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The Impact of Positive Psychotherapy on Decreasing the College Students' Stress, Anxiety, Depression and Increasing their Well-being

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Abstract

The purpose of this study is to examine the impact of positive psychotherapy on decreasing the students' stress, anxiety, depression and increasing their well-being. In this study, an experimental research method was adopted using a pretest-posttest control group design. A total of 34 undergraduate students sampled out of 1200 students in academic year 2013-2014 in University of Shahid Beheshti. Using convenience sampling, the participants were randomly assigned to the experimental and control groups. The instruments employed in the study included Depression/ Anxiety and Stress Scale Lovibond (1995) and positive psychotherapy inventory (Rashid & Seligman, 2013). The positive psychotherapy was trained to the experimental group on a weekly basis during six two-hour sessions. The results of covariance indicated that positive psychotherapy was effective in decreasing stress, anxiety, depression and increasing the students' well-being and that their permanence was observed two months after the experiment. Because the early period of the students' life is stressful, and as the results represented, positive psychotherapy can be beneficial for students as an effective way to strengthen the psychological resources and mental health.

Keywords: Anxiety, Depression, Positive Psychotherapy, Stress, flourish.

Introduction

Positive psychology is a relatively new approach in the field of psychology. It gained a remarkable standing in psychology basically due to the special viewpoints and educational-therapeutic approaches ever raised. Especially, in contexts such as becoming empirical evidence based pragmatic approaches to improve quality of life, happiness and achieving wellbeing, this approach had better rates and

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quickly reached to this position (Joseph & Linley, 2006). Comprehension and explanation of happiness and wellbeing and also accurate prediction of factors affecting them are among the points which are focally dealt with in this approach. Taking the negative symptoms of the disorders into consideration, this approach, through a positive perspective, is fundamentally intended to increase the people's happiness and wellbeing. Therefore, positive psychology is an area which supplements the traditional and contemporary psychology (Seligman, Steen, Park and Peterson, 2005). Developed programs in this approach, both in the education, promotion and prevention, and in the therapeutics, have opened up new venues to the psychological domain in today's scientific inquiry.

Having the educational and therapeutic areas thoroughly investigated in the field of positive psychology (Seligman, Steen, Park and Peterson, 2005., Fredrickson & Branigan, 2005., Sin & Lyubomirsky, 2009., Seligman, Rashid & Parks, 2006., Rashid & Seligman, 2013), it is well known that with the help of these interventions, reduction of disorder symptoms and their prevention as well as human abilities, a variety of factors such as positive emotions and experiences, happiness, optimism, self-esteem, quality of life and life satisfaction have been enhanced. Rashid and Seligman (2013)'s "Positive Psychotherapy" is one of the most effective interventions in the area of positive psychology. This method has three basic elements for happiness: positive emotions, engagement, and meaning which are related to Seligman (2002)'s theory of happiness. Furthermore, the efficiency of this approach in enhancing the level of happiness, life satisfaction as well as reducing the symptoms were emphasized (Seligman, Rashid & Parks, 2006., Vella-Brodrick, Park & Peterson, 2009., Rashid & Anjum, 2009., Meyer, Johnson, Parks, Iwanski & Penn, 2012., Mongrain & Anselmo- Matthews, 2012., Bay & Csillic, 2012., Rashid & Seligman, 2013., BaratiSedeh, 2008). Khanjani (2014), in his investigation. shows that this program, as compared with Pennsylvania Resilience Program, turned out to be more effective in decreasing the symptoms of depression, anxiety and stress, and also in increasing life satisfaction, optimism and psychological wellbeing. Generally, the results of the empirical studies conducted on the efficacy of positive psychotherapy state that the present approach reduces stress, anxiety, depression and other symptoms of emotional distress on the one hand, and improves happiness, life satisfaction and optimism, and the people's wellbeing, on the other hand, and as the result creates positive emotions in the sample study.

Recently, Seligman has introduced a newer description about the concept of full life and wellbeing. Seligman (2012) believes that happiness is not what the concept of positive psychology merely focuses on; what it demands for, he believes, is wellbeing. That's why which he introduced this view in his book titled "flourish". In this theory, the subject of positive psychology is wellbeing. It consists of five measurable components (based on the PERMA model), which the necessary backgrounds and contexts are provided for its realization: positive emotions (the two aspects of which are happiness and life satisfaction), engagement, meaning, positive relationship and accomplishment. As stated earlier, the three main components of this theory are the same as the active elements of authentic happiness theory. Adding two more components to the theory, Seligman decided to make changes in the relations, results, or the basis of happiness theory in order to introduce the theory of wellbeing (Seligman, 2012).

To sum up, the review of the studies conducted on the Iranian students' mental health indicated that after entering university, they tend to suffer from different psychological and social problems or they usually already face up with different levels of psychological problems such as anxiety, depression, and stress (Omidi, Yaghoobi, Peyrovi, Hasanabadi and Zafar, 2012). Students confront with different problems during their study; this most likely leads to the exacerbation of their mental stress and might have adverse effects on their mental health, as well (World Health Organization, 2004, 2005). According to the longitudinal studies conducted on the mental health of students (Omidi, Yaghoobi, Peyrovi, Hasan Abadi, and Zafar, 2012), an increasing rate of mental disorders among university students is reported. Therefore, psychological interventions and training play a vital role in preventing, treating and promoting the mental health of these students. Referring back to what was mentioned above, we discussed such concepts as the effects of positive interventions on decreasing stress, anxiety and depression, enhancement of wellbeing, life satisfaction among different people, and the importance of implementing interventional and educational programs among college students in order to improve their mental health and giving them effective psychological resources as they face educational and non-educational tensions. In this paper, the following hypotheses are examined:

1. Positive psychotherapy is effective in decreasing the symptoms of stress, anxiety and depression among the students.

2. Positive psychotherapy is effective in the promotion of students' level of wellbeing (flourish).

3.

Method

In this experimental study, a pre-test post-test design with control group is adopted. The research population included all undergraduate students of Shahid Beheshti University. Using sampling method, 34 students were selected to participate in the study. Then, they were randomly assigned to experimental and control groups. The Cohen method (1986, cited in Sarmed et al., 2004) was employed to estimate the sample size. The acceptance level is considered to be $\alpha = 0.05$ and the effect size is measured to be 0.50; then, choosing 17 participants for each group, the test power will be about 0.84.

Instruments: 1. Depression, anxiety and stress scale (DASS). This scale was developed in 1995 and consists of 21 questions. It measures the symptoms of depression, anxiety and stress. Question 3, 5, 10, 13, 16, 17, 21 are about depression; questions 2, 4, 7, 9, 15, 19, 20 are bout anxiety and questions 1, 6, 8, 11, 12, 14, 18 estimate stress. The scale is from zero (never) to three (very much). In each subscale, the lowest score is zero and the highest score is 42. Sahebi, Asghari and Salari (2005) examined the validity of this test. The correlation coefficient between depression subscale of this test and Beck depression test was 0.70, the correlation coefficient between anxiety subscale of this test and Zhang anxiety test was about 0.67, and the correlation coefficient between stress subscale of this test and the perceived stress test was 0.49. In this research article, Cronbach alpha for depression, anxiety and stress was measured 0.68, 0.70 and 0.65, respectively.

2. Positive Psychotherapy Inventory (PPTI). Rashid and Seligman (2013) developed PPTI in order to measure the level of people's wellbeing (flourish). They used five subscales for this measurement including positive emotion, engagement, meaning, relationships, and achievement or accomplishment. This scale consists of 25 items and is based on 5-point Likert scale from (1) to (5). The score of this scale

varies from 25 to 125; this measures an individual's overall score of wellbeing and happiness. Questions (1, 6, 11, 16 and 21) measure "positive emotions"; items (2, 7, 12, 17 and 22) are about "engagement in life"; items (4, 9, 14, 19 and 24) are about "meaning in life", items (3, 8, 13, 18, and 23) estimate "relationships in life", and items (5, 10, 15, 20, and 25) measure "progress in life." The overall score of wellbeing is estimated based on the five existing subscales; it could vary from 25 to 125. Gunney (2011), using a degree of 0.80 (based on Cronbach alpha), estimated the degree of internal consistency for the initial version of positive psychotherapy scale with 21 questions. In 1393, Khanjani, Shahidi, Fathabadi, Mazaheri and Shokri obtained Cronbach's alpha coefficient of 0.84 for the whole scale. In this study, the internal consistency for the whole scale was obtained using Cronbach's alpha coefficient; the score was measured to be about 0.79.

