




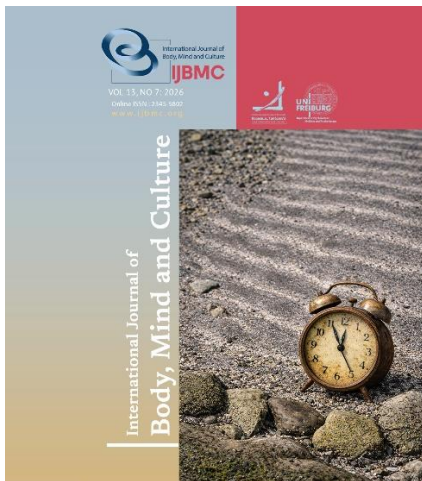
Article type:  
Original Research

1. M.A. in Clinical Psychology, Department of Psychology, Faculty of Educational Science and Psychology, University of Isfahan, Isfahan, Iran.
2. Professor, Department of Psychology, Faculty of Educational Sciences and Psychology, University of Isfahan, Isfahan, Iran.
3. Assistant professor, Department of Psychology, Faculty of Educational Science and Psychology, University of Isfahan, Isfahan, Iran.

Corresponding author email address:  
m.b.kaj@edu.ui.ac.ir

# The Mediating Role of Cognitive Flexibility in the Relationship Between Childhood Maltreatment and Entrapment

Seyed Ali. Ghaemmaghami<sup>1</sup>, Mohammadbagher. Kajbaf<sup>2\*</sup>,  
Hosseinali. Mehrabi<sup>3</sup>



Article history:

Received 11 Mar 2026  
Revised 18 Apr 2026  
Accepted 24 June 2026  
Published online 01 Jul 2026

How to cite this article:

Ghaemmaghami, S. A., Kajbaf, M., & Mehrabi, H. (2026). The Mediating Role of Cognitive Flexibility in the Relationship Between Childhood Maltreatment and Entrapment. *International Journal of Body, Mind and Culture*, 13(7), Article e2026-1065. <https://doi.org/10.61838/ijbmc.v13i7.1065>



© 2026 the authors. This is an open access article under the terms of the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License.

## ABSTRACT

**Objective:** Childhood maltreatment is a well-established risk factor for adverse psychological outcomes. One such outcome is entrapment, the perception of being trapped in uncontrollable and aversive circumstances. This study aimed to examine the relationship between childhood maltreatment and entrapment, by investigating the mediating role of cognitive flexibility.

**Methods and Materials:** A descriptive-correlational design using structural equation modeling (SEM) was employed. A total of 317 adult residents of Isfahan, Iran, were selected through convenience sampling in the summer of 2024. Participants completed the Childhood Trauma Questionnaire (Bernstein et al., 2003), the Entrapment Scale (Gilbert & Allan, 1998), and the Cognitive Flexibility Inventory (Dennis & Vander Wal, 2010). Data were analyzed using SPSS-27 and AMOS-26.

**Findings:** The SEM analysis showed that childhood maltreatment had a significant negative direct effect on cognitive flexibility ( $\beta = -0.50, p < 0.001$ ), and cognitive flexibility had a significant negative direct effect on entrapment ( $\beta = -0.75, p < 0.001$ ). Childhood maltreatment also had a significant positive direct effect on entrapment ( $\beta = 0.58, p < 0.001$ ). These findings indicate that cognitive flexibility partially mediates the relationship between childhood maltreatment and entrapment. Model fit indices confirmed a good fit of the proposed model.

**Conclusion:** Cognitive flexibility serves as a significant mediator in the link between childhood maltreatment and entrapment. Enhancing cognitive flexibility may help mitigate the psychological impact of early traumatic experiences.

**Keywords:** Childhood Maltreatment, Cognitive Flexibility, Entrapment.

## Introduction

Childhood maltreatment is defined as actual or potential psychological and physical harm to children caused by violence or abuse from parents or other caregivers (Ben-Porat et al., 2023; Xiang et al., 2020). It includes physical abuse, emotional abuse, sexual abuse, and neglect of individuals under the age of 18, and has been identified as a major determinant of both short- and long-term physical and mental health outcomes in children (Yang, 2024). All types of maltreatment are significantly associated with PTSD symptoms (Gama et al., 2021). Childhood maltreatment not only causes immediate and acute harm but also extends its impact into adolescence and adulthood (Guo et al., 2021; Zhao & Quan, 2023). It is considered a serious social problem Li et al., (2024) that is linked to a lifelong increased risk for nearly all common psychiatric disorders Ion et al., (2023), and one of its most important consequences is the development of impulse control problems, emotional dysregulation, maladaptive emotional coping, and impulsivity (d'Huart et al., 2022; Krause-Utz et al., 2019).

Stress, in any context, can lead to a wide range of negative emotional states such as frustration, entrapment, and anger (Farahmand & Sharooni, 2022). Entrapment arises in situations referred to as "inescapable defeat," where the individual initially feels a sense of failure and attempts to escape the situation but finds it impossible to do so—leading to the experience of entrapment (Arab & Emadian, 2022). Numerous global studies have shown that entrapment can result in feelings of hopelessness, depression, and even suicidality. In other words, the inability to tolerate entrapment can lead to psychological distress, maladjustment, and interpersonal difficulties (Sayadi et al., 2024). Therefore, it is essential to identify a key determinant that helps individuals cope with failure and entrapment and adapt to new environmental changes. This determinant could be cognitive flexibility, which refers to the cognitive readiness to adapt to changing environmental stimuli (Mousavi & Asghari, 2018).

Although individuals exposed to trauma often show deficits in cognitive flexibility, a core executive function involving the ability to shift attention, adjust to changing demands, and modify strategies in response to feedback Kalia et al., (2021), those with higher cognitive flexibility are better equipped to manage stressful life events,

including those rooted in past trauma (Huang et al., 2024). Cognitive flexibility plays a critical role in emotion regulation and adaptive coping, as it allows individuals to reinterpret challenging situations and choose more effective behavioral responses (Başaran et al., 2022). Conversely, a lack of cognitive flexibility may trap individuals in rigid thought patterns and increase their vulnerability to emotion regulation difficulties and persistent distress (Liu et al., 2021).

Given the broad and long-term psychological consequences of childhood maltreatment, such as emotional entrapment, dysregulation, and vulnerability to psychiatric disorders, identifying protective factors that can buffer these effects is of great importance. One such key factor is cognitive flexibility, which enables individuals to reframe negative experiences, regulate emotions effectively, and adapt to environmental stressors. Thus, exploring the relationship between childhood maltreatment and cognitive flexibility is not only significant from a theoretical and scientific standpoint, but it may also have practical implications for developing interventions that promote psychological recovery and prevent further psychopathology in trauma-exposed individuals.

### *Research Hypothesis:*

Cognitive flexibility mediates the relationship between childhood maltreatment and feelings of entrapment.

## Methods and Materials

### *Study Design*

The present study employed a descriptive research method with a structural equation modeling (SEM) design. The objective was to investigate the mediating role of cognitive flexibility in the relationship between childhood maltreatment and entrapment among residents of Isfahan, Iran.

### *Participants and Procedure*

The statistical population of this study included all residents of Isfahan during the summer of 2024. Based on Kline (2023) recommendation of a minimum sample size of 250 for structural equation modeling, a total of 320 participants were initially recruited from three different districts of Isfahan using convenience sampling. Participants were selected from main streets and public places such as parks, shopping centers, public libraries,

and healthcare centers. After identifying and removing 3 outliers using the Mahalanobis distance, the final sample size consisted of 317 participants.

Although convenience sampling was employed due to accessibility and logistical constraints, this method poses limitations in terms of generalizability and representativeness, particularly in structural equation modeling (SEM), which ideally requires random sampling. However, given the exploratory nature of the current study and the adequate sample size ( $N = 317$ ), the use of SEM remains statistically appropriate.

