

The role of Child's Self-efficacy in the Relationship between Childhood Traumatic Events and Psychosomatic Complaints

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Abstract

This study investigated the role of child's self-efficacy in the relationship between childhood traumatic events and the incidence of psychosomatic complaints. The population included all 10-14 years old boys of Tehran city. A sample of 215 boys was made by convenience sampling method. The participants were selected from fifth and sixth grades of two all-boys elementary schools at 11th and 18th districts in Tehran. Research questionnaires included the following: The Self-Efficacy Questionnaire-Children (Muris), the Lifetime Incidence of Traumatic Events (Greenwald, et al.) and the Psychosomatic Complaints Scale (Takata, et al.). Data were analyzed by mediator and moderator analysis. Results showed that the children's self-efficacy variable was not a moderator between the traumatic events and the occurrence of psychosomatic complaints, but it was a mediator. Therefore, treatments aimed to reduce psychosomatic complaints and treat traumatized children, should include self-efficacy promotion in their agenda.

Keywords: children, psychosomatic complaints, self-efficacy, traumatic events

Introduction

Psychosomatic symptoms, defined as the occurrence of physical complaints in the body, cannot be explained by the underlying causes and are common in "medical disorders" and psychological problems (Heidari, et al., 2019). According to psychoanalysis, psychosomatic symptoms may indicate that the individual's desires are not being met in an adaptive manner (Dimitrova, 2020). Child maltreatment involves any act or negligence by a parent or other caregiver that results in harm (overtly) or threatens to harm the child, even if the action was not intentional (Cohrdes, et al, 2020). According to a study, there is a positive relationship between traumatic experiences and the severity of physical symptoms (Sadeghi, et al., 2017). Self-efficacy is one of the factors that has a protective effect against the impact of a traumatic event by strengthening the power of adaptive coping (Gallagher, et al., 2020). According to Bandura (1997), Self-efficacy is defined as an individual's beliefs in his ability to organize and carry out the necessary programs and practical paths in order to achieve specific goals or certain types of performance (Mekky, et al., 2021). Traumatic childhood events have a negative effect on self-efficacy (Cohrdes, et al., 2020). Little research has been done on the relationship between traumatic childhood events and psychosomatic complaints and their mediating factors. Therefore, there is a serious need for further research in this regard. The aim of this study was to investigate the role of child self-efficacy in the relationship between traumatic childhood events and psychosomatic complaints. The hypotheses considered in this study were:

- There is a significant relationship between traumatic childhood events, psychosomatic complaints and self-efficacy.
- Traumatic childhood events positively predict psychosomatic complaints.
- The child's self-efficacy negatively predicts the rate of psychosomatic complaints.

- The child's self-efficacy mediates the relationship between traumatic childhood events and psychosomatic complaints.
- Child self-efficacy has a moderating role in the relationship between traumatic childhood events and psychosomatic complaints.

Method

The present study follows a descriptive correlational design. The research population consists of all fifth and sixth grade male students in Tehran. The sample consisted of 215 male students in two schools in the 11th and 18th districts of Tehran who were selected by convenience sampling (mean=12.07; standard deviation=0.69). First, educational districts 11 and 18 were selected, and among the boys' schools, one school was selected from each district. Then research questionnaires were distributed among students in the classroom. To emphasize the optionality of participating in the research, its optionality was mentioned in the questionnaire form. Data were analyzed by mediator and moderator analysis by SPSS-20 and AMOS-20 software.

Self-efficacy Questionnaire for children (Muris, 2001): Cronbach's alpha coefficient is 0.88 for the total self-efficacy score and between 0.85 and 0.88 for the subscales. The degree of internal consistency (alpha = 0.79) was also sufficient (Muris, 2001). The validity of the test in Iran was equal to 0.87 and Cronbach's alpha was 0.74 (Tahmassian, et al., 2010).

Lifetime Incidence of Traumatic Events (LITE): The results of test-retest reliability for child form, correlation was 0.80, (p <0.001), (Greenwald, et al., 1999). The reliability of the Persian version has been calculated 0.83 for the parent form and 0.84 for the child form through Cronbach's alpha test (JaberQaderi, et al., 2008).

Psychosomatic Complaints Scale (Takata, et al, 2004): The authors of the scale obtained Cronbach's alpha in three executions between 0.91 and 0.93. This scale has retest reliability (r=0.83) and appropriate internal consistency (Hajloo, 2012).

Findings

Examining the default normality showed that most of the research variables do not have a normal distribution; Therefore, first all variables were converted to standard Z scores.

