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The effectiveness of positive education intervention on happiness, depression, academic satisfaction, and academic achievement

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Abstract

Introduction: Positive psychology is a type of psychology focuses on a topic beyond illnesses and disabilities. Unlike other approaches that focus on problems and weaknesses, it focuses on positive emotions and quality of life. This study was performed to determine the effectiveness of positive education intervention on happiness, depression, academic satisfaction, and academic achievement.

Materials and Methods: This clinical trial conducted on high school female students in Shahroud city in the academic year of 2015-16. The participants were selected voluntarily among students of two schools then they divided into experimental group (n=15) and control group (n=15) randomly. The experimental group received 14 sessions of positive education. After intervention, both groups completed the Oxford Happiness Questionnaire, Beck Depression Inventory, and Hubner Academic Satisfaction. Data were analyzed using multivariate analysis of variance.

Results: Findings showed that positive intervention had a significant effect on happiness ($P=0.005$), depression ($P=0.037$) and academic achievement ($P=0.031$), but it had no significant effect on academic satisfaction ($P=0.058$).

Conclusion: It seems that positive intervention is a good strategy to increase happiness and academic achievement and decrease depression in students.

Keywords: Academic achievement, Depression, Happiness, Positive education

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Introduction

One of the important approaches that have a positive attitude towards human beings is the positive psychology approach. Positive psychology is a type of psychology whose primary purpose is to focus on a subject beyond illnesses and disabilities (1). Unlike other approaches that focus on problems and weaknesses, the method focuses on positive emotions and quality of life (2). Positive psychology has been able to study new ways to make people more flexible, improve their health, and study human capacities when faced with problems (3). Various studies have shown the effectiveness of positive thinking skills training. Duell, Philo, and Locke Funk (4) showed that positive psychological interventions positively effected exercise and well-being. Laius et al. (5) believe that positive interventions directly or indirectly foster positive thoughts, positive behavior, positive emotions, improve well-being, and reduce negative emotions. No way. Positive psychology is intended to accomplish goals, increase positive emotions, and reduce negative emotions.

Jabari, Shahid, and Motabi (6) concluded in their study that positive interventions reduce ineffective attitudes and increase happiness. Khazai, Khazai, and Ghanbari's research (7) showed that positive psychological interventions were effective in the treatment of Internet addiction.

One of the topics that positive psychology has focused heavily on is the subject of happiness. Seligman divides happiness into three different constructs: positive emotion, attractiveness and attraction, and meaning (8). Happiness is a positive emotional state characterized by anger, compassion, and happiness, with its symptoms including positive beliefs about aging, positive emotions, and a lack of negative emotions. In other words, happiness is the intellectual tranquility that predicts the outcome of a life event and increases life satisfaction (9). Those adolescents with higher happiness may experience fewer emotional problems (10). Relationship with others, purpose in life, personality development and loving others, identifying positive situations, commitment to

society, positive ethics and character, being able to control one's life and one's physical health, satisfaction of themselves and life, they are all part of happiness. Happiness can be divided into cognitive and emotional components. The cognitive component is the same as satisfaction with life and the emotional component is the same as emotions such as being happy, laughing, feeling good and not having a negative feeling (11). In their study, Perrier, Gunder, Velenzo, and Rush (12) concluded that positive online psychology could increase happiness and decrease depression symptoms. Research by Pickett, Cook, Matthews, and Holmes (13) has described an exciting cycle of the effects of positive and negative emotions to explain the effectiveness of this approach and to explore how to create happiness and depression in individuals. This study showed that creating positive conditions as well as positive mental images can increase positive emotions and happiness in people and reduce depression.

Positive psychology aims to reduce depression, in addition to enhancing happiness and living a quality life. Depression is one of the most common types of mental disorders and it considered as a health and global problem in all cultures. However, some people in the community are more vulnerable to this disorder due to their particular circumstances and they develop depression more and more quickly than others (14). Depression manifests itself as a person's lack of energy and interest in life, feeling guilty, not focusing on everyday tasks, lack of appetite, the thought of dying and committing suicide. It impairs cognitive abilities, sleep, and biological conditions. Depressed individual becomes frustrated and has no incentive to continue with his/her daily life and lose confidence in him/her-self (15). The results of various studies indicate the effectiveness of positive thinking skills in reducing depression (16).

