



The Relationship Between Early Maladaptive Schemas and Social Anxiety with the Mediation of Emotion Regulation in Female Students

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ABSTRACT

Objective: The present study examines the relationship between early maladaptive schemas and social anxiety with the mediation of emotion regulation in female students.

Methods and Materials: Considering the objective, this research is classified as applied research. In terms of data type, it is quantitative, and based on its nature, it is descriptive-correlational and utilizes structural equation modeling. The statistical population includes all female students of Islamic Azad University, Lahijan, in the 2023-2024 academic year, totaling 8,000 individuals. The sampling method was multi-stage cluster random sampling. The sample size was determined using Cochran's formula, yielding 367 participants. Data were collected using the Social Anxiety Inventory, Early Maladaptive Schemas Questionnaire, and the Emotion Regulation Questionnaire by Garnefski et al. (2001). The data were analyzed using Pearson correlation coefficient, structural equation modeling, and SPSS version 22 and Smart PLS version 3 software.

Findings: The results of the Pearson correlation test indicated a significant relationship between early maladaptive schemas and social anxiety in female students ($P < 0.001$). Additionally, the results of the structural equation modeling test demonstrated that emotion regulation mediates the relationship between early maladaptive schemas and social anxiety in female students ($P < 0.001$).

Conclusion: There is a significant relationship between early maladaptive schemas and social anxiety with the mediation of emotion regulation in female students.

Keywords: *Early Maladaptive Schemas, Social Anxiety, Emotion Regulation.*

1. Introduction

Social anxiety is one of the most disabling anxiety disorders, with symptoms that begin in childhood or

adolescence and persist throughout later developmental stages (APA, 2022). It creates maladaptation in personal life, social interactions, professional life, and other functional aspects of an individual (Stein & Stein, 2018). Social anxiety

is one of the most common mental health disorders and is considered the second most prevalent disorder among anxiety disorders. The overall prevalence of this disorder is approximately 13%, ranking third after major depressive disorder and alcohol dependence (Nicholson, 2018). The prevalence and comorbidity of social anxiety and psychiatric disorders in Iran are slightly higher than in Western countries. In a study by Ghazanfar and Naderi (2019) conducted on high school adolescents in Lorestan province, the prevalence rate of this disorder was 22.30% (Ghazanfari & Naderi, 2019). The average age of onset for social anxiety ranges from early to mid-adolescence (around 15 years old), although it can occur in much younger children (Kessler et al., 2012).

In the cognitive domain, one of the fundamental cognitive processes involved in the development of social anxiety is early maladaptive schemas, which are primarily formed as a result of adverse childhood experiences (Kaya & Aydin, 2020). Early maladaptive schemas are self-defeating emotional and cognitive patterns that develop early in life and tend to be repeated throughout one's life, drawing adulthood into the unfavorable conditions of childhood. According to Young et al. (2023), schemas influence the processing of later experiences and play a major role in how individuals think, feel, behave, and relate to others. Early maladaptive schemas, which fall into five domains: disconnection and rejection, impaired autonomy and performance, impaired limits, other-directedness, and over-vigilance and inhibition, play a role in social anxiety (Heimberg et al., 1997). For instance, the presence of maladaptive schemas in social situations is inferred from the persistent use of self-descriptive phrases by socially anxious individuals such as "I am not attractive" or "I am abnormal." (Young et al., 2023). Cognitive models related to social anxiety generally suggest that individuals with social anxiety possess maladaptive schemas related to themselves and others, which guide their attentional and cognitive processes when activated in social situations. It has been demonstrated that early maladaptive schemas significantly influence how individuals think, feel, and interact with others, and that individuals with social anxiety tend to have higher levels of these schemas (Hawke & Provencher, 2011). Several studies have shown a relationship between social anxiety and early maladaptive schemas, with emotional deprivation, defectiveness and shame, and social isolation/alienation schemas playing a significant and positive role in this disorder (Naderi et al., 2022).