Among these 317 participants, 69 individuals (21.8%) had a diploma, 38 individuals (12.0%) held an associate degree, 196 individuals (61.9%) had a bachelor's degree, 10 individuals (3.1%) held a master's degree, and 4 individuals (1.2%) had a doctoral degree. Regarding gender distribution, 134 participants (42.3%) were male and 183 participants (57.7%) were female. In terms of marital status, 228 participants (71.9%) were single and 89 participants (28.1%) were married.

#### *Inclusion and Exclusion Criteria*

Inclusion criteria were: (1) having at least a high school diploma, (2) residing in Isfahan, (3) no history of psychological disorders, (4) not currently participating in psychotherapy or family therapy, and (5) providing complete responses to the questionnaires. Prior to questionnaire completion, each participant underwent an initial interview during which the general objectives of the study were explained.

#### *Instruments*

*The Entrapment Scale (ES)*: Developed by Gilbert and Allan (1998), this 16-item scale assesses internal and external entrapment using a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). Total scores range from 16 to 80, with higher scores indicating greater entrapment. Cronbach's alpha was 0.94 for students and 0.93 for depressed individuals in the original study. In Iran, Tarsafi et al. (2015) reported alphas of 0.94 for women and 0.93 for men. In the present study, Cronbach's alpha was found to be 0.81.

*Childhood Trauma Questionnaire (CTQ)*: This scale was developed by Bernstein et al. (2003) to assess childhood trauma. It consists of 28 items and evaluates five subscales: physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect. Responses are rated on a 5-point Likert scale ranging from 1 (never) to 5 (always). The score range for each

subscale is 5 to 25, and the total score ranges from 25 to 125, with higher scores indicating greater levels of childhood trauma. Bernstein et al. (2003) reported the reliability of this instrument using both a two-month test-retest method and Cronbach's alpha, with values ranging from 0.79 to 0.94. Soleimani et al. (2021) reported a Cronbach's alpha of 0.84 for the Persian version of the scale. In the present study, Cronbach's alpha was found to be 0.73.

*Cognitive Flexibility Inventory (CFI)*: Created by Dennis and Vander Wal (2010), this 20-item scale measures cognitive flexibility across three subscales: perceived control over challenging situations, ability to generate alternative explanations for life events, and capacity to produce multiple solutions. Using a 7-point Likert scale, total scores range from 20 to 140, with higher scores indicating greater flexibility. The original study reported convergent validity of 0.75 and reliability of 0.91. In Iran, Shareh et al. (2014) found a Cronbach's alpha of 0.90. In the present study, Cronbach's alpha was found to be 0.86.

#### *Ethical Considerations*

Ethical approval was obtained (code: IR.UI.REC.1403.092). Participants provided informed consent after being briefed on the study's purpose and confidentiality protocols. Data were anonymized and stored securely.

#### *Data Analysis*

Data analysis was conducted in two sections: descriptive statistics (mean, standard deviation, and correlation matrix) and inferential statistics (structural equation modeling). Data were analyzed using SPSS-27 and AMOS-26. Structural equation modeling was employed to examine the relationships between the study variables.

## Findings and Results

Demographic findings indicated that 42.3% of participants were male and 57.7% were female. Before presenting the results of Pearson's correlation analysis, the assumptions of parametric tests were assessed. Accordingly, the Shapiro-Wilk test results showed that the assumption of normal distribution of sample data was met for the variables of entrapment, childhood maltreatment, and cognitive flexibility ( $P < 0.05$ ). Additionally, the homogeneity of variance assumption was tested using Levene's test, which yielded non-

significant results, indicating that the homogeneity of variance assumption was satisfied for the variables of

entrapment, childhood maltreatment, and cognitive flexibility ( $P < 0.05$ ).