3. Positive Psychotherapy Program. In order to conduct positive psychotherapy sessions, the author used the group form of positive psychotherapy in this research. This program was performed in a group. The group consisted of six sessions each session of which was lasted about 2 hours. As follows, the positive psychotherapy program sessions will be described in brief.

Session 1: explaining positive program. Aim: introducing people to each other, general expression of group-work principles, confidentiality of sessions, and emphasis on homework assignments. Explaining the lack of positive sources, such as positive emotions, engagement, positive relationship, meaning, and character strengths when facing depression, anxiety and absurd life and the role of these components in people's happiness are another aim of this session. Pretest implementation.

Session 2: identification and promotion of strength index. Aim: determining character strengths using VIA questionnaire. In order to create and reinforce engagement, 24 character strengths point and capability was discussed. The ways to use character strengths was discussed as well.

Session 3: Forgiveness. Aim: after doing the trainings, people will understand the exact nature of forgiveness. They were asked to write one or two pages about the positive characteristics they want people remember about them, something like an acknowledgement message at the end of life. Session 4: Gratitude. Aim: Emphasis on good memories and gratitude as a form of acknowledgement. Taking the people's sense of gratitude into account, the role of good and bad memories was discussed. Practice how to write a gratitude letter.

Session 5: savoring. Hastening to take advantage of enjoyment is identified as a threat against savor enjoyment, therefore the proper methods for preventing and dealing with it were taught. Individuals participate in the training sessions of savoring. In these training sessions, different methods and guidelines were used.

Session 6: positive relationship in providing wellbeing and Active-Constructive Responding. Aim: the necessary instructions were given to the people in order to teach them how to show Active-Constructive Responding when receiving good news from others. Participants saw these trainings as a way to reinforce their positive relationships. At the end of this session, after final conclusion and receiving feedback, the post-test was performed. Before implementing positive psychotherapy program, experimental group answered the questions related to stress, anxiety, depression, and positive psychotherapy scales; at the pre-test both control and experimental groups answered these questions. After completing these six sessions that were held every week for two hours, the post-test was performed in both groups. Finally, in order to examine durability of the training program, a follow-up session was performed after two months and the research instruments were implemented again. Having collected the values of the main research variables at the follow-up session, the authors, trying to follow the research ethics, presented the content of the training program to people waiting to participate in the research.

Results

The mean and the Standard Deviation (SD) of the participants' age were calculated to be 19.03 and 0.627, respectively, 28 of whom (24%) were male and 26 (76%) were female students. All of them were single.

Table 1. Mean and SD of depression, Stress, anxiety and well-being of two groups in pre and

post-test.												
group	Pre-test		Pre-test		Pre-test		group Pre-test Post-test		Pre-test Post-test		Follow	v-up
	Mean	SD	Mean	SD	Mean	SD						
Experimental	10.06	3.54	3.18	2.45	3.41	2.81						
control	9.53	4.42	7.29	6.59	6.82	6.08						
Experimental	7.65	4.54	3.18	3.01	3.29	2.82						
	Experimental control	group Pre- Mean Experimental 10.06 control 9.53	MeanSDExperimental10.063.54control9.534.42	groupPre-testPost-MeanSDMeanExperimental10.063.543.18control9.534.427.29	group Pre-test Post-test Mean SD Mean SD Experimental 10.06 3.54 3.18 2.45 control 9.53 4.42 7.29 6.59	group Pre-test Post-test Follow Mean SD Mean SD Mean Experimental 10.06 3.54 3.18 2.45 3.41 control 9.53 4.42 7.29 6.59 6.82						

	control	9.47	5.72	7.82	4.90	7.24	3.73
atroas	Experimental	14.59	4.35	8.71	3.60	8.00	3.32
stress	control	15.71	6.12	12.70	3.32	13.20	6.02
Positive emotions	Experimental	13.82	2.12	17.88	1.69	17.76	1.67
Positive emotions	control	15.06	2.79	15.24	2.92	15.71	3.13
angagamant	Experimental	14.88	1.49	18.59	1.37	18.18	1.66
engagement	control	14.82	1.77	16.06	1.56	15.47	1.32
maanina	Experimental	18.12	2.23	23.0	1.22	22.76	1.14
meaning	control	18.56	2.02	20.12	1.90	19.53	1.90
molationship	Experimental	15.82	1.91	15.56	1.32	18.56	1.27
relationship	control	15.59	2.62	16.47	2.34	15.88	2.69
aaaamuliahmant	Experimental	18.53	2.29	22.88	1.56	22.53	1.80
accomplishment	control	17.94	2.13	19.53	1.84	19.59	2.32
Well-being (PERMA)	Experimental	81.18	5.87	101.00	5.51	99.88	5.89
weii-being (PERIVIA)	control	82.06	8.43	87.41	7.31	86.18	8.43

Table 1. The mean and standard deviation of students' scores in the stress, anxiety, depression and well-being variables in the group at pre-test, post-test and follow-up.

Before examining and testing the research hypotheses in order to perform covariance analysis, homogeneous assumption of regression coefficients and normal distribution of data were calculated and all these assumptions were approved to be employed in covariance analysis.

source	Dependent variable	Sum of squares	df	Mean square	F	Observed power
	depression	29.107	1	29.107	1.872*	.248
group	anxiety	42.853	1	42.853	2.732*	.360
	stress	33.381	1	33.381	3.090*	.398
	depression	657.359	30	21.912		
error	anxiety	470.598	30	15.687		
	stress	324.069	30	10.802		
	depression	1868.000	34			
total	anxiety	1492.000	34			
_	stress	3372.000	34			

Table 2. The MANCOVA test regarding depression, anxiety and stress

P<.05* p<.01**

Based on table 2, after eliminating effects of pre-test, there is a significant difference between control and experimental groups. This indicates how prominently the positive psychotherapy can serve to decrease the symptoms of stress, depression and anxiety in the experimental group.

1 able 3. The MANCOVA test regarding PERMA								
source	Dependent variable	Sum of df		Mean	F	Observed		
source	Dependent variable	squares	ui	square	1	power		
0001100	positive emotion	26.50	1	26.50	4.96^{*}	.578		
group —	engagement	10.80	1	10.80	5.11*	.590		

Table 3. The MANCOVA test regarding PERMA

Quarterly	of	Clinical	Psychology	Studies,	Vol.	7,	No.	28,□ □ [al][]2017
114								

	Meaning	15.62	1	15.62	6.05*	.633
			1			
	relationship	11.07	1	11.07	3.38*	.428
	accomplishment	32.64	1	32.64	11.48^{**}	.906
	PERMA	459.20	1	459.20	12.98**	.937
	positive emotion	160.04	30	5.33		
	engagement	63.38	30	2.11		
	Meaning	77.44	30	2.58		
error —	relationship	98.33	30	3.27		
	accomplishment	85.24	30	2.84		
	PERMA	1060.67	30	35.35		
	positive emotion	9565.00	34			
	engagement	10327.0.	34			
total	Meaning	15955.00	34			
total	relationship	10639.00	34			
	accomplishment	15483.00	34			
-	PERMA	304653.00	34			

P<.05* p<.01**

Table 3 indicates that there would be a significant difference between wellbeing (flourishing) variable values of the two groups after the elimination of the pre-test effects. In other words, positive psychotherapy increases positive emotion, engagement, meaning, positive relationships, accomplishment, and wellbeing (flourishing) in the experimental group. A repeated-measure ANOVA test was employed to investigate the sustainability of psychotherapy at the follow-up session. The assumptions of Sphericity of research variable were examined before performing the test, and the results showed that within-group tests can be used with no possible requirement to modify its degree of freedom.