Recent research on anxiety disorders has shown that difficulties in emotion regulation are also a key factor in the emergence of social anxiety (Sackl-Pammer et al., 2019). Emotion regulation involves a range of conscious and unconscious cognitive and behavioral strategies aimed at reducing, maintaining, or enhancing an emotion. Emotion regulation is defined as the process of initiating, maintaining, modifying, or altering the expression, intensity, or persistence of an internal emotional experience, and the related social, psychological, and physical processes to achieve personal goals (Ahmed Leitão et al., 2019). When individuals regulate their emotions and respond to life challenges in constructive and effective ways, they develop efficient coping skills. Afterward, these individuals deliberately create conditions under which they can control their emotions in a way that benefits them (Dryman & Heimberg, 2018).

In the present study, considering the reviews conducted and the findings of previous studies, components of early maladaptive schemas and anxiety sensitivity have been examined individually in individuals with social anxiety. However, no study has examined all these variables together. Therefore, this study aims to investigate the direct relationships and correlations of the variables with social anxiety. The question this study seeks to answer is whether the model of early maladaptive schemas and social anxiety, with the mediating role of cognitive emotion regulation, fits the data.

2. Methods and Materials

2.1. Study design and Participant

This study is applied research in terms of its objective. Based on the type of data, it is quantitative, and in terms of its nature, it is descriptive-correlational, using structural equation modeling. The statistical population consists of all female undergraduate students of Islamic Azad University, Lahijan, in the 2023-2024 academic year, totaling 8,000 individuals. The sample size was determined using Cochran's formula, which resulted in 367 participants. The sampling method employed in this study was multi-stage cluster random sampling. The inclusion criteria were being a female undergraduate student at Islamic Azad University, Lahijan, and willingness to participate in the study. The exclusion criteria included chronic psychological disorders.

2.2. Measures

2.2.1. Social Phobia

Connor's Social Phobia Inventory is a self-report tool consisting of 17 items and includes three subscales: fear (6 items), avoidance (7 items), and physiological discomfort (4 items). The scoring of this scale is based on a five-point Likert scale, ranging from 1 (not at all) to 4 (very much). According to the obtained results, a cutoff score of 40 distinguishes individuals with social phobia from those without it with 80% diagnostic accuracy, while a cutoff score of 50 provides 89% diagnostic accuracy (Reghuram & Mathias, 2014). This questionnaire has high reliability and validity. Its test-retest reliability for groups diagnosed with social phobia ranged from 0.78 to 0.89, and its internal consistency (Cronbach's alpha) in a normative group was reported as 0.94. The subscale reliabilities were 0.89 for fear, 0.91 for avoidance, and 0.80 for physiological discomfort. The construct validity was evaluated by comparing the results of this test in two groups: individuals diagnosed with social phobia and normal individuals without a psychiatric diagnosis, showing significant differences between the two, indicating high validity (Biederman et al., 2001). In this study, Cronbach's alpha was found to be 0.773.

2.2.2. Early Maladaptive Schemas

The short form of the Young Schema Questionnaire (2007) is a self-report questionnaire consisting of 75 items. Respondents read each statement and rate how true it is for them on a Likert scale ranging from 1 (completely untrue) to 6 (completely true). The 75 items are categorized into five domains, each assessing a particular early maladaptive schema. Studies in Iran showed that the alpha coefficient for each early maladaptive schema ranged from 0.83 (for undeveloped self/entrapment schema) to 0.96 (for defectiveness/shame schema), and the test-retest reliability in a non-clinical population ranged from 0.50 to 0.82 (Ebrahimi et al., 2023). In this study, Cronbach's alpha was 0.889.

2.2.3. Cognitive Emotion Regulation

The Cognitive Emotion Regulation Questionnaire, developed by Garnefski and colleagues (2001), is a

multidimensional self-report tool consisting of 36 items. It is available in both adult and child versions. The CERQ assesses nine cognitive strategies: self-blame, acceptance, rumination, positive refocusing, refocus on planning, positive reappraisal, putting into perspective, catastrophizing, and other-blame. Garnefski and colleagues reported satisfactory validity and reliability for this questionnaire. The questionnaire includes 36 five-point Likert scale items (ranging from always to never), with each factor evaluated by four items. The factors include self-blame, other-blame, rumination, catastrophizing, positive refocusing, positive reappraisal, acceptance, and refocus on planning. The Persian version of this scale was validated by Samani and Jokar (Ebrahimi et al., 2023). The alpha coefficient for the subscales of this questionnaire in Samani and Jokar's study ranged from 0.71 to 0.81. For convergent and divergent validity, the depression, anxiety, and stress scales were used, which include 21 four-point Likert items (ranging from very much like me to not at all like me), assessing three factors of depression, anxiety, and stress. In this study, Cronbach's alpha was 0.951.