**Table 1**

*Mean, Standard Deviation, Skewness, Kurtosis, and Correlation of Research Variables*

Variable	Mean	SD	Skewness	Kurtosis	Correlation with Entrapment
Entrapment	62.56	5.99	0.25	-0.31	-
External Entrapment	39.32	3.41	0.31	-0.17	-
Internal Entrapment	23.24	2.35	0.19	-0.13	-
Childhood Maltreatment	43.41	14.12	0.81	1.89	0.63*
Physical Neglect	11.08	4.03	0.48	0.33	0.55*
Emotional Neglect	11.44	4.08	0.54	0.32	0.59*
Sexual Abuse	10.09	4.49	0.75	0.03	0.52*
Physical Abuse	10.85	4.13	0.52	0.07	0.54*
Emotional Abuse	11.38	4.01	0.68	0.72	0.59*
Cognitive Flexibility	68.63	15.87	0.19	-1.12	-0.65*
Alternatives	34.98	9.79	-0.06	-0.41	-0.61*
Control	26.85	7.22	0.41	-0.89	-0.51*
Human Behavior Alternatives	6.79	3.00	-0.56	-1.05	-0.24*

\* $P < 0.01$

As shown in Table 1, the distribution of variable scores was within the acceptable range for normality, with skewness and kurtosis values falling between  $\pm 2$ . The mean score for entrapment was 62.56 (SD = 5.99), comprising two subscales: external entrapment (M = 39.32, SD = 3.41) and internal entrapment (M = 23.24, SD = 2.35). The mean score for childhood maltreatment was 43.41 (SD = 14.12), which included five subcomponents: physical neglect (M = 11.08, SD = 4.03), emotional neglect (M = 11.44, SD = 4.08), sexual abuse (M = 10.09, SD = 4.49), physical abuse (M = 10.85, SD = 4.13), and emotional abuse (M = 11.38, SD = 4.01). All subcomponents of childhood maltreatment showed significant positive correlations with entrapment ( $p < 0.01$ ), ranging from  $r = 0.52$  to  $r = 0.59$ . The mean score

for cognitive flexibility was 68.63 (SD = 15.87), consisting of three subdimensions: alternatives (M = 34.98, SD = 9.79), control (M = 26.85, SD = 7.22), and human behavior alternatives (M = 6.79, SD = 3.00). Cognitive flexibility and all its subcomponents were significantly and negatively correlated with entrapment ( $r = -0.65$ ,  $r = -0.61$ ,  $r = -0.51$ , and  $r = -0.24$ , respectively;  $p < 0.01$ ). These findings suggest that higher levels of childhood maltreatment are associated with greater feelings of entrapment, while higher levels of cognitive flexibility are associated with lower levels of entrapment. The directions of these correlations support the theoretical assumption that cognitive flexibility may serve as a protective factor against the psychological impact of early trauma.

**Table 2**

*Unstandardized and Standardized Regression Coefficients of the Model Paths*

Model Paths	Unstandardized Coefficients	Critical Value (t)	Standardized Coefficients	P-value
Childhood Maltreatment → Cognitive Flexibility	-1.11	-7.08	-0.50	< 0.001
Cognitive Flexibility → Entrapment	-0.21	-7.38	-0.75	< 0.001
Childhood Maltreatment → Entrapment	0.37	7.25	0.58	< 0.001

As shown in Table 2, childhood maltreatment had a significant negative direct effect on cognitive flexibility ( $B = -1.11$ ,  $\beta = -0.50$ ,  $t = -7.08$ ,  $p < 0.001$ ), and cognitive flexibility had a significant negative direct effect on entrapment ( $B = -0.21$ ,  $\beta = -0.75$ ,  $t = -7.38$ ,  $p < 0.001$ ). Additionally, childhood maltreatment showed a

significant positive direct effect on entrapment ( $B = 0.37$ ,  $\beta = 0.58$ ,  $t = 7.25$ ,  $p < 0.001$ ). These results indicate that cognitive flexibility partially mediates the relationship between childhood maltreatment and entrapment. In other words, childhood trauma not only directly increases feelings of entrapment but also indirectly

contributes to entrapment by reducing individuals' cognitive flexibility. To assess the overall adequacy of the model, several goodness-of-fit indices were examined, the results of which are presented in Table 3. A model with good fit is expected to have a non-significant chi-square, a chi-square to degrees of freedom ( $\chi^2/df$ ) ratio

less than 3, a Comparative Fit Index (CFI) and Parsimony Comparative Fit Index (PCFI) greater than 0.50, a Root Mean Square Error of Approximation (RMSEA) less than 0.09, and a Hoelter index above 75. Among these, RMSEA is considered one of the most reliable indicators of model fit, as it is not significantly influenced by sample size.