Table .2 shows the correlation between each of the variables. According to the findings, the correlation between the continuity of distress and post-trauma-related distress variables is higher than 0.80. Therefore, due to the importance of the effect of continuity of distress and to prevent the effect of collinearity, only the continuity of distress variable entered the regression model.

Table 1. Matrix of correlation coefficients of research variables

Variable	1	2	3	4	5
Psychosomatic complaints	1.00				
Self-efficacy	-0.36***	1.00			
Types of traumatic events	0.15*	-0.03	1.00		
Repeat traumatic events	0.03	0.00	0.50***	1.00	
Post-trauma-related distress	0.30***	0.13*	0.77***	0.41***	1.00
Continuity of distress	0.41***	0.20**	0.66***	0.37***	0.87***

* p<0.05, ** p<0.01, *** p<0.001

By increasing a standard deviation in the child self-efficacy variable, the standard deviation of 0.26 decreases the rate of psychosomatic complaints (beta=-0.26 and $p<0.001$). Also, with the increase of a standard deviation in the current trauma-related distress, the standard deviation of 0.46 increases the rate of psychosomatic complaints (beta=+0.46 and $p<0.001$). The model consisting of predictor variables explains 25.2% of the changes in the dependent variable and the model provides a meaningful prediction of psychosomatic complaints ($p<0.001$ and $F=18.999$).

As shown in Figure 1, the moderator variable path (the product of the child's self-efficacy multiplied by the continuity of distress) was not significant with the rate of psychosomatic complaints (beta=0.07 and $p>0.05$). The rate of continuity of distress is able to significantly predict psychosomatic complaints (effect size=17% and $r=0.41$). The child's overall self-efficacy is also able to significantly predict psychosomatic complaints (effect size=13% and $r=0.36$). continuity of distress and child self-efficacy are simultaneously able to significantly predict psychosomatic complaints (the effect size of these two variables together=25%, beta for the child self-efficacy variable=0.29 and Beta for the continuity of distress variable =0.35).

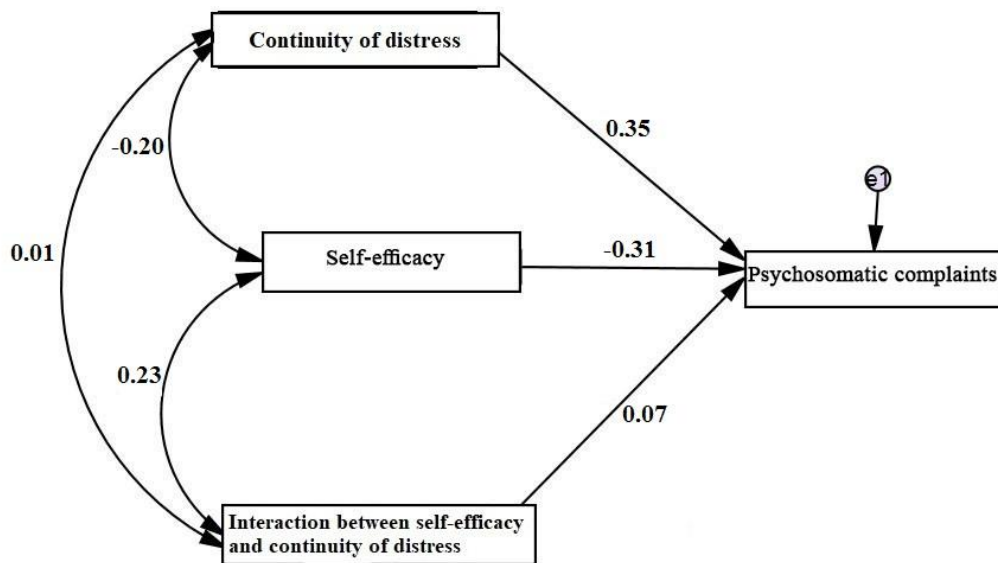


Figure 1. Model standard coefficients

Discussion and conclusion

These results revealed that there is no difference between children with high self-efficacy and low self-efficacy in terms of psychological complaints in children with traumatic experiences. Confirmation of the mediation of the self-efficacy variable indicates that the occurrence of traumatic events leads to a decrease in the child's self-efficacy and the decrease in self-efficacy in the injured child leads to psychosomatic complaints.

Some of the limitations were age range and the number of areas selected. The wider age range of sample can be a better representative of population. It is suggested that future research focus on the community of children with psychosomatic disorders or more vulnerable groups, rather than on the general population. As a result, it will be possible to prevent negative physical and

psychological complications caused by traumatic events and design more effective treatment methods for children with psychosomatic complaints.

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Conflicts of interest

Authors found no conflict of interests.