2.3. Data Analysis

This study is applied in terms of its objective and non-experimental in terms of its data collection and analysis methods. To analyze the data collected through the above questionnaires, descriptive statistical methods were used to calculate frequencies, percentages, means, standard deviations, and standard errors. Inferential statistics, including structural equation modeling, were conducted using SPSS version 22 and Smart PLS version 3.

3. Findings and Results

Demographic characteristics indicated that all 249 participants (100%) were female. In terms of field of study, 128 participants (34.9%) were studying psychology, and in terms of education level, 190 participants (51.8%) were undergraduates. Table 1 presents the descriptive information (mean and standard deviation) related to the subcomponents and components of social anxiety, early maladaptive schemas, and cognitive emotion regulation.

Table 1

Descriptive Indices (Mean and Standard Deviation) of Research Variables in Students (N=367)

Variable	Mean	Standard Deviation	Skewness	Kurtosis
Fear	10.98	2.78	-0.505	0.384
Avoidance	18.69	3.77	0.607	-0.096
Physiological Discomfort	19.60	2.78	0.473	-0.531
Disconnection	32.04	4.79	-0.644	0.197
Autonomy	29.16	4.79	0.598	0.213
Impaired Limits	34.66	5.05	1.257	0.179
Other-Directedness	27.82	4.26	1.409	2.211
Inhibition	34.23	5.72	0.140	-0.230
Self-Blame	15.96	0.35	1.816	2.229
Acceptance	16.04	1.55	0.003	0.256
Rumination	18.05	1.25	-0.136	0.608
Positive Refocusing	17.64	1.96	0.627	1.149
Refocus on Planning	12.69	3.77	0.607	-0.096
Positive Reappraisal	11.60	2.78	0.473	-0.531
Putting into Perspective	12.04	0.79	-0.644	0.197
Catastrophizing	19.16	0.79	0.598	0.213
Other-Blame	14.66	0.05	1.257	0.179
Social Anxiety	27.6	8.65	-0.572	-0.554
Early Maladaptive Schemas	193.1	43.60	-0.630	0.776
Cognitive Emotion Regulation	66.57	8.08	-0.529	-0.625

Table 2 presents the Pearson correlation information between the variables.

Table 2

Correlation Matrix Between Predictor, Mediator, and Dependent Variables in the Final Model

	1	2	3
1. Social Anxiety	1		
2. Early Maladaptive Schemas	0.85	1	
3. Cognitive Emotion Regulation	-0.79	-0.90	1

All P < 0.01

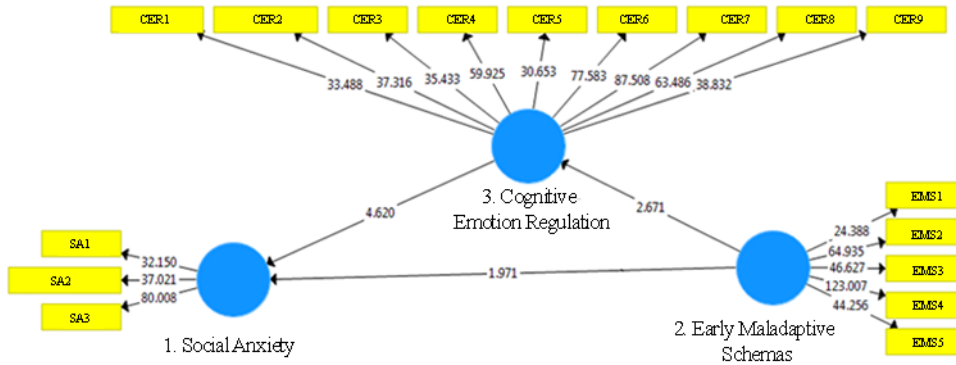
According to the results of the correlation matrix, there is a significant relationship between early maladaptive schemas and social anxiety ($r = 0.85$) and cognitive emotion regulation ($r = -0.79$) ($P < 0.001$). Additionally, there is a significant relationship between cognitive emotion regulation and social anxiety ($r = -0.79$) ($P < 0.001$). Structural equation modeling was used to analyze the data and examine the research model. Given the small sample size, partial least squares (PLS-3) was used for structural equations, and the regression coefficients for direct and indirect effects in all model pathways were reported. To evaluate the structural model, indices such as R^2 , redundancy validity, common validity index, overall model fit index, and average variance extracted (AVE) were used. The significance of path coefficients was evaluated using bootstrapping.