**Table 3**

*Fit Indices of the Proposed Model in the Study*

DF	$\chi^2/df$	PGFI	CFI	HOELTER	RMSEA
45	1.66	0.70	0.98	275	0.04

Based on the results presented in Table 3, the proposed model demonstrates an acceptable fit. To further evaluate the mediating role of cognitive

flexibility in the relationship between childhood maltreatment and entrapment, both the bootstrap method and the Sobel test were employed.

**Table 4**

*Bootstrap Results for the Mediation Effect of Cognitive Flexibility between Childhood Maltreatment and Entrapment*

Independent Variable	Mediator	Dependent Variable	Indirect Effect ( $\beta$ )	95% BC CI	p-value
Childhood Maltreatment	Cognitive Flexibility	Entrapment	0.24	[0.16, 0.36]	<.05

To examine the mediating role of cognitive flexibility in the relationship between childhood maltreatment and entrapment, the indirect effect was tested using a bias-corrected bootstrap approach with 5,000 resamples. As shown in Table 4, the results revealed a significant indirect effect ( $\beta = 0.24$ , 95% BC CI [0.16, 0.36],  $p < .05$ ), indicating that cognitive flexibility significantly mediates the relationship between childhood maltreatment and entrapment. Since the confidence interval does not include zero, the mediation effect is statistically supported (Table 4).

## Discussion and Conclusion

The primary aim of this study was to examine the relationship between childhood maltreatment and entrapment, with cognitive flexibility considered as a mediating factor. The findings revealed that childhood maltreatment significantly predicted higher levels of entrapment, consistent with prior research highlighting the long-term psychological consequences of early adversity (Ion et al., 2023; Krause-Utz et al., 2019). Childhood maltreatment, encompassing emotional, physical, and sexual abuse as well as emotional and physical neglect, has been linked to disrupted emotional regulation, heightened vulnerability to stress, and a

perceived lack of control—all of which contribute to the subjective experience of entrapment.

Importantly, the present study demonstrated that cognitive flexibility significantly mediates this relationship. This aligns with prior research emphasizing the protective role of cognitive flexibility in mental health (Huang et al., 2024). Cognitive flexibility enables trauma-exposed individuals to reframe painful memories, disengage from rigid thought patterns, and generate adaptive coping strategies. These cognitive capacities are essential for reducing the perception of circumstances as inescapable, which is central to the experience of entrapment (Amédée et al., 2022).

These findings align with and extend the theoretical perspective outlined in the introduction, emphasizing the importance of identifying protective factors that buffer the long-term psychological consequences of childhood maltreatment. As cognitive flexibility is both measurable and trainable, it holds promise as a focus for clinical programs aiming to foster psychological resilience and prevent the progression of trauma into chronic psychopathology. Future studies should investigate whether enhancing cognitive flexibility through targeted interventions—such as mindfulness training, ACT-based protocols, or cognitive

remediation—can reduce the intensity or frequency of entrapment experiences in trauma-affected populations.  
*Conclusion*

This study underscores the critical role of cognitive flexibility as a protective psychological mechanism in the aftermath of childhood maltreatment. By demonstrating that cognitive flexibility significantly mediates the relationship between childhood trauma and entrapment, the findings highlight its importance in reducing the adverse emotional consequences of early adversity. Individuals with greater cognitive flexibility appear to be more capable of reframing negative experiences, adapting to environmental stressors, and regulating emotional responses—thus mitigating the development of entrapment-related thinking patterns. These results offer valuable insights into trauma-informed approaches and suggest that interventions aimed at enhancing cognitive flexibility may help trauma-exposed individuals break free from rigid cognitive frameworks that sustain psychological suffering.

#### Acknowledgments

The authors express their gratitude and appreciation to all participants.

#### Declaration of Interest

The authors of this article declared no conflict of interest.

#### Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Ethical considerations in this study were that participation was entirely optional.

#### Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

#### Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

#### Authors' Contributions

All authors equally contribute to this study.

