



Research paper

## The Effectiveness of Cognitive Behavioral Therapy on Interpersonal Relations, Self-Perception and Empathy among Bully Female Students

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### Abstract

This study aimed to investigate the effectiveness of cognitive-behavioral intervention on interpersonal relationships, self-perception, and empathy in bully female students. The research method was quasi-experimental with a pretest-posttest design and a control group. Based on a diagnostic questionnaire, 30 bullied students were identified, using purposive sampling and based on inclusion criteria. The experimental group received the educational intervention for 8 sessions, 90-mins once a week. The research tools were questionnaires on child behavior checklist, quality of relationships, self-perception, and children's cognitive and emotional empathy scale. Data were analyzed using univariate analysis of covariance. The findings showed that cognitive behavioral intervention had a positive and significant effect on interpersonal relationships, self-perception, and empathy of female bullied students. Accordingly, it is suggested that psychologists and psychotherapists use cognitive behavioral intervention as an intervention to improve interpersonal relationships, self-perception, and empathy of bullied female students.

**Keywords:** Self-perception, interpersonal relationships, cognitive-behavioral, empathy

### Introduction

Bullying is one of the problems that people face in their communication in schools (Pivec et al., 2023). Several factors influence bullying, but most studies on bullying have reported a lack of empathy among bullies (Bernado et al., 2022). High empathy prevents antisocial behavior, encourages altruistic behavior, and increases positive social behaviors (Weisz, & Cikara, 2021). Various studies have also shown that bullied students have problems with self-perception. (Fareo, 2018). One of the treatments that has attracted the attention of therapists in recent years in helping bullied students is cognitive behavioral therapy. Previous studies have shown that treatments based on the cognitive-behavioral approach are effective on children's behavioral problems (Vacher et al., 2022). Since bullying in school is a serious threat to the mental health of students and all those who are involved in this issue, it is very necessary to conduct effective and serious research to prevent it. Therefore, considering the importance of addressing the phenomenon of bullying and examining the effectiveness of cognitive-behavioral skills on interpersonal relationships, self-perception and empathy, and also

considering that in the past literature, these variables have not been examined simultaneously, Therefore, considering the importance of addressing the phenomenon of bullying and examining the effectiveness of cognitive-behavioral skills on interpersonal relationships, self-perception and empathy, and also considering that in the past literature, these variables had not been examined simultaneously, Therefore, the hypothesis of this study was: Cognitive-behavioral intervention improves interpersonal relationships, positive self-perception and empathy of female students who are bullies.

## **Method**

In this study, a quasi-experimental pre-test-post-test design with a control group was used. The statistical population of the study was female students in Dezful city. After completing the child behavior inventory, 30 students who scored higher than the cutoff score (64) on the bold conflict and rule-breaking index of the child behavior inventory, were purposefully selected and randomly assigned to two experimental and control groups of 15 students. The experimental group underwent a cognitive behavioral intervention program during 8 sessions of 90-mins, in a group setting (the control group did not receive training). Data were analyzed by univariate analysis of covariance, using SPSS26 software. Informed and voluntary consent to participate, ensuring non-disclosure of information, and confidentiality were observed in the study.

## **Tools**

**Child Behavior Check List (CECL):** This Aachen Bach inventory consists of 113 main items and 8 subitems. The retest validity of the inventory was 0.94. The internal consistency of the scale with Cronbach's alpha coefficient was 0.63 and 0.95, Yochman, et al. (2004). In the present study, Cronbach's alpha coefficient was 0.91.

**Quality of Relationship Inventory (QRI):** Pierce (1994) constructed this with 29 items. The test-retest reliability was 0.83 and the validity of this questionnaire using content validity (0.81) indicated adequate validity. In the present study, the reliability of this scale was obtained by Cronbach's alpha method of 0.80.

**Self Perception Profile for Children (SPPC):** The Self-Perception Scale was developed by Harter (1985) for children aged 8 to 14 years and has 48 items. Harter (1985) reported the reliability of the test using Cronbach's alpha for the entire questionnaire as 0.83. In this study, the reliability of this scale using Cronbach's alpha was 0.79.

**Childrens Cognitive and Emotion scale (CCE):** The empathy scale of Dadds et al. (2008) consists of 23 items, with reported reliability of 0.89 based on Cronbach's alpha coefficient method. In this study, the reliability was 0.82 using Cronbach's alpha coefficient method.

## **Results**

The findings showed that the age range of the study sample was 12 to 15 years, with a mean age of 13.8 years with a standard deviation of 0.81 in the experimental group and a mean age

of 14.01 years with a standard deviation of 0.98 in the control group. In each group, 8 people were in junior high school and 7 people were in senior high school. As shown in Table 1, there is a significant difference between the experimental and control groups in terms of interpersonal relationships, self-perception, and empathy of bully students. In other words, the cognitive behavioral intervention has significantly increased interpersonal relationships, self-perception, and empathy in the experimental group.

**Table 1. Results of analysis of covariance for interpersonal relationships, self-perception, and empathy scores of the two groups (with pre-test control)**

Variables	Indicators	SS	Df	MS	F	Sig	Eta
Interpersonal relationships	Pre-test	231.12	1	231.12	5.15	0.001	0.121
	Group	756.14	1	756.14	1.46	0.001	0.534
	Error	19.23	27	4.19	8		
Self-perception	Pre-test	154.51	1	154.51	5.99	0.001	0.142
	Group	673.03	1	673.03	2.12	0.001	0.612
	Error	41.17	27	3.03	2		
Empathy	Pre-test	103.62	1	103.62	3.10	0.001	0.081
	Group	834.50	1	834.50	2.61	0.001	0.580
	Error	41.03	27	3.13	6		

## Discussion and Conclusion

The findings of this study confirmed that cognitive behavioral intervention was effective on interpersonal relationships, self-perception, and empathy of bullied students. The results of this study indicated that cognitive behavioral intervention, with a special focus on managing and controlling negative thoughts resulting from self-evaluation and others, was able to free bullied students from negative thoughts and emotions in the first step and, by teaching friendly communication skills, skilled to focus on positive emotions and capabilities, awareness of weaknesses and strengths, the ability to solve problems, and forgiveness of oneself and others, taught individuals to create emotional, cognitive, and behavioral changes in themselves and to change negative thoughts, feelings, and behaviors in a positive way. The most important limitation of this study was that the research population was limited to female high school students. Therefore, it is suggested that future research should include other academic years as well as male students, in order to increase the generalizability of the results. At the practical level, it is also suggested that educational programs based on cognitive behavioral therapy be held for parents on how to properly deal with bullying students.

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### Conflicts of interest

Authors found no conflict of interests.



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