One of the consequences of depression among students is the decrease in attention, learning loss, and decreased educational satisfaction. Students' satisfaction includes students' understanding of the conditions and programs available at school, the opportunities for study,

as well as teachers' attitudes, behaviors, strategies and guidance (17). One of the goals of academic progress is to identify and evaluate those who are successful in learning and education (18). Putwain, Sander, and Larkin found that academic satisfaction is one of the main indicators of students' academic achievement (19). Some evidences suggest that positive intervention is effective in students' academic achievement (20).

Regarding the conducted researches and the importance of positive attitudes in schools, the main purpose of this study was to investigate the effectiveness of positive education intervention on happiness, depression, academic satisfaction and academic achievement.

Materials and Methods

The statistical population of this clinical trial consists of all female students of Shahrud city who aged 16-19 years. Among them, 30 students were recruited by convenient sampling method. The sample size was calculated using G power software. Prior to the study, a clinical trial code was obtained from Semnan University of Medical Sciences (IRCT Registration Code 20141026019683N2). This study was conducted

after the approval of the authorities related to the target groups. It first, the researchers corresponded with the schools that were volunteering for the intervention. Two schools were selected from volunteer schools. From each school, 15 students were selected. To control the effect of diffusion, the experimental group was randomly selected from one school and the control group from another school. Finally, 14 students remained in the experimental group while 13 students remained as controls.

The participants wrote consent form after receiving information about the project.

Inclusion criteria: Secondary school students, mean age of 16-19 years, no taking medication or psychological treatment concurrent with research. Exclusion criteria concluded absence for more than 3 sessions.

The experimental group received positive thinking skills (Table 1) in fourteen 90-minute sessions in a school classroom by a senior psychologist and the control group received no training.

Table 1. Summary and content of training sessions

Session	Meeting Description
1 st	homework (positive introduction)
2 nd	Assignment (determining superior personality strengths)
3 rd	Homework (gift book or blessings book)
4 th	Homework (bad memories vs. good memories)
5 th	Homework (letter of intent)
6 th	Homework (letter of appreciation)
7 th	Intervention review (both homework and gratitude are followed)
8 th	Homework (satisfaction instead of maximizing)
9 th	Homework (optimism and hope)
10 th	Homework (producer-active reactions)
11 th	Homework (strength genealogy)
12 th	Homework (the art of enjoyment)
13 th	Homework (blessings of time)
14 th	The fourteenth of a full life 1

Research instrument

A) *Oxford Happiness Scale*: This scale was developed in 1989 by Argyle and Martinoceland. This questionnaire has 29 items of 4 items whose options are scored from 0 to 3, respectively. The sum score of the 29 items constitutes the total score of the scale. The total score of the subjects ranges from 0 to 87. The validity of this scale has been confirmed in various studies (21). Also, to determine the validity of this test, Argyle and Lu (22) reported a coefficient alpha of 0.90 with 47 subjects.

B) *Beck Depression Inventory*: It was developed by Beck in 1961 and published in 1978. The questionnaire consisted 21 questions which scored 0 to 3 so the total score ranges 0 to 63. Its validity was obtained by retesting method equal to 0.48-0.86. The correlations with Hamilton Depression Scale, Zunk ZCS and MMPI Depression Scale reported as 0.73, 0.76, and 0.74 respectively. Alipour and Nouri calculated the validity of this questionnaire in Iran. They reported Cronbach's alpha coefficient 0.94 and

alpha coefficient of post-test within two months equal to 0.72 (23).

C) *Life Satisfaction Scale*: In 2001, Hubner designed a 40-item self-report tool for children and adolescents aged 8-18 years. This scale can give an overall assessment of the individual by combining all the available options (24). Hubner, Laglin, and Ash Weilman reported alpha coefficient of 0.90 and pre-test and post-test coefficient of 0.81 over 4 weeks (25).

Students' academic achievement was measured through their academic grades at the end of the semester. In this study, only students' satisfaction with education was included in the analysis. Since two groups were compared in four dependent variables in a post-test design, a multivariate analysis of variance was used.

Results

In this study, 30 secondary school girl students aged 16-19 years (mean age: 17.5 years) participated. Table 2 indicated the scores of the variables in two groups.

