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Comparison of Early Maladaptive Schemas and Positive and Negative Affect in Individuals with Anxiety Disorders and Normal Individuals

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ABSTRACT

The objective of this study was to compare early maladaptive schemas and levels of positive and negative affect between individuals diagnosed with anxiety disorders and psychologically normal individuals. This applied, descriptive–causal-comparative study was conducted on individuals who referred to counseling centers in Qom during 2022–2023. The sample consisted of 60 participants, including 30 individuals diagnosed with anxiety disorders by a psychiatrist and 30 normal individuals, selected through convenience sampling. Data collection instruments included the Young Early Maladaptive Schemas Questionnaire–Short Form and the Positive and Negative Affect Schedule. Data were analyzed using independent-samples t tests with SPSS version 26 after verifying assumptions of normality and homogeneity of variances through Levene's test. Inferential analyses revealed statistically significant differences between the two groups on all schema domains. Individuals with anxiety disorders scored significantly higher on Disconnection and Rejection ($t = 11.035$, $p < .001$), Impaired Autonomy and Performance ($t = 11.597$, $p < .001$), Other-Directedness ($t = 6.875$, $p < .001$), Overvigilance and Inhibition ($t = 9.174$, $p < .001$), and Impaired Limits ($t = 10.594$, $p < .001$). Furthermore, the anxiety group exhibited significantly lower Positive Affect ($t = 9.167$, $p < .001$) and significantly higher Negative Affect ($t = 11.194$, $p < .001$) compared with the normal group. The findings indicate that individuals with anxiety disorders demonstrate a pervasive pattern of maladaptive cognitive schemas accompanied by profound affective dysregulation, characterized by elevated negative affect and diminished positive affect, highlighting the importance of integrative cognitive–emotional models in the understanding and treatment of anxiety disorders.

Keywords: Anxiety, early maladaptive schemas, positive affect, negative affect.

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Introduction

Anxiety disorders represent one of the most prevalent and disabling categories of mental health conditions worldwide and are associated with profound personal, social, and economic burdens. These disorders are characterized by excessive fear, persistent worry, heightened physiological arousal, and maladaptive

behavioral patterns that significantly impair daily functioning and quality of life. Contemporary psychological research increasingly recognizes that anxiety does not emerge in isolation but is rooted in complex interactions among cognitive structures, emotional processes, and developmental experiences that shape vulnerability to psychological distress across the lifespan (1-3). Among the most influential conceptual frameworks for understanding these vulnerability mechanisms is schema theory, particularly the construct of early maladaptive schemas, which has become central to modern cognitive-behavioral and integrative models of psychopathology.

Early maladaptive schemas are pervasive and enduring patterns of thoughts, emotions, memories, and bodily sensations that originate in early life and become elaborated throughout development. These schemas form as a consequence of unmet core emotional needs, adverse childhood experiences, dysfunctional family environments, and repeated interpersonal trauma. Once established, they guide information processing, influence emotional responses, and shape behavioral strategies in ways that maintain psychological disorders, including anxiety, depression, and interpersonal dysfunction (1, 4-6). Schema theory proposes that individuals with anxiety disorders exhibit heightened activation of specific maladaptive schemas—such as abandonment, vulnerability, mistrust, emotional deprivation, and unrelenting standards—that amplify perceived threat, intensify negative affect, and undermine emotional regulation capacities.

A growing body of empirical research provides strong support for the association between early maladaptive schemas and anxiety-related symptomatology. Longitudinal studies indicate that maladaptive schemas serve as stable vulnerability factors that predict the development and persistence of anxiety and depressive symptoms over time (4). Cross-cultural investigations further demonstrate that these schemas mediate the impact of childhood maltreatment on later psychological distress, suggesting that schemas operate as core mechanisms linking early adversity to adult psychopathology (3, 5). In athlete populations, maladaptive schemas have been identified as key mechanisms through which irrational beliefs contribute to psychological distress, highlighting the broad applicability of schema-based models across diverse contexts (7). Similar findings have been reported in university students, where early maladaptive schemas predict engagement in risky behaviors and emotional dysregulation (8). In Iranian samples, the role of maladaptive schemas has been documented in adolescents, individuals with social anxiety, and clinical populations, further confirming their relevance in non-Western cultural contexts (9-11).

Although cognitive schemas provide the structural foundation for vulnerability to anxiety, emotional processes represent the dynamic mechanisms through which schemas exert their effects on psychological functioning. In this regard, affective experience—particularly the balance between positive and negative affect—has emerged as a critical determinant of mental health outcomes. The circumplex model of mood conceptualizes affect as consisting of two relatively independent dimensions: positive affect, reflecting energy, enthusiasm, engagement, and pleasure; and negative affect, reflecting distress, fear, anger, guilt, and nervousness (12). Individuals with anxiety disorders typically display elevated negative affect and diminished positive affect, a pattern that contributes to symptom severity, functional impairment, and poor treatment outcomes (13-15).

Extensive research has documented the central role of negative affect in the etiology and maintenance of anxiety disorders. Negative affectivity amplifies threat perception, sustains hypervigilance, and reinforces maladaptive coping strategies such as avoidance, suppression, and rumination. It also increases

vulnerability to comorbid conditions, including depression, nonsuicidal self-injury, and psychosomatic symptoms (12, 15). Conversely, positive affect functions as a protective factor, fostering resilience, cognitive flexibility, adaptive coping, and psychological well-being. Reduced positive affect has been linked to poor emotion regulation, impaired interpersonal functioning, and greater psychological distress in both clinical and nonclinical populations (13, 14, 16).

Crucially, emerging evidence suggests that early maladaptive schemas and affective processes are deeply intertwined. Schemas influence emotional experience by shaping the interpretation of events, the selection of coping responses, and the regulation of affective states. Individuals with dominant maladaptive schemas are more likely to experience intense negative affect, reduced positive affect, and chronic emotional dysregulation (6, 11). In adolescents, negative emotion regulation has been shown to mediate the relationship between early maladaptive schemas and psychological distress, highlighting the role of affective mechanisms in schema-driven psychopathology (11). Similarly, cognitive emotion regulation strategies have been identified as mediators between maladaptive schemas and anxiety sensitivity, reinforcing the integrative nature of cognitive-affective interactions in anxiety disorders (17).

From a developmental perspective, childhood adversity and dysfunctional parenting styles contribute simultaneously to the formation of maladaptive schemas and to enduring affective vulnerabilities. Psychological maltreatment in childhood predicts adolescent depressive symptoms through its effects on social anxiety and maladaptive emotion regulation strategies, which are themselves closely associated with schema activation patterns (3). Parenting styles have likewise been shown to influence the development of anxiety sensitivity through their impact on schemas and emotion regulation processes (17). These findings underscore the necessity of examining both cognitive structures and affective processes when investigating anxiety pathology.

Despite the substantial evidence linking early maladaptive schemas, affective experience, and anxiety, relatively few studies have directly compared these constructs between individuals with diagnosed anxiety disorders and psychologically normal individuals. While prior research has examined schema differences across clinical groups such as depression and social anxiety (9, 10), and intervention studