). Social anxiety and peer relations in early adolescence: Behavioral and cognitive factors. *Journal of Abnormal Child Psychology*, 35 (3), 405- 416.

Budge, S. (2006). Peer mentoring in post-secondary education: Implications for research and practice, *Journal of College Reading and Learning*, 37 (1), 73- 87.

Connolly, S., Simpson, D., & Petty, C. (2006). *Anxiety Disorders*. New York: Chelsea House Publishers.

Coopersmith, S. (1967). *The Antecedents of Self-Esteem*. W. H. Freeman, San Francisco.

Cowden, P. (2009). Communication and conflict: Social anxiety and learning. In the proceedings of Academy of Organizational Culture: Communications and Conflict, 14(2), 16-19.

Gough, H. G., McClosky, H., & Meehl, P. E. (1952). A personality scale for social responsibility. *Journal of abnormal social Psychology*, 47, 73-80.

Hewitt, John P. (2009). *Oxford Handbook of Positive Psychology*. Oxford University Press
Horwitz, E. K. & Young, D.J. (Eds.). (1991). *Language anxiety: from theory and research to classroom implications*. Englewood Cliffs, NJ: Prentice Hall.

Huberty, T. (2009). Test and performance anxiety. *Principle Leadership*, 1(10), 15-19.

Lagares, C., & Connor, D. (2009). Help students prepare for high school examinations. *Intervention in School and Clinic*, 45(1), 63-67.

Little, D. & Perclova, R (2001). *European Language Portfolio: Guide for teachers and teacher trainers*. Strasbourg, Council of Europe

McCarthy, W., & Widanski, B. (2009). Assessment of chemistry anxiety in a two-year college. *Journal of Chemical Education*, 86(12), 1447-1452.

Meece, J.L. (2003). Applying learner-centered principles to middle school education. *Theory into Practice*, 42(2) 109-116 doi. 10.1002/pits.20290

Sherman, B. F. & Wither, D. P. (2003). Mathematics anxiety and mathematics achievement. *Mathematics Education Research Journal*, 15(2), 138-150.

Schmitt, D. P. & Allik, J. (2005). Simultaneous administration of the Rosenberg Self-Esteem Scale in 53 nations: Exploring the universal and culture-specific Features of global self-esteem. *Journal of Personality and Social Psychology*, 89(4), 623-642.

Vassilaki, E. (2006). *Anxiety and cognitive functioning in primary and high school students. Stress and Anxiety- Application to Health, Workplace, Community and Education*. Newcastle: Cambridge Scholars Press.

Watkins, D., Akande, A., Cheng, C., & Regmi, M. (1996). Culture and gender differences in the self-esteem of college students: A four-country comparison. *Social Behavior and Personality*, 24(4), 321-328.

Wentzel, K. (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Journal of Child Development*, 73, 287-301

Wolfe, B. E. (2005). *Understanding and Treating Anxiety Disorders: An Integrative Approach to Healing the Wounded Self*. Washington: DC.

Zatz, S. &Chassin, L. (1985).Cognitions of test-anxious children under naturalistic test-taking conditions. *Journal of Consulting and Clinical Psychology*, 53(3), 393-401.