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Research paper

The effectiveness of virtual education based on positive psychology education on the resilience of students of gifted schools (SAMPAD)

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Extended Abstract

The present research was conducted with the aim of comparing the effectiveness of virtual education based on positive psychology on the resilience of students of Tehran's gifted schools. This research is a semiexperimental type with a pre-test-post-test design with a control group. The statistical population of the research included all the students of the gifted schools, who were studying in the first secondary schools. In order to select subjects from one of the schools accessible to Tehran's brilliant talents in the first year of high school, 45 people were randomly selected and replaced in two experimental groups (n) and a control group. The pre-test was conducted for both groups. The first experimental group was During 14 sessions of 90 minutes, they were trained based on positive psychology, and the second group was trained based on cognitive-behavioral methods. During this period, the control group did not receive any training in these fields. Conclusion: The results showed that there is a significant difference between the performances of the two groups in the resilience post-test. While, as expected, the resilience of the control group did not have significant changes, but training based on positive psychology improved the resilience index by 9.67% and changed their resilience performance. The effect of education based on cognitive-behavioral method, although it is less than the positive method, but it is with a significant amount of 6.27%, which can create relative changes in the resilience of students. It can be concluded that education based on positive psychology improves the resilience index have become students and can be used as effective virtual trainings in the resilience of students of gifted schools.

Introduction

Human power is the most valuable capital of any country, the all-round growth and development of countries will depend on the training of healthy, committed and expert personnel so that they can bring cultural, economic and social progress and growth to societies. The educational system of the countries is responsible for the main mission of training the human resources necessary for achieving the growth and progress of the societies. In the meantime, schools, as institutions that are responsible for the education and training of children and adolescents in the society, will play a key role in achieving this important goal. If the education and training system fulfills its mission correctly, we will witness the flourishing of the talent of students who, in addition to academic progress, will reach the necessary growth in physical, mental and social fields and will lead the society towards growth and perfection in various fields. Therefore, the health and skill of students, who make up the great group of children and teenagers of every society, is the first priority of the countries, because the future of every country depends on how to educate the future makers of that country.

By examining the researches conducted in our country, we find that some effective features in the educational process of students have been paid less attention by researchers. Perhaps one of the reasons is the problems of such researches. Among these features is students' resilience and methods of improving it, on which there has been limited research. Considering the importance of resilience and its role in the success of students, the current research is focused on this feature and the main problem of the research is to measure the level of resilience of students and examine the methods of improving this feature.

The researcher's intervention methods in this research; Trainings based on positive or positivist psychology and training based on cognitive-behavioral intervention, the effectiveness of which will be researched in improving the resilience level of students of Sampad schools.

I. Problem statement

Resilience is a dynamic process during which a person tries to balance what he does or wants to do and what the environment and society demand. Personal biological, psychological, and social experiences bring about extensive changes in adolescence, that is, when a person is in the first and second secondary school years. During these changes, people discover new and different behavioral and emotional stimuli for their adult life, the changes that occur during adolescence may cause teenagers to engage in behaviors that are harmful to their health or self-destructive. It is these behaviors that have long-term effects on health and increase the risk of early death and have psychological and social consequences (Gonzalez and Field, 1994). Important behavioral patterns that can affect a person's entire life begin from this period. In adolescence, a person seeks to find his place in his family, friends and society. It is very important to explore the level of resilience in teenagers under education and training, and by knowing its principles, we can adopt appropriate educational methods to improve their resilience and by choosing and teaching scientific methods and principles, we can increase the resilience of people in the society. Entering the adolescent period in the country's formal education has become symmetrical with the first secondary education course, so the researcher in the present research aimed to study the students of this period and tried to find out the characteristics of resilience in teenagers who are in one of the most sensitive types of schools. That is, check the

schools of brilliant talents. The main topic of this research is the study of the effectiveness of some educational methods on improving resilience in students of the first year of high school in Tehran's gifted schools.

One of the important features that can be noticed and researched in gifted schools is the level and methods of improving the resilience of the students of these schools, because by increasing the capacity of resilience, students gain the necessary ability to triumphantly overcome the unfortunate events of life and even in If they are exposed to social damage, they can overcome it safely, and develop their talents, as well as improve their social, educational and professional skills.

In this research, the effectiveness of two intervention methods on improving the resilience of students of gifted schools are tested:

The purpose of this study, which is a new research in the provision of psychological services to students of gifted schools, is to investigate whether it is possible to implement educational programs based on positive psychology and cognitive behavioral methods, which are taught in groups and each in 14 sessions. Is it possible to increase the resilience of gifted school students?