Dependent variable	Sum of squares	df	Mean of squares	F	Eta
depression	377.098	2	188.549	- 39.983*	.74
error	150.902	32	4.716	59.965	./4
anxiety	220.7.6	2	110.353	- 9.792*	.38
error	360.627	32	11.270	9.192	.38
stress	444.863	2	222.431	- 14.897**	.48
error	477.804	32	14.931	14.897	.48
P < 05* n < 01**					

Table 4. Repeated-measure ANOVA for depression, anxiety and stress

P<.05* p<.01

Table 4 shows that the difference between pre-test, post-test and follow-up is statistically significant and positive psychotherapy is capable of both reducing the symptoms of stress, anxiety, and depression, and increasing the level of the individuals' wellbeing in experimental group while remained constant in follow-up.

Tuble 5. Repeated Theusare Theorem									
Sum of squares	df	Mean of squares	F	Eta					
110.824	2	55.412	22 620*	.42					
150.78	32	2.345	25.050*	.42					
116.706	2	110.353	27545**	.49					
114.078	32	1.782	52545***	.49					
202.902	2	101.451	15 506**	.56					
130.941	32	2.046	43.380***	.30					
67.431	2	33.716	15.042*	.63					
143.451	32	2.241	15.042	.05					
190.608	2	95.304	41 501*	.57					
146.902	32	2.295	41.321*	.57					
4216.745	2	2108.373	104 245**	.89					
542.588	32	16.956	124.545	.89					
	Sum of squares 110.824 150.78 116.706 114.078 202.902 130.941 67.431 143.451 190.608 146.902 4216.745	Sum of squares df 110.824 2 150.78 32 116.706 2 114.078 32 202.902 2 130.941 32 67.431 2 143.451 32 190.608 2 146.902 32 4216.745 2	Sum of squares df Mean of squares 110.824 2 55.412 150.78 32 2.345 116.706 2 110.353 114.078 32 1.782 202.902 2 101.451 130.941 32 2.046 67.431 2 33.716 143.451 32 2.241 190.608 2 95.304 146.902 32 2.295 4216.745 2 2108.373	$\begin{array}{c c c c c c c c c c c c c c c c c c c $					

Table 5. Repeated-Measure ANOVA Perma

P<.05* p<.01**

Table 6. Pairwise comparisons of dependent variable

danandant	Posttest -pretest		Fallow up	– pretest	Fallow up -posttest	
dependent - variable	Mean	Std.	Mean	Std. Error	Mean	Std.
variable	differences	Error	differences	Std. Elloi	differences	Error
depression	6.882*	.915	6.647*	.790	.235	.450
anxiety	4.471*	1.378	4.353*	1.153	.118	.866
stress	5.882*	1.557	6.582*	1.588	.706	.567
Positive emotion	2.118*	.402	2.294*	.453	.176	.219
engagement	2.471*	.357	1.971*	.353	.500	.250
meaning	3.176*	.383	2.756*	.373	.412	.273
relationship	1.583*	.379	1.559*	.381	.294	.327
accomplishment	2.971*	.369	2.824*	.395	.147	.336
PERMA	19.824*	1.657	17.7.6*	1.649.176	1.118	.722

According to table 5 and 6, the difference between pre-test and post-test variables and the standard deviation of pre-test and post-test in research variables and standard deviation of post-test with followup in all variables was significant. However, the difference between follow-up and post-test is not significant in any of the variables. These results explicitly show the sustainability of the effect of positive psychotherapy in follow-up.

Discussion and Conclusion

As observed in earlier steps, the positive psychotherapy program reduces the symptoms of depression, anxiety and stress among college students and this effect goes on for two months after the research. These findings are in consistency with the findings of Seligman, Rashid & Parks, 2006., Vella-Brodrick, Park & Peterson, 2009., Rashid & Anjum, 2009., Meyer, Johnson, Parks, Iwanski & Penn, 2012., Mongrain & Anselmo-Matthews, 2012., Bay & Csillic, 2012., Rashid & Seligman, 2013., BaratiSedeh,