Figure 1 shows the structural model of the research based on standardized regression coefficients in students using PLS software. In this figure, cognitive emotion regulation, early maladaptive schemas, and social anxiety are latent variables represented by circles, and these variables are estimated using indicators (subscales) connected to them, represented by rectangles. Figure 2 shows the structural model of the research based on t-statistic values in students using PLS software. Table 3 shows the structural model quality indices for the student group. The R^2 index shows the explained variance of the latent endogenous variables. Chin (1998) described R^2 values of 0.67, 0.33, and 0.19 as strong, moderate, and weak, respectively, in structural equations. The R^2 values for social anxiety and cognitive emotion regulation are 0.78 and 0.90, respectively, indicating that all exogenous variables (early maladaptive schemas) can predict 78% of the variance in social anxiety and cognitive

emotion regulation in students, which is considered moderate.

Figure 1

Structural Model of the Research (Standardized Regression Coefficients)



The CV-red index indicates the structural quality of the model, and the CV-com index shows the common validity of each latent component. These indices were positive for all variables, indicating good model quality. The AVE values represent the average variance shared between a construct

and its indicators. Fornell and Larcker recommend AVE values greater than 0.50, meaning the construct explains about 50% or more of the variance in its indicators. Therefore, the AVE values indicate good discriminant validity for all model constructs.

Figure 2

Structural Model of the Research (t-Statistic Values)

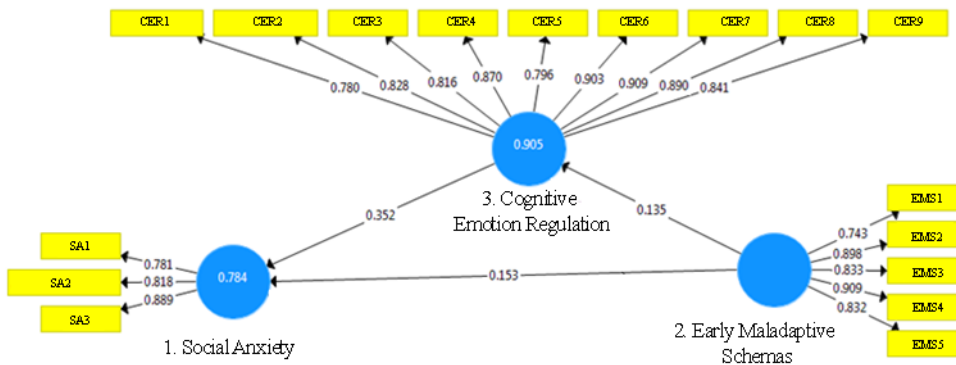


Figure 2 shows the standardized path coefficients between the research variables, and Figure 2 presents the t-statistic values between the research variables. As the standardized coefficients increase, the t-statistic increases, and t-statistic values higher than 1.96 at the 0.05 level indicate significant pathways. To assess the overall fit of the structural model, the goodness-of-fit (GOF) index, which equals the square root of the product of the average variance extracted and the R² values of the dependent variables, was used. According to Tenenhaus et al. (1998), GOF values of 0.10, 0.25, and 0.36 are weak, moderate, and strong,

respectively, for model fit. The GOF index in this study was 0.765, indicating strong model fit. Therefore, the overall fit of the model is confirmed, and both the structural and measurement models have good quality in explaining the research variables.

$$\text{Goodness of Fit} = \sqrt{(\text{Average Shared Variance} \times \text{Explained Variance})} = \sqrt{(0.747 \times 0.784)} = 0.765$$

Thus, based on the estimated indices, the structural relationship between early maladaptive schemas and social anxiety is mediated by cognitive emotion regulation in students.