The importance and necessity of conducting research

Nowadays, improving the personal and social skills of students has become one of the major challenges of schools. The change in lifestyle and the damages caused by it have affected the people of the society. The resilience of students has decreased, and with its decrease, many social harms, including new harms, threaten people's lives. Although the increase in social damage has worried many education and training workers and specialists, unfortunately, little research activities have been done in this field. This is while it seems that it is possible to increase the resilience of students as the future builders of society by designing appropriate educational programs and effective specialized interventions as well as supporting measures of related institutions and prepare them to enter important social responsibilities. Knowledgeable and skilled students will be more sociable, have high selfconfidence, and as a result, will have the ability to solve problems in difficult life challenges and situations. Although in this field, there have been researches about the effectiveness of treatment methods on the resilience of different groups of society, including students of normal schools, but instead of similar researches on students of gifted schools, who form a significant group of students in our country, is empty The current research can partially compensate for this shortcoming and play an effective role in the entry of researchers into these elite schools. This is while developed countries have prepared special programs to improve the skill level of their elites and also to use their services for the development of the society. The time has come for our country to pay more attention to this important and vital issue by using experts and specialists, including health psychologists. It seems necessary to increase personal and social skills among students of gifted schools who are among the selected groups with valid tests. If the endurance of these students increases and they acquire personal and social life skills, they can have a much more favorable impact on society and use their inherent talents and rely on acquired skills to have useful and effective activities in society.

Specific objectives of the research

general purpose

Determining the effectiveness of education based on positive psychology (PPE) on the resilience of gifted school students

Minor goals

1. Measuring the level of resilience of students of schools of brilliant talents

2. Determining the effectiveness of education based on positive psychology on the resilience of students of gifted schools

3. Comparing the effectiveness of two positive and cognitive-behavioral treatment methods

Application purpose

The results of this research can be used as a supplementary and auxiliary educational method in schools of brilliant talents, as well as other schools, and these schools can be used to improve the resilience of students. themselves, benefit from the results of this research.

II. Theoretical definition of variables

Resilience is a process, ability, or outcome of successfully adapting to threatening conditions. That is, resilience is positive adaptation in response to adverse conditions (Mortazavi, 2016, quoted by Waller, 2001). Of course, resilience is not only stability against injuries or threatening conditions, and it is not a passive state in facing dangerous conditions, but active and constructive participation in the surrounding environment (Connor and Davidson, 2003). Elsewhere, resilience is defined as the ability to overcome difficulties and overcome conditions in life. Resilience also refers to the ability of humans to adapt in the face of disasters or life-threatening pressures, to overcome and even be strengthened by those experiences (Basharat and Abbaspour Duplani, 2019).

Positive psychology: One of the most important developments in contemporary psychology is the positive psychology movement led by Martin Seligman. This movement caused the focus of psychology to shift from psychopathology to positive issues such as happiness, mental health, positive emotions, spirituality, creativity, and moral virtues. The evaluation of the state of global psychology made Seligman realize the incompatibility of the medical model in psychology and present the positive psychology model as an efficient model for human perfection and excellence. The positive psychology movement ended the long-standing conflict between psychology and religion and led to a return to spirituality in psychology. The goal of positive psychology is to bring about a change in the psychological system of the world and change the focus on repairing the worst things in life to the best qualities in life. For this purpose, the flourishing of abilities should be placed in the first priority of preventions. The topic of positive psychology is related to positive experiences such as mental health, satisfaction with life, enthusiasm, happiness in the present and efficient understanding of the future, which includes optimism, hope and faith. Positivism at the individual level is related to personal characteristics such as kindness, commitment, courage, interpersonal skills, beauty of friendship, perseverance, forgiveness, originality, foresight and wisdom. At the group level, it is related to citizenship virtues such as sense of responsibility, kindness, sacrifice, politeness, moderation, tolerance and work ethics (Kalantari and Ismaili, 2014).

III. Analysis of research findings

In this section, the data obtained from the implementation of the Connor-Davidson Resilience Scale (CD-RISC) among the male students of the first secondary school of Tehran's gifted schools, in two experimental groups and one control group, in two pre-test stages. And the post-test was obtained, collected, coded and entered into the computer and analyzed using SPSS software.

Statistical description of research data Descriptive statistics are methods that are used to summarize large categories of data. These statistics make the available data comprehensible to the readers by using a number of normal values and several indicators and graphs. Every research report should include descriptive statistics to provide information about the sample and also to describe the data before conducting inferential tests (Saei, 2011).

IV. Descriptive statistics of endurance scores

In the descriptive analysis of the data, the difference in performance of the subjects in the pre-test and post-test, the average of the groups, along with related tables and graphs, have been separated. These scores are the results of the Connor-Davidson Resilience Scale (CD-RISC) in positivity-oriented (PPE), cognitive-behavioral (CBT) and control groups in two pre-test and post-test times.

Examining the data obtained from the implementation of the resilience scale in the pre-test and post-test in the first group, shows that education based on positive psychology has a significant effect, which can be further understood with inferential studies. Chart 1 shows these differences more.



Fig. 1: Comparison of the performance of the positive group (PPE) pre-test and post-test

Table 1:The mean of pre-test, post-test and the trend of changes of two groups

group	pre-	post-	The process of
	exam	test	changes
Positiv	64/93	60/74	76/9
e group			
Control	64/33	./65	0/67
group			

The comparison of the data in Table shows that the trend of the average changes between pre-test and post-test was higher in the positive group with 9.67 and 0.67 in the control group.

V. Inferential statistics and investigation of research hypotheses

In this section, the linearity of the relationship between the variables was investigated first by using the test of the linearity of the relationship between the variables, then the assumption of homogeneity of variances was investigated by using the Lone test, by examining the mean and standard deviation of the experimental groups and the control group. Then, in the following, we analyzed the significance of the difference in the mean endurance scores of the students of the experimental and control groups through covariance analysis. As can be seen, the linearity of the relationship between the accompanying and dependent variables (pre- and post-test) is confirmed by the probability value of F obtained with P>0/05.

The mean scores of the dependent variable (post-test) resilience in the positive group is 74.50, the cognitivebehavioral group is 71.33, and the control group is 65. The standard deviation of these scores was 7.818 for the positive group, 13.356 for the cognitive-behavioral group, and 7.755 for the control group.

Due to the one-factor nature of the research topic, the assumption of homogeneity of variances was obtained through the Lone test, by examining the mean and standard deviation of the experimental groups and the control group of data, regarding the trend of the dependent variable, and it is reported in the table:

The probability value of F is significant with P>0.05 and it shows that the assumption of homogeneity of the regression slope for pre-test-post-test has been observed. Therefore, according to the normality and equality of the variance of the dependent variable, which was investigated through Lone's test, and the calculated value of Lone (0.056) is greater than 0.05.

Covariance analysis

Analysis of variances of any type is a set of statistical methods during which the total sum of squares is divided into components related to specific sources in order to find out which of the sources of change is effective and which of the sources of change is insignificant. And it can be ignored. It is a variable that is used in a study. This variable can be called 2 variance/factor analysis. 3 is a set of interdependent states and classes that are called levels.

Conclusion and Recommendations

This research has sought to find effective methods on students' resilience, communication skills, confrontation, encouragement and self-expression can increase resilience and then increase people's health level (Samani et al., 2016). Of course, the level of resilience is not the same for many children because their growth rate is also different. This means that we cannot expect them to use the same model and techniques to build their resilience, but we can teach resilience to children in the same way we teach them how to play soccer or how to use tools. Use music, let's teach. Therefore, it is necessary to try effective educational and intervention methods by different institutions of the society, such as the institution of education, in order to increase resilience and some of its related characteristics. By increasing these features; Students can strengthen the capacity to bounce back from persistent and ongoing difficulty and the ability to repair themselves. This capacity makes a person triumphantly overcome unfortunate events and improve his social, academic and professional competence despite being exposed to extreme tensions. Resilience is a characteristic that varies from one person to another and can grow or decrease over time and is formed based on human intellectual and practical self-correction in the trial and error process of life. Resilient people are normally able to think. They are creative and flexible about solving problems and get help from other people whenever needed and help others in times of crisis. These people have a degree of health and independence. They believe in their abilities to change the environment. Resilience results show how people come out successfully in the face of stressful and damaging factors that exist in the social context. Brilliant talents are clearly visible among school students. They are fascinated by the scientific and research activities of their schools. This work may create positive excitement for them or have meaning for them. Therefore, it is obvious that when their life is full of positive excitement, feeling overwhelmed, meaningful and purposeful, positive relationships and achievement, they feel happy and well-being. Therefore, it can be said that; Gifted schools have students who have more parameters of positive abilities, and education based on positive psychology has also been able to improve their resilience as one of the positive characteristics of these students, significantly compared to the control group.