Table 2. Mean and standard deviation of the studied variables by group

Variable	Experimental group		Control group	
	Mean	SD	Mean	SD
Happiness	1.79	0.36	1.29	0.46
Academic satisfaction	3.90	0.41	3.51	0.59
Depression	0.11	0.13	0.37	0.42
Educational achievement	16.18	2.03	14.76	0.95

A multivariate analysis of variance was used to analyze the data to determine the difference between the means of the experimental and control groups. First, the assumptions of multivariate analysis of variance were examined. Leven's test was used to test for similarity of error variance. The results showed that the same variance assumption is true. Box test was used to test for variance matrix homogeneity (BOX'S M= 02.02, F88= 79.3, $P>0.05$) and homogeneity of variance matrix is established. Bartlett test was used to investigate the correlation between the dependent variables and the results showed a significant correlation between the dependent variables ($X^2= 110.35, P<0.001$).

The results of analysis of variance showed that the mean scores of happiness in the experimental

group were significantly changed compared to the control group. The results of multivariate analysis of variance show that this difference is statistically significant and the effect size of this intervention was 0.28 (Table 3).

It was also assumed that the rate of depression in students who received positive education was lower than in the control group. Results of analysis of variance showed that the mean scores of depression in the experimental group were significantly changed compared to the control group. The results of multivariate analysis of variance show that this difference is statistically significant and the effect size of this intervention is 0.16 (Table 3).

In this study, it was assumed that the educational satisfaction of students who received positive

education was higher than that of the control group but the difference between two groups was not significant (Table 3).

Also, the results of analysis of variance showed that the mean scores of academic achievement in the experimental group were significantly

changed compared to the control group. The results of multivariate analysis of variance showed that this difference was statistically significant and the effect size of this intervention was 0.17 (Table 3).

Table 3. Results of multivariate analysis of variance to compare experimental and control groups

Group	The sum of the squares	df	The mean of squares	Statistics f	P	Eta
Happiness	1380.95	1	1380.95	375.33	0.005	0.28
Academic Satisfaction	169.26	1	169.26	4.86	0.037	0.16
Depression	1656.41	1	1656.41	3.96	0.058	-
Educational achievement	13.54	1	6457.47	2486.62	0.031	0.17

Discussion

Overall, the findings of this study showed that positive education increases happiness and academic achievement while it reduces depression.

Positive psychology has been exploring new ways to make individuals psychologically flexible, and to enhance the health of positive psychologists while exploring human capacities in confronting to problems (3). Interventions that create a positive sense are effective in reducing and alleviating depression in children and adolescents (27). Positive psychological interventions include treatments or activities that intentionally occur to disseminate positive emotions, positive behaviors, positive cognition, and perception, enhance people's well-being, and improve symptoms of depression (28). Jabari, Shahid, and Motabi (6) concluded that positive interventions reduce ineffective attitudes and increase happiness. When students are taught happiness, they are encouraged to know about their experiences and to what extent these experiences have been effective in enhancing their self-esteem and respect for others. They learn to choose how they can make their own lives individually, rather than accepting everything that matters to them (1). For example, adolescents with higher levels of happiness may experience less emotional distress (10). Various studies have shown that skills can be taught to students, children and adolescents so that they can face strong problems and be more optimistic and positive

about their lives and future (26). Argyle and Lou concluded that having a relationship with other people, having a purpose in life, developing a personality and loving others, identifying positive situations, committing to society, having positive ethics and disposition, physical health, self-satisfaction, and life-satisfaction are all part of happiness (22). Although happiness is not the opposite of depression, it is at least essential for one to be happy (29). Based on the evidences, positive education was effective on adolescents' quality of life, depression, anxiety, and stress. The concept of students' satisfaction and academic satisfaction, which reflects the level of students' positive emotions and attitudes toward the current educational situation, is one of the most important and common issues in the field of organizational behavior in today's competitive environment. Satisfaction is a function of one's mental performance and expectations. For this reason, any pleasant feeling that results from comparing one's mental performance with expectations is called satisfaction (30). Amin Bidokhti et al. concluded that there is a significant relationship between satisfaction and social capital. Academic satisfaction is sometimes considered a substitute for academic achievement. While academic progress is one of its goals, it is to identify and evaluate those who are successful in learning and education (32).

Usually in any research, depending on the conditions and possibilities it has been

implemented, it has limitations that can reduce its generalizability to the whole community. These limitations are as follows: small sample size, lack of follow-ups to judge about long-term effects of intervention, limited cases to Shahroud city, and using self-report instrument

Conclusion

The results of the present study showed that positive education increases happiness and academic achievement while it reduces depression. So, it can be suggested that positive

education intervention leads to increase students' satisfaction with education and academic achievement, as well as it can increase happiness and reduce depression in students.

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