#### References

- Amédée, L. M., Cyr-Desautels, L., Bénéard, H., Pascuzzo, K., Dubois-Comtois, K., Hébert, M., Matte-Gagné, C., & Cyr, C. (2022). Cognitive flexibility moderates the association between maltreatment and emotion regulation in residential care children of the middle childhood period. *Developmental Child Welfare*, 4(3), 217-234. <https://doi.org/10.1177/25161032221100233>
- Arab, L., & EMADIAN, S. (2022). The Effectiveness of Education Based on Acceptance and Commitment based on Quality of Family Relationships and Feeling of Failure in Adolescent Girls with High-Risk Behaviors. *10.29252/mejds.0.0.116*
- Başaran, S. K., Gökdağ, C., & Yıldırım, Z. E. (2022). How does cognitive flexibility associate with depressive symptoms? A multiple mediation model including emotion dysregulation and problem-solving. *Yaşam Becerileri Psikoloji Dergisi*, 6(11), 23-37. <https://doi.org/10.31461/ybpd.1110174>
- Ben-Porat, T., Bacon, S. L., Woods, R., Fortin, A., & Lavoie, K. L. (2023). Childhood maltreatment in patients undergoing bariatric surgery: Implications for weight loss, depression and eating behavior. *Nutrients*, 15(9), 2046. <https://doi.org/10.3390/nu15092046>
- Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., Stokes, J., Handelsman, L., Medrano, M., & Desmond, D. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child abuse & neglect*, 27(2), 169-190. [10.1016/s0145-2134\(02\)00541-0](https://doi.org/10.1016/s0145-2134(02)00541-0)
- d'Huart, D., Hutsebaut, J., Seker, S., Schmid, M., Schmeck, K., Bürgin, D., & Boonmann, C. (2022). Personality functioning and the pathogenic effect of childhood maltreatment in a high-risk sample. *Child and Adolescent Psychiatry and Mental Health*, 16(1), 95. <https://doi.org/10.1186/s13034-022-00527-1>
- Dennis, J. P., & Vander Wal, J. S. (2010). The cognitive flexibility inventory: Instrument development and estimates of reliability and validity. *Cognitive therapy and research*, 34, 241-253. <https://doi.org/10.1007/s10608-009-9276-4>
- Farahmand, M., & Sharooni, M. (2022). The role of social loneliness, failure and religiosity in ruminating the anger of prisoners. *Social Psychology Research*, 11(44), 145-164. <https://doi.org/10.22034/spr.2022.255632.1586>
- Gama, C. M. F., Portugal, L. C. L., Gonçalves, R. M., de Souza Junior, S., Vilete, L. M. P., Mendlowicz, M. V., Figueira, I., Volchan, E., David, I. A., & de Oliveira, L. (2021). The invisible scars of emotional abuse: a common and highly harmful form of childhood maltreatment. *BMC psychiatry*, 21(1), 156. <https://doi.org/10.1186/s12888-021-03134-0>
- Gilbert, P., & Allan, S. (1998). The role of defeat and entrapment (arrested flight) in depression: an exploration of an evolutionary view. *Psychological medicine*, 28(3), 585-598. <https://doi.org/10.1017/S0033291798006710>
- Guo, L., Wang, W., Li, W., Zhao, M., Wu, R., & Lu, C. (2021). Childhood maltreatment predicts subsequent anxiety symptoms among Chinese adolescents: the role of the tendency of coping styles. *Translational Psychiatry*, 11(1), 340. <https://doi.org/10.1038/s41398-021-01463-y>
- Huang, W., Fang, Y., Tan, X., & Zhao, J. (2024). Childhood trauma, stressful life events, and depression: Exploring the

