The Roles of Child Abuse and Insecure Attachment, Through Mediation of Cognitive Process, in Explaining Conduct Disorder in Adolescents

1.Shir Mohammadi. Ziba; 2. Sadeghi, Masoud *; 3. Ghazanfari, Firoozeh

Master student of General Psychology, Faculty of Literature and Humanities, Lorestan University, Lorestan, Iran. (shirmohammadi.ziba@gmail.com)

. Corresponding author: Assistant Family Counselor, Faculty of Literature and Humanities, Lorestan University, Lorestan, Iran. (sadeghi.m@lu.ac.ir)

Associate Professor of General Psychology, Faculty of Literature and Humanities, Lorestan University, Lorestan, Iran. (Ghazanfari.f@lu.ac.ir)

Abstract

This research was aimed to explore the roles of child abuse and insecure attachment, through the mediation of cognitive process, in explaining conduct disorder in adolescents. By using the multi- stage cluster sampling, 300 girls aged 12-15 years, who were studying in secondary schools in Ghorveh city during 2020- 21, were selected randomly to fill six scales including Achenbach's behavioral problems Youth Self- Report scale, Child Abuse Self-Reporting Scale, Revised Adult Attachment Scale of Collins and Reads, Deep Information Processing, Wechsler Memory Scale for Children, and Stroop Color-Word Test. Results, by employing structural equation model, showed child abuse, insecure attachment, and cognitive process directly impact on forming conduct disorder. Moreover, child abuse and insecure attachment predicted conduct disorder through the mediation of cognitive process, also, findings indicated that the model was fitted properly. Thus the experts of health, psychology, and education can use the findings in considering clinical problems and also in arranging preventive and educative plans.

Keywords: child abuse, cognitive process, conduct disorder, insecure attachment.

Introduction

The behavioral disorder is one of the most common mental disorders during development and adolescence, which has a persistent pattern of behavior with four main groups: aggression, sabotage, lying, and breaking the law, which violates the norms, fundamental rights of others, and social norms. Wang, et al. (2020) stated in a study that developmental experiences determine the degree of adjustment, trust in others, feelings of security, and self-confidence of individuals, which generally indicate mental health throughout life. Therefore, the low level of these factors in children and adolescents with conduct disorder indicates the possibility of traumatic experiences in the life process of these people. According to World Health Organization, child or adolescent mental or physical health and well-being are endangered by parents or others. This harassment has four components including physical harassment, sexual harassment, emotional harassment, and negligence. Life experiences such as child abuse and insecure attachment affect the process of cognitive processing during development phases (Delisi, et al., 2019; Schoorl, et al., 2018). This process examines how a person thinks, perceives, learns, and remembers information that is received, interpreted, and sent to memory through attention by the senses (Sternberg, 2006). Therefore, the present study seeks to address the shortcomings of research in this area and examined the role of child abuse and insecure attachment in explaining adolescent behavioral disorders through cognitive processing.

Method

The method was correlation and structural equation modeling. The research population was female high school students in Ghorveh who were studying during 2020-2021. A sample of

330 students were selected by multi-stage cluster method. Due to the spread of Covid-19 pandemic, the questionnaires were distributed online. After collecting the questionnaires and removing incomplete ones, 300 questionnaires were analyzed via SPSS 24 and AMOS 24 software. The scales used in the present study were:

Achenbach's behavioral problems Youth Self- Report scale (AYSRS): From 122 items scale which developed by Achenbach (1991) for adolescents aged 11-18 years, measuring behavioral problems, a subscale of behavioral disorder with 24 items was used to measure conduct disorder. In Iran, Kakabraei, et al. (2007) reported the validity of this test using Cronbach's alpha 0/94 and Pearson correlation coefficient for simultaneous validity between 0.60 to 0.75. In the present study, Cronbach's alpha for the behavior disorder subscale was 0.82. Child Abuse Self-Reporting Scale (CASRS): This scale was created by Mohammadkhani

(2003) with 38 items and four subscales of physical, sexual, emotional, and inattention. The Cronbach's alpha for scale was reported at the desired level 0.92 (Mohammadkhani, et al., 2003). The questionnaire's Cronbach's alpha was equal to 0.84 in this study.

Revised Adult Attachment Scale (RAAS) of Collins and Reads: Developed by Collins and Reed (1991with 18 items and three subscales of secure attachment, avoidant insecure attachment, and ambivalent insecure attachment. Pakdaman (2002) reported Cronbach's alpha for these subscales at 0.81, 0.78, 0.85 respectively, and also retest validity coefficient at 0.85. In the present study, their Cronbach's alpha values were at 0.84 and 0.81 respectively.

In-Depth Information Processing Questionnaire: Designed by Schouwenburg and Schilder (1996) with 24 items. Ghasempour (2011) reported its validity of 0.82 and reliability of 0.79. In the present study, Cronbach's alpha value was 0.80.

Wechsler Memory Scale for Children (WMSC-III): Developed by Wechsler (1945). Orangi et al., (2002) reported reliability of this scale from 0.28 to 0.98 and validity between 0.54 to 0.75. The value of Cronbach's alpha coefficient in the present study was equal to 0.85.

Stroop Word-Color Test: John Riley Stroop (1935) developed the test to measure selective attention and cognitive flexibility. This scale consists of 25 items (5 rows X 5 columns) on four cards. Ghasempour (2011) reported the reliability of this test between 0.83 and 0.93. Its validity in two simultaneous tests was significant (p < 0.001). In the present study, Cronbach's alpha value was 0.84.