2008. These findings are in consistency with the basic assumptions of positive psychology as well. In the Positive Psychology approach, it is believed that direct creation and increment of positive emotions, engagement, makes a huge sense in life, and also the identification and improvement of signature strengths of individuals lead to the elimination and reduction of individual's emotional and psychological problems (Rashid & Seligman, 2013). Another assumption of positive psychotherapy is that the identification and specification of the signature strengths of individuals and teaching them how to put these signature strengths to a better practical use will significantly reduce the severity of the negative symptoms of depression. Furthermore, Seligman, Rashid and Parks (2006), believes that the lack of meaning is not only a symptom, but also one of the causes of depression as well, and hence, the actions taken for creating meaning reduce the severity of depression (Seligman, Rashid and Parks, 2006). Usually, having stronger positive emotion is associated with the reduction of depression or anxiety. According to Duckworth, Steen & Seligman (2005), there are two reasons why their positive psychotherapy is effective: First, positive interventions are defined as "creating pleasure, engagement, and meaning" and these kinds of interventions are completely justifiable. Second, developing positive emotions, engagement, and meaning can reduce the effects of disorder as well.

Findings of the second hypothesis indicate that in comparison with control group, PPT was key to increase the overall score of college students' well-being (flourishing). These findings are in consistency with the results obtained by Seligman, Rashid and Parks (2006), Rashid, Anjum and Lennox (2006), Parks (2009), Rashid, Uliaszeck, Stevanovski, Gulamani & Kazemi, (2013). These researchers have shown the effectiveness of positive interventions in enhancing the positive psychotherapy elements. In positive psychology-based interventions and training, a huge amount of time would be spent on teaching people how to consider this point and to pay attention to the desirable aspects of life. This will provide a more appropriate and balanced basis for estimating their problems and issues. Rashid (2008) believes that rather than just limit or change the negative aspects, the real goal should be the reinforcement of these positive aspects. This is because humans mostly tend to recall the negative experiences of their lives. People can clearly recall the worst aspects of their life. Therefore, many positive intervention techniques try to change these kinds of attentions into the negative experiences and reduce their effect; instead, these techniques attempt to improve the existing positive aspects of life rather than teaching the reinterpretation of these negative aspects (Rashid, 2008). The distinction between a positive program and common actions lies in decreasing the symptoms of depression and increasing positive emotions, interactions and meanings instead of directly confronting with the symptoms of depression. Individuals majoring in different colleges and informal environments usually consider these actions to be the source of tremendous changes in their lives (Seligman, Rashid and Parks, 2006). Therefore, taking the findings of this research paper into consideration, it is obvious that positive psychotherapy can be used to improve mental health, psychological resources, and also decrease the symptoms of stress and anxiety among college students.

References

- Sahebi, A., Salari, M. J., and Salari, R. S. (2005). Validation of the Depression, Anxiety and Stress Scale (DASS-21) for Iranian population. *Developmental psychology: the Iranian psychologist.* 4, 1, 299-312. (Persian)
- Asgharipoor, N., Asgharnejad, Farid. A., Arshadi, H., & Sahebi, A. (2010). A comparative study on the effectiveness of positive psychotherapy and group cognitive-behavioral therapy for the patients suffering from major depressive disorder. *Iranian Journal of Psychiatry and Behavioral Sciences*, *6*, 33-41.
- Barati Sedeh, F. (2009). The Effectiveness of Positive Psychology Interventions in Increasing Happiness, Life Satisfaction and meaning in Life and decreasing Depression: A Model for Action. PhD thesis, Faculty of Psychology and Educational Sciences, Allameh Tabataba'i University. (Persian)
- Bay, M. & Csillic, A. (2012). Comparing Positive Psychotherapy with cognitive behavioral therapy in treating depression. Unpublished manuscript. Paris West University Nanterre La Défense (Université Paris Ouest Nanterre La Défense).
- Bolier, L., Haverman, M., Westerhof, G. J., Riper, H., Smit, F., and Bohlmeijer, E. (2013). Positive psychology interventions: a meta-analysis of randomized controlled studies. *BMC Public Health*, 13:119. doi:10.1186/1471-2458-13-119.
- Duckworth, A. L., Steen, T. A., & Seligman, M.E.P. (2005). Positive psychology in clinical practice. *Journal of Clinical Psychology*, *1*, 629-646.
- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought–action repertoires. *Cognition and Emotion*, *19*, *313–332*.