This research can be a good way to choose effective educational methods in schools. Specialists consider upbringing before education and health is the first priority of countries in planning for teenagers. Resilience is one of the parameters of people's mental health, which can help students to successfully overcome the challenges, issues and problems that have arisen and acquire knowledge with physical, mental and social health resulting from the learned correct performance. . Based on the findings of this research, the managers and workers of education and training can take action to strengthen the positive characteristics in their adolescent audience, so that in addition to the general and basic lessons that lead to the scientific and professional advancement of the future builders of the society, some of their educational characteristics also strengthen

References

1- Mortazavi Emami, Seyyed Ali Akbar; Ahghar, Qudsi (2016) The effect of Jomdari Rogers treatment method on students' academic endurance, Scientific-Research Journal of Educational Innovations No. 57 from 104 to 118 2- American Psychiatric Association (2013), Diagnostic and Statistical Manual of Mental Disorders (DSM5), translated by Yahya Syed Mohammadi, fifth edition, Ravan Publishing

3- American Psychiatric Association (2012), DSM changes, translated by Yadaleh Ghasemipour, Binesh No publication.

4- Frederik Benninak (2013), positive cognitive behavioral therapy, translated by Akram Khamse, published by Arjamand Kitab.

5- Moe-Magiar Jina L (2013), Positive psychology interventions, translated by Ali Akbar Foroughi and colleagues, Nashkitab Arjamand

6- Kaplan-Sadok (2012), Psychiatry Summary 1, 2, 3, translated by Nosratoleh Pourafkari, Ayandehsazan Publishing

7- Curtis Anthony J. (2013), Psychology of Health, translated by Shahnaz Mohammadi, Nashroyish

8- Safari Mohsen and colleagues (2013), Theories, models and methods of health education and health promotion, Athar Sobahan and Yarres Publications

9- Didarlo Alireza and colleagues (2013), health promotion planning based on behavior models, publication of the works of Soban and Yarres

10- Tabrizi Alireza (2013), Behavioral therapy methods for rapid behavior change, Psychology Publications

11- Haq Ranjbar, Farrokh, Kakavand, Alireza, Barjali, Ahmad, Barmas, Hamed (2019) Resilience and quality of mothers with mentally retarded children, Journal of Behavioral Sciences, Volume 1, Number 1, Spring 2019.

12- DiMatteo M. Rabin (2012), Psychology of Health (Volumes 1 and 2), translated by Kianoosh Hashemian and colleagues, Jihoon Publishing

13- Rahimian Boger Ishaq (2008), Clinical Psychology of Health, Danje Publications

14-15. Kurdmirzanikozadeh, Ezzatullah. Biological-Psychological-Spiritual Modeling in Substance-Dependent People and Developing an Intervention Program to Promote Resilience Based on Cognitive Narrative and Positive Psychology, Doctoral Thesis, Faculty of Psychology and Educational Sciences, Allameh Tabatabai University, 2018.

15- Khaleghi Samrin Adel; Sheikh Pour Mahmoud (2007), effective communication methods, Tindis Alam

16- Basharat, Mohammad Ali. Salehi, Maryam. Shah Mohammadi, Khadijah, the relationship between resilience and hard work with sports success and mental health in athletes, contemporary psychology. 2017: 3(2): 38-49.

Real, Jamal; Attari, Yusuf Ali; Rahimi, Alisina; Nia Soleimani, Leila (2008) The relationship between stubbornness and its components with mental health in a male student of the university's master's course. Journal of Educational Sciences and Psychology of Shahid Chamran University of Ahvaz, No. 3(6): 1-18.

17- Karimi Abdulazim (2006), The Hidden Effects of Traumatic Education, 7th Edition, Publications of the Association of Parents and Teachers

18- Rosenhan, David L.; and Seligman, Martin, AP (1384) Psychopathology, first and second volumes, translated by Yahyasyed Mohammadi, published by Arsbaran

19- Adhami Ashraf, Nouhi Esmet, Mohammad Alizadeh, Sakineh, Jalili, Zahra, Fatahi Zahra (2008) The attitude of professors towards academic counseling and guidance and their opinion about counseling duties. Iranian Journal of Education in Medical Sciences. 1378 : 8(1): 7-14

20- Fred N. Kerlinger (1376), Fundamentals of Research in Behavioral Sciences, translated by Hasan Pasha Sharifi and Jaafranjafizand, Avai Noor Publishing House

21- Ball, Samuel, Motivation in education, translated by: Seyed Ali Asghar Masdad, Shiraz University Publications, 1373.