Table 3*Structural Model Quality Indices in the Student Group*

Variable	R ²	Adjusted R ²	CV-red	CV-com	AVE	CR	Cronbach's Alpha
Cognitive Emotion Regulation	0.905	0.905	0.213	0.724	0.689	0.959	0.951
Social Anxiety	0.784	0.783	0.104	0.330	0.689	0.869	0.773
Early Maladaptive Schemas	-	-	-	0.340	0.714	0.926	0.899

Considering the obtained values for Q² and the three threshold values of 0.02, 0.15, and 0.30, which were described by Henseler et al. (2016) as weak, moderate, and

strong, respectively, the predictive power for the variables in this model shows appropriate and acceptable predictive strength, and the structural model fit is confirmed.

Table 4*Standardized Regression Coefficients and t-Statistic Values for Direct Effects*

Variable Relationship	B	t	Lower Bound (95% CI)	Upper Bound (95% CI)	p
Early Maladaptive Schemas ---> Social Anxiety	0.15	1.97	0.121	0.324	0.001

Based on the results in Table 4, the path coefficient for the effect of early maladaptive schemas on social anxiety was calculated as 0.15, with a t-value of 1.97, which is higher than 1.96. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted with 95% confidence. Thus, it can be concluded that there is a significant relationship between early maladaptive schemas and social anxiety in students. To examine the mediating effect, the

method by Nitzl et al. (2016) was used. In this method, the indirect effect is obtained by multiplying the direct effects, and then the significance of the mediating effect is assessed using the bootstrapping technique. Bootstrapping is a process that randomly extracts several subsamples (e.g., 5000) with replacement from the original data. PLS software uses each subsample to estimate the effects.

Table 5*Indirect Effects*

Variable Relationship	B	t	p.value	Lower Bound	Upper Bound
Early Maladaptive Schemas ---> Emotion Regulation ---> Social Anxiety	0.271	2.312	0.001	0.172	0.425

The results in Table 5 show that the indirect effect of early maladaptive schemas and social anxiety, mediated by cognitive emotion regulation, is 0.271 and significant at the 0.05 level. Therefore, with 95% confidence, cognitive emotion regulation plays a mediating role in the relationship between early maladaptive schemas and social anxiety in students.

4. Discussion and Conclusion

Based on the results, the path coefficient for the effect of early maladaptive schemas on social anxiety was calculated as 0.15, with a t-value of 1.97, which is higher than 1.96. Therefore, the null hypothesis is rejected, and the alternative hypothesis is accepted with 95% confidence. Thus, it can be stated that there is a significant relationship between early maladaptive schemas and social anxiety in students. The

results of this hypothesis are consistent with the findings of prior studies (Leahy, 2018; Naderi et al., 2022; Thimm & Chang, 2022). In explaining this finding, it can be stated that early maladaptive schemas are the deepest psychological structures that interact with negative and stressful life events. Cognitive and attachment theories suggest that negative childhood experiences become internalized, shaping the child's responses to external events. According to Beck, experiencing negative and intrusive parenting styles leads to the development of a set of rigid, negative, and complex beliefs about the self, the world, and the future, which are resistant to change. When a maladaptive schema is activated by exposure to schema-triggering situations and stimuli, the individual experiences emotions and bodily sensations that may be consciously or unconsciously linked to early memories. Students, in early life, develop maladaptive

responses and coping strategies to avoid experiencing intense emotions and distress. In another explanation, researchers have shown that psychological disorders such as depression and anxiety arise from biased information processing, which leads to automatic thought patterns characterized by pessimism and negative, unrealistic interpretations. According to cognitive theories, early maladaptive schemas remain latent and dormant until they are activated by external stressors. The core constructs of early maladaptive schemas are biased information processing, which distorts individuals' perceptions and thoughts (Leahy, 2018).