- Gunney, S. (2011). The positive psychotherapy inventory (PPTI): reliability and validity stydy in Turkish population. Procedia- social and behavioral sciences. 29, 81-86. Joseph, S., & Linley, A. P. (2005). Positive psychological approaches to therapy. *Counseling and Psychotherapy Research*, 5, 5–10.
- Khanjani, M., Shahidi, Sh., Fathabadi, J., Mazaheri, M. A., & Shokri, O. (2014). Factor structure and psychometric properties of the positive psychotherapy Inventory (PPTI). *Journal of Applied Psychology*. 5, 7, 1-20. (Persian)
- Lü, W., Wang, Z., & Liu, Y. (2013). A pilot study on changes of cardiac vagal tone in individuals with low trait positive affect: The effect of positive psychotherapy. *International Journal of Psychophysiology*, 88, 213-217.
- Meyer, P. S., Johnson, D. P., Parks, A. C., Iwanski, C. & Penn, D. L. (2012). Positive living: A pilot study of group positive psychotherapy for people with schizophrenia. *Journal of Positive Psychology*, 7, 239-248.
- Mongrain, M. and Anselmo- Matthews, T. (2012). Do positive psychology exercises work? A replication of Seligman et al. (2005). *Journal of Clinical Psychology*, 68, 382-389.
- Omidi, A., Yaqubi, H., peyravi, H., HasanAbadi, H & Zafar, M. (2012). Comparison of mental health of new entrance students and high level students: preliminary results of a national study. *Proceedings of the 6th Student Seminar on mental Hygiene*. Counseling Office of Ministry of Science, Research & Technology. (persian).
- Page, K., & Vella-Brodrick, D. (2012). The working for wellness program: RCT of an employee well-being intervention. *Journal of Happiness Studies*, 1–25.
- Parks-Sheiner, A. C. (2009). Positive Psychotherapy: Building a model of empirically supported self-help. Dissertation
- Rashid, T., & Seligman, M. E. P. (2013). *Positive psychotherapy*: A treatment manual. New York: Oxford University Press.
- Rashid, T., & Uliaszeck, A. Stevanovski, S., Gulamani, T, Kazemi, F. (2013). Comparing Effectiveness of Positive Psychotherapy (PPT) with Dialectical Behavior Therapy (DBT): Results of a Randomized Clinical Trial. Poster presented at the Third International Positive Psychology Congress, Los Angeles, CA.
- Rashid, T., Anjum, A., & Lennox, C. (2006). Positive psychotherapy for middle school children. Unpublished manuscript, Toronto District School Board. Results presented in: Rashid, T., & Anjum, A. (2008). *Positive psychotherapy for young adults and children*. In J.R.Z. Abela & B.L. Hankin (Eds), Handbook of depression in children and adolescents (pp. 250–287). New York: Guilford Press.
- Sarmad, Z., Bazargan, A., Hejazi, E. (2004). *Research Methods in Behavioral Sciences*. Tehran: Agah Press.

- Sahebi, A., Asqari, M, J., Salari, R. (2005). Validation of Depression Stress Anxiety Scale (DASS-21) for Iranian population. *Developmental Psychology* (*Iranian Psychologists*) No. 4. (Persian)
- Seligman, M.E.P. (2002). *Positive psychology, positive prevention, and positive therapy*. In C.R Snyder, & S. J. Lopez (Eds), the handbook of positive psychology. New York: Oxford Press.
- Seligman, M. E. P. (2002). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment. New York: Free Press.
- Seligman, M. E. P., Steen, T., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60 (5), 410, 414, 419.
- Seligman, M. E. P., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American Psychologist*, 61 (8), 774-778/781-786.
- Seligman, M. E. P., (2012). Flourish: A visionary new understanding of happiness and well-Being. New York: Free Press.
- Sin, N. L; & Lyubomirsky, S. (2009). Enhancing well-being and alleviation depressive symptoms with positive psychology Interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology*, 65 (5), 467-487.
- Vella-Brodrick, D. A., Park, N. & Peterson, C. (2009). Three ways to be happy: Pleasure, engagement, and meaning: Findings from Australian and US samples. *Social Indicators Research*, *90*,165-179.