Results

The results obtained after analyzing the data via mentioned software are as follows: the relationship between child abuse and conduct disorder (β = 0.51), insecure attachment with conduct disorder (β = 0.49), cognitive processing with conduct disorder (β = -0/46), child abuse with cognitive processing) β = -0/38) and also insecure attachment to cognitive processing (β = -0.41) which is significant. Also, according to the fit indices, the model had a good fit (P> 0.05, $X^2 = 1.12$). According to Table 1, the variables of child abuse and insecure attachment through cognitive processing have an indirect and significant relationship with conduct disorder. Also, the model was able to explain 0.42 of the variance of conduct disorder and 0.41 of the variance of cognitive processing.

......Psychological Studies Vol.17, No.2, Summer 2021.....

Table 1. Doustrap test results for municer routes									
	variable	Path coefficients			Low	upper	Significance	Result	
The dependent	independent	Criterion	Direct	indirect	Total	limit	line	level	
Chil abuse ->	Cognitive->	Conduct	0.51	0.20	0.71	0.09	0.21	0.001	Confirmation
	proces	Disorder							
Insecure>	Cognitive->	Conduct	0.49	0.19	0.68	0.04	0.16	0.001	Confirmation
Attachment	proces	Disorder							

Table 1. Bootstrap test results for indirect routes

Discussion and Conclusion

The results of the present study confirmed the relationship between child abuse and insecure attachment directly as well as through cognitive processing in conduct disorder. These findings are consistent with the results of research by Delisi, et al. (2019) and Schoorl, et al. (2018). When such children in social situations face with the first stimulus signs, the mental process of the story begins to be processed, and accordingly, the behaviors stored in memory are activated and retrieved. Patterns of behavior are then selected and updated according to a processed process (Holz, et al., 2017). Thus, the process of cognitive processing mediates between child abuse and insecure attachment with conduct disorder. Therefore, the research findings can be used in educational and preventive programs for parents and educators in order to help them understand the factors involved in conduct disorder more effectively and also to present a scientific resource for mental health professionals to prevent, diagnose and control conduct disorder better. As previously noted due to the spread of Covid-19 there was no possibility to contact participants face-to-face but we hope that in future researches, both sexes will be examined by researches in person.

References

- DeLisi, M., Drury, A. J., & Elbert, M. J. (2019). The etiology of antisocial personality disorder: The differential roles of adverse childhood experiences and childhood psychopathology. *Comprehensive* psychiatry, 92, 1-6. doi.org/10.1016/j.comppsych.2019.04.001
- Ghasempour, A. (2011). Comparison of emotion facial expression from recognition and cognitive processing in schizophrenia and control people, Master Thesis, University of Mohaghegh Ardebili. (Text in Persian).
- Holz, N. E., Boecker-Schlier, R., Buchmann, A. F., Blomeyer, D., Jennen-Steinmetz, C., Baumeister, S., & Laucht, M. (2017). Ventral striatum and amygdala activity as convergence sites for early adversity and

conduct disorder. Social Cognitive and Affective Neuroscience, 12(2), 261-272.

- Kakaberaie, K., Asgar-Abad, M., Fedaei, Z (2007). Validation of Achenbakh's Behavioral Problems: Performing the Youth Self-Report Scale (YSR) for 11-18 Year-old Adolescents on High School Students, *Quarterly Journal of Research in Mental Health*, 1 (4): 50-66. (Text in Persian)
- Mohammadkhani, P., Mohammadi, M. R., Nazari, M. A., Salavati, M., & Razzaghi, O. M. (2003). Dev elopment, validation and reliability of child abuse self-report scale (CASRS) in IRANIAN students. *Medical Journal of The Islamic Republic of Iran (MJIRI)*, *17*(1), 51-58.
- Orangi, M., Atef Vahid, M. K., Ashayeri, H (2002). Standardization of the revised Wechsler Memory Scale in Shiraz, *Iranian Journal of Psychiatry and Clinical Psychology (Thought and Behavior)*, 7 (4): 56-66. (Text in Persian).
- Pakdaman, Sh (2002). *Investigating the relationship between attachment and socialism in adolescence*, PhD Thesis, University of Tehran. (Text in Persian).

......Psychological Studies Vol.17, No.2, Summer 2021.....

Schoorl, J., van Rijn, S., de Wied, M., Van Goozen, S., & Swaab, H. (2018). Boys with oppositional defiant disorder/conduct disorder show impaired adaptation during stress: An executive functioning study. *Child Psychiatry & Human Development*, 49(2), 298-307.

Sternberg, R. J. (2006). The nature of creativity. Creativity Research Journal, 18(1), 87-98.

Wang, D. S., Chung, C. H., Chang, H. A., Kao, Y. C., Chu, D. M., Wang, C. C., ... & Chien, W. C. (2020). Association between child abuse exposure and the risk of psychiatric disorders: A nationwide cohort study in Taiwan. *Child Abuse & Neglect*, 101, 104362. doi.org/10.1016/j.chiabu.2020.104362

Acknowledgments

The authors of this article would like to thank all the loved ones who contributed to this research.

Conflicts of interest

The authors did not have any conflict of interest

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not for profit sectors