24. Mohammad Alimoradi1, Morteza Abdolahi2, Leila Aryan3, Roya Vazirijavid4, Marjan Ajami, Cognitive

Behavioral Therapy for Treatment of Adult Obesity, International Journal of Medical Reviews 2016.

25. M. Ann Easterbrooks, Kenneth Ginsburg, and Richard M. Lerner ,Resilience among Military Youth,(2011) psychopathology: Areview and analysis of empirical effort.

26. *Alicia Kruisselbrink Flatt* College Quarterly (Winter 2013 - Volume 16 Number 1) A Suffering Generation: Six factors contributing to the mental health crisis in North American higher education .

27. Dinesh K. Arya, (August 2013), Promoting Resilience, Independence and Self Management (PRISM) —A strategy to manage chronic mental illnesses, Asian Journal of Psychiatry.

28. Tang Hui & Ma Liang (2012), College of Chemistry and Molecular Sciences, Wuhan University., Wuhan, China, The Study on the Psychological Problems and Countermeasures of the Full-Time Professional Masters v US-China Education Review.

29. Turkish Online Journal of Distance Education-TOJDE April (2012) ISSN 1302-6488 Volume: 13 Number: 2 Article 22

30. Francesca Cornaglia, Elena Crivellaro & Sandra McNally(February 2012), Mental Health and Education Decisions.

31. Despina M. Rothìa, Gerard Leaveyb and Ron Bestc(2012), Recognising and managing pupils with mental health difficulties: teachers' views and experiences on working with educational psychologists in schools.

32. Annesi, J. J., Tennant, G. A. From Morbid Obesity to a Healthy Weight Using Cognitive-Behavioral Methods: A Woman's Three-Year Process With One and One-Half Years of Weight Maintenance. The Permanente Journal,2012: 16(4), 54.

33. Taylor & Francis, Tachelle Banks Department of Teacher Education , Cleveland State University , Cleveland, OH, USA(2011) Helping students manage emotions: REBT as a mental health educational curriculum, Educational Psychology in Practice: theory, research and practice in educational psychology.

34. Gregory J. Benner, Kathleen M. Beaudoin, Pei-Yu Chen, Carol Davis, & Nicole C. Ralston(2010), The Impact of Intensive Positive Behavioral Supports on the Behavioral Functioning of Students with Emotional Disturbance:How Much Does Fidelity Matter?

35. Bitsika V. Sharply C. F, Peters K. How is resilience associated with anxiety and depression? Analysis of factor score interactions within a homogeneous sample. The German Journal of Psychiatry.2010: 1(3): 9-16.

36. American Psychological Assosiation. (A.P.A.) . Teaching Resilience, sense of purpose in schools can prevent Depression, Anxiety and Improve Grades, According to Research. University of Pennsylvania. A.P.A.2009.

37. Brennan L., Walkley J., Fraser S. F., Greenway K. Motivation alinterviewing and cognitive behaviour

therapy in the treatment of adolescent overweight and obesity: study design and methodology. Contemporary clinical trials.2008:29(3), 359-375.

38. Gomes R. Mc Laren SO. The association of avoidance coping style, and perceived Mather and farther support with anxiety/Depression among late adolescents. Applicability of resiliency models personality and Individual Differences.2006: 40; 1165-1176.

39. G.j.Trevor young.(2006).Risk and Resilience Markers inBipolar Disorder

40. 8.Starke M.C. Retention, bonding, and academic achievement: effectiveness of the college seminar in promoting college success.2006.

41. Hjemdal O ,Friborg O ,Stiles T. C,Rosenvinge J. H & Martinussen M. Resilience predicting psychiatric symptoms: A prospective study of protective factors and their role in adjustment to negative life events.Clinical Psychology and Psychotherapy.2006: 13;, 194-201.

42. Inzlicht M, Aronson J, Good C & McKay L. A particular resiliency to threatening environments. Journal of Experimental Social Psychology.2006; 42: 323-336.

43. Inzlicht, M. Aronson, J. Good, C. & McKay L. A particular resiliency to threatening environments. Journal of Experimental Social Psychology.2006; 4(2): 323-336.

44. Friborg O, Barlaug D, Martinussen M, Rosenvinge J. H, & Hjemdal O. Resilience in relation to personality and intelligence. International Journal of Methods in Psychiatry Research.2005; 14: 29-42.

45. Tugade M. M, & Fredrickson B. L. Resilient.Individuals use Positive Emotions to Bounce back from negative emotional experiences. Journal of Personality and Social Psychology.2004;86: 320-333.