

The Effectiveness of Emotional Regulation and Time Perspective Therapies on Anxiety and Emotional Dysregulation in Adolescents During the COVID-19 Outbreak


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Abstract

The study aimed to evaluate the effectiveness of emotion regulation and time perspective therapies on anxiety and emotional dysregulation in adolescents during the COVID-19 outbreak. The research method was quasi-experimental design (pre-test, post-test and follow-up with control group). The sample size consisted of 51 adolescents with anxiety symptoms who were replaced in three groups of emotion regulation therapy, time perspective therapy, and control group. Each two experiments groups were under treatment, 8 sessions of 90 minutes per week. The Beck Anxiety Inventory and the Emotional Dysregulation scale were used to collect data. Analysis of variance with repeated measure was used to analyze the data. The results showed that emotion regulation and time perspective therapies were effective in reducing the symptoms of anxiety and emotional dysregulation. Present study results can be used theoretically and practically by child and adolescent' psychologists.

Keywords: Adolescents, anxiety, emotional dysregulation, emotion regulation, time perspective

Introduction

Covid-19, which began in China in December 2019 and quickly spread throughout the world, has caused many psychological problems in addition to mortality (Benjamin et al., 2021). Due to the effects of covid-19 on the psychological problems of adolescents (Ariapooran & Khezeli, 2021), psychological therapies are necessary to reduce these problems in adolescents. Two of these therapies are emotion regulation and time perspective therapies; Emotion regulation therapy affects the amount and time of emotions, their duration, and the expression, experience and management of emotions. By weakening negative attitudes towards the past and present, time perspective therapy helps to improve positive past, hedonic present, and future perspectives, and create a balanced time to solve psychological problems. The effect of emotion regulation therapy on improving adolescent emotion dysregulation (Holmqvist Larsson, et al., 2020) and anxiety (Volkaert, et al., 2020) was confirmed. Time perspective therapy has also had an effect on improving emotion regulation (Nazariy Fardooy, 2022) and anxiety of adolescents (Hosseini, et al., 2016). This study aimed to evaluate the effectiveness of emotion regulation and time perspective therapies on anxiety and emotional regulation disorders in adolescents during the outbreak of covid-19. Therefore, the main hypothesis of this research was: "Emotion regulation and time perspective therapies are effective on anxiety and emotional dysregulation of adolescents in the outbreak of Covid-19."

Method

The research method was quasi-experimental with a pre-test, post-test and follow-up design with the control group. The study's statistical population consisted of all 7th to 12th grade boys of Gilan-E-Gharb city in 2020 (N=1050). The sample size consisted of 51 adolescents with anxiety symptoms who were randomly assigned in emotion regulation therapy time perspective therapy, and control groups. Each group included 17 adolescents. In this research, the following tools were used:

Beck Anxiety Inventory: This 21-items inventory was developed by Beck et al. (1988; cited in Khesht-Masjedi, et al., 2015). The range of scores is between 0 and 63. The Cronbach's alpha coefficient of this test was 0.92, its retest reliability was 0.75, and its validity was also confirmed. In the present study, Cronbach's alpha coefficient was 0.86.

Difficulties in Emotion Regulation Scale Brief Form: This 16-items scale was developed by Bjureberg, et al., (2016; cited in Fallahi, et al., 2021). The range of scores is between 16 and 96. Cronbach's alpha coefficient of the scale was 0.94 and its validity has been confirmed. In the present study, Cronbach's alpha coefficient was 0.83.

Results

Table 1 shows the mean (M) and standard deviation (SD) of dependent variables in three groups.

Table 1: Pre-test, post-test, follow-up scores of variables by group

Variables	Time	Emotion Regulation		Time Perspective		Control	
		M	SD	M	SD	M	SD
Anxiety	Pre-test	31.29	5.84	31.70	7.28	31.64	6.53
	post-test	24.52	5.51	26.59	6.88	32.35	5.38
	follow-up	22.70	5.99	26.88	6.08	32.53	5.67
Emotion Dysregulation	Pre-test	35.82	3.39	35.88	3.26	35.23	3.73
	post-test	26.18	2.96	30.11	4.17	35.53	4.36
	follow-up	25.41	3.13	29.70	3.37	35.41	3.54

Before performing the analysis of variance with repeated measure, the results of the Box test for anxiety ($F=1.35$; $p<0.06$) and emotion dysregulation ($F=1.46$; $p<0.13$) indicate that the homogeneity of variance-covariance matrices was observed. The results of the Mauchly's sphericity test for anxiety ($X^2=1.65$; $p<0.08$) and emotion dysregulation ($X^2=1.92$; $p<0.05$) confirmed the equality of within group variances. Leven's test results in pre-test ($F=0.42$; $p>0.66$), post-test ($F=0.61$; $p>0.54$), and follow-up ($F=0.63$; $p>0.55$) of anxiety and pre-test ($F=1.09$; $p>0.34$), post-test ($F=1.07$; $p>0.35$), and follow-up ($F=0.06$; $p>0.94$) of emotion dysregulation confirmed equality of between group variances.

Table 2: Analysis of variance with repeated measure to compare the independent variables in the experimental groups and control group

Variables	Source	Sum of Square	DF	Mean of Square	F	p	Effect Size	Power
Anxiety	Time	444.794	1	444.794	77.59	0.001	0.62	1.0

	Group*time	386.529	2	193.265	33.71	0.001	0.58	1.0
	Error	275.176	48	5.733				
	Group	938.915	2	469.458	4.41	0.017	0.15	0.73
	Error	5106.314	48	106.382				
Emotion	Time	763.147	1	763.147	221.29	0.001	0.82	1.0
Dysregulation	Group*time	482.824	2	241.412	70.04	0.001	0.59	1.0
	Error	165.529	48	3.449				
	Group	1472.405	2	736.203	10.29	0.001	0.30	0.98
	Error	3431.765	48	71.495		0.001		

According to Table 2, there is a significant difference between the mean of the pre-test, post-test and follow-up of dependent variables in the two therapies groups and the control group. The effect sizes of time, group*time and group on anxiety were 0.62, 0.58, and 0.15, respectively, and on emotion dysregulation were 0.82, 0.59, and 0.30, respectively. Based on Tukey's post-hoc test, it can be said that in the post-test and follow-up, the mean of the dependent variables in the experimental groups has decreased significantly compared to the control group. The results of the Bonferroni follow-up test showed that in the post-test and follow-up compared to the pre-test, the mean of the dependent variables in emotion regulation and time perspective groups decreased, and due to the non-significance of the post-test and follow-up, the effect of the two treatments was maintained.

Discussion and Conclusion

The present study results showed that the emotion regulation and time perspective therapies had meaningful effect on the reduction of anxiety symptoms and emotion dysregulation in adolescents. In addition, the time perspective therapy causes positive view of the past, present and future; Therefore, adolescents who experience symptoms of anxiety and emotional dysregulation in the outbreak of Covid-19, by learning techniques of two therapies, manage their emotions and change their perspective towards the past, present and future in a positive direction. Therefore, their symptoms of anxiety and emotional dysregulation are reduced during the outbreak of Covid-19. The limitation of this research was the lack of screening based on the emotion dysregulation, so it is suggested to perform screening based on the variable of emotion dysregulation. Results can be used theoretically and practically by child and adolescent' psychologists.

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Conflicts of interest

Authors found no conflict of interests.



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