- mediating effect of cognitive flexibility. *Psychological trauma: theory, research, practice, and policy*, 16(S1), S45. <https://doi.org/10.1037/tra0001337>
- Ion, A., Bilc, M. I., Pişur, S., Pop, C. F., Szentágotai-Táatar, A., & Miu, A. C. (2023). Childhood maltreatment and emotion regulation in everyday life: An experience sampling study. *Scientific Reports*, 13(1), 7214. <https://doi.org/10.1038/s41598-023-34302-9>
- Kalia, V., Knauft, K., & Hayatbini, N. (2021). Adverse childhood experiences (ACEs) associated with reduced cognitive flexibility in both college and community samples. *Plos one*, 16(12), e0260822. <https://doi.org/10.1371/journal.pone.0260822>
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications. <https://www.guilford.com/books/Principles-and-Practice-of-Structural-Equation-Modeling/Rex-Kline/9781462551910?srsId=AfmBOoo6UcsDly6OsX2qGkwpFh17M4cxGkmTkcQav1F4tjy9dqEP6rXj>
- Krause-Utz, A., Erol, E., Broussianou, A. V., Cackowski, S., Paret, C., Ende, G., & Elzinga, B. (2019). Self-reported impulsivity in women with borderline personality disorder: the role of childhood maltreatment severity and emotion regulation difficulties. *Borderline personality disorder and emotion dysregulation*, 6(1), 6. <https://doi.org/10.1186/s40479-019-0101-8>
- Li, M., Yuan, Y., Cheng, X., Wang, Y., & Xu, Z. (2024). Childhood maltreatment and insomnia in college students: The role of alexithymia and psychological distress. *Acta psychologica*, 243, 104149. <https://doi.org/10.1016/j.actpsy.2024.104149>
- Liu, C., Rotaru, K., Lee, R. S., Tiego, J., Suo, C., Yücel, M., & Albertella, L. (2021). Distress-driven impulsivity interacts with cognitive inflexibility to determine addiction-like eating. *Journal of Behavioral Addictions*, 10(3), 534-539. <https://doi.org/10.1556/2006.2021.00027>
- Mousavi, A., & Asghari, F. (2018). Explaining Defeat and Entrapment based on Cognitive Flexibility in Athlete and Non-Athlete Students. 3(1). [10.48308/mbsp.3.1.57](https://doi.org/10.48308/mbsp.3.1.57)
- Sayadi, A., Azarmajd, S., Modaber Chaharborj, F., Salehi, A., Samian, P., & Khanjmali, M. (2024). The Effectiveness of Schema Therapy on Feelings of Frustration and Self-Compassion in Patients with Borderline Personality Disorder. *medical journal of mashhad university of medical sciences*, 67(4). <https://doi.org/10.22038/mjms.2024.25130>
- Shareh, H., Farmani, A., & Soltani, E. (2014). Investigating the reliability and validity of the Cognitive Flexibility Inventory (CFI-I) among Iranian university students. *Practice in Clinical Psychology*, 2(1), 43-50. [https://jpcp.uswr.ac.ir/browse.php?a\\_id=163&sid=1&slc\\_lang=en](https://jpcp.uswr.ac.ir/browse.php?a_id=163&sid=1&slc_lang=en)
- Soleimani, A., Lashkari, A., & Torabi, Y. (2021). The Relationship between Trauma and Psychological Well-Being: The Mediating Role of Fear of Happiness and Alexithymia. <https://doi.org/10.52547/rbs.19.1.116>
- Tarsafi, M., Kalantar Kousheh, S. M., & Lester, D. (2015). Exploratory factor analysis of the defeat scale and its relationship with depression and hopelessness among Iranian university students. *Clinical Psychology Studies*, 5(19), 81-98.
- Xiang, Y., Cao, Y., & Dong, X. (2020). Childhood maltreatment and moral sensitivity: An interpretation based on schema theory. *Personality and Individual Differences*, 160, 109924. <https://doi.org/10.1016/j.paid.2020.109924>
- Yang, J. (2024). Childhood maltreatment, emotion regulation difficulties/externalizing problems, and sleep problems in adolescents: Direct and indirect associations among developmental trajectories. *Sleep medicine*, 115, 114-121. <https://doi.org/10.1016/j.sleep.2024.01.026>
- Zhao, X., & Quan, L. (2023). The relationship between childhood maltreatment and learning engagement of high school students: the role of growth mindset and beliefs about adversity. *Frontiers in psychology*, 14, 1222855. <https://doi.org/10.3389/fpsyg.2023.1222855>