The results show that the indirect effect of early maladaptive schemas on social anxiety, mediated by cognitive emotion regulation, was 0.271, which is significant at the 0.05 level. Therefore, with 95% confidence, cognitive emotion regulation mediates the relationship between early maladaptive schemas and social anxiety in students. The results of this hypothesis are consistent with the findings of Zarei Davijani et al. (2023). In explaining this finding, it can be stated that problems and issues arise for all individuals; however, what is determining is the way they react to those problems and challenges. Ineffective coping not only does not help but may worsen the individual's situation and likely create a vicious cycle of conflicts, concerns, and issues. Over time, the individual's conflicts and problems may become more widespread and advanced, making intervention for improvement more difficult. Emotion-focused coping involves strategies that reduce emotional feelings, express emotions, and prevent appropriate actions in stressful situations. The use of cognitive emotion regulation prevents individuals from directly and effectively engaging with the problem and reduces their capacity to solve the issue. This condition disrupts cognitive coherence and emotional stability, reducing mental health. Cognitive and emotional disturbance also impairs the ability to correctly recognize the source of stress and negatively impacts mental health (Zarei Davijani et al., 2022). Thus, it can be assumed that there is a reciprocal relationship between coping strategies and mental health.

5. Limitations and Suggestions

One of the limitations of the present study was that it was quantitative and relied on data collected through questionnaires from a population of students who had not sought treatment at medical centers. This included the lack

of control over demographic variables such as age, social, and economic factors, which may require caution when generalizing the findings. Respondents' psychological stress could have influenced their responses. Using qualitative research methods, such as structured, semi-structured, or unstructured interviews in a clinical population of individuals seeking treatment at medical centers, could provide deeper insights into the impact of the study variables on social anxiety. It is recommended that future research include control variables to obtain more accurate results. Future researchers are also encouraged to conduct follow-up studies to determine the role of anxiety and stress over a longer period.

To prevent and control social anxiety, it is recommended that educational workshops be held for parents to raise their awareness of the formation of maladaptive schemas. It is also suggested that helpful training in cognitive emotion regulation and other preparations for student life be provided in advance, so primary prevention can be undertaken before the disorder emerges. Given the detrimental effects of early maladaptive schemas that form in early developmental stages and impact student performance, it is suggested that effective interactive methods and schema therapy approaches (e.g., schema therapy) be taught as a university course to reduce negative outcomes like social anxiety. In students with social anxiety, schema therapy can be used as a psychotherapeutic approach, alongside medical treatment, to reduce dysfunctional beliefs and schemas in these patients.

Authors' Contributions

Authors contributed equally to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. This article is derived from the first author's master's thesis at Lahijan Branch, Islamic Azad University, Lahijan, Iran. It has an ethics code of IR.IAU.LIAU.REC.2024.006, issued by the Ethics Committee of the Islamic Azad University, Lahijan Branch.

References

- Ahmed Leitão, F., Rosenstein, D., Marx, M., Young, S., Korte, K., & Seedat, S. (2019). Posttraumatic Stress Disorder, Social Anxiety Disorder, and Childhood Trauma: Differences in Hippocampal Subfield Volume. *Psychiatry Research: Neuroimaging*, 284, 45-52. <https://doi.org/https://doi.org/10.1016/j.psychresns.2018.12.015>
- APA, A. P. A. (2022). *Diagnostic And Statistical Manual Of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)*. <https://doi.org/10.1176/appi.books.9780890425787>
- Biederman, J., Hirshfeld-Becker, D. R., Rosenbaum, J. F., Herot, C., Friedman, D., & Snidman, N. (2001). Further Evidence of Association Between Behavioral Inhibition and Social Anxiety in Children. *American Journal of Psychiatry*, 158, 1673-1679. <https://doi.org/https://doi.org/10.1176/appi.ajp.158.10.1673>
- Dryman, M. T., & Heimberg, R. G. (2018). Emotion Regulation in Social Anxiety and Depression: A Systematic Review of Expressive Suppression and Cognitive Reappraisal. *Clinical Psychology Review Journal*, 65, 17-42. <https://doi.org/https://doi.org/10.1016/j.cpr.2018.07.004>
- Ebrahimi, G., Ghazanfari, A., Mashhadizadeh, S., & Rahimi, S. (2023). The Relationship Between Childhood Trauma and Suicidal Thoughts Considering the Mediating Role of Early Maladaptive Schemas. *Journal of psychiatric nursing*, 11(1), 94-105. https://ijpn.ir/browse.php?a_id=2165&sid=1&slc_lang=en
- Ghazanfari, F., & Naderi, M. (2019). Developing a Model for the Etiology of Social Anxiety in Adolescents Based on the Components of Anxiety Sensitivity, Negative Emotional Regulation, and Insecure Attachment Style, with the Mediating Role of Emotion-Focused Coping Strategies. *Journal of Clinical Psychology Studies*, 9(35), 98-130. https://jcps.atu.ac.ir/article_10389.html?lang=en
- Hawke, L. D., & Provencher, M. D. (2011). Schema Theory and Schema Therapy in Mood and Anxiety Disorders: A Review. *Journal of Cognitive Psychotherapy*, 25(4), 257-276. <https://doi.org/https://doi.org/10.1891/0889-8391.25.4.257>
- Kaya, Y., & Aydin, A. (2020). The Mediating Role of Early Maladaptive Schemas in the Relationship Between Attachment and Mental Health Symptoms of University Students. *Journal of Adult Development*. <https://doi.org/https://doi.org/10.1007/s10804-020-09352-2>
- Kessler, R. C., Petukhova, M., Sampson, N. A., Zaslavsky, A. M., & Wittchen, H. U. (2012). Twelve-Month and Lifetime Prevalence and Lifetime Morbid Risk of Anxiety and Mood Disorders in the United States. *International Journal of Methods in Psychiatric Research*, 21, 84-169. <https://doi.org/https://doi.org/10.1002/mpr.1359>
- Leahy, R. L. (2018). Emotional Schemas and Resistance to Change in Anxiety Disorders. *Cognitive and Behavioral Practice*, 14(1), 36-65. <https://doi.org/https://doi.org/10.1016/j.cbpra.2006.08.001>
- Naderi, M., Sadeghi, M., & Rezaei, F. (2022). A Causal Model of Social Anxiety Based on Early Maladaptive Schemas and Childhood Traumas, with the Mediating Role of Emotion-Focused Coping Strategies. *Cognitive and Behavioral Sciences Research*, 12(23), 49-72. https://cbs.ui.ac.ir/article_27310.html?lang=en
- Nicholson, C. (2018). What to Do About Social Anxiety Disorder. *Harvard Women's Health*.
- Reghuram, R., & Mathias, J. (2014). A Study on the Occurrence of Social Anxiety Among Nursing Students and Its Correlation with Professional Adjustment in Selected Nursing Institutions at Mangalore. *Nitte University Journal of Health Science*, 4(2), 9-64. https://www.researchgate.net/publication/340904971_A_STUDY_ON_OCCURRENCE_OF_SOCIAL_ANXIETY_AMONG_NURSING_STUDENTS_AND_ITS_CORRELATION_WITH_PROFESSIONAL_ADJUSTMENT_IN_SELECTED_NURSING_INSTITUTIONS_AT_MANGALORE
- Sackl-Pammer, P., Jahn, R., & Özlü-Erkilic, Z. (2019). Social Anxiety Disorder and Emotion Regulation Problems in Adolescents. *Child and adolescent psychiatry and mental health*, 13, 37. <https://doi.org/https://doi.org/10.1186/s13034-019-0297-9>
- Stein, M. B., & Stein, D. J. (2018). Social Anxiety Disorder. *Lancet*, 371(9618), 1115-1125. [https://doi.org/https://doi.org/10.1016/S0140-6736\(08\)60488-2](https://doi.org/https://doi.org/10.1016/S0140-6736(08)60488-2)
- Thimm, C. J., & Chang, M. (2022). Early Maladaptive Schemas and Mental Disorders in Adulthood: A Systematic Review and Meta-Analysis. *International Journal of Cognitive*, 15, 371-413. <https://doi.org/https://doi.org/10.1007/s41811-022-00149-7>
- Young, J., Klosko, J. S., & Weishaar, M. E. (2023). *Schema Therapy: A Practitioner's Guide*. Guilford Press. https://books.google.com/books/about/Schema_Therapy.html?id=vScjGGgJEZgC
- Zarei Davijani, A., Dabiri, S., Jabbari Moghadam, S., Fakhri, P., & Molaraza, Z. (2022). Prediction of Social Anxiety Based on Childhood Trauma with the Mediating Role of Alexithymia in Adolescents. 2nd National Conference on Child and Adolescent Clinical Psychology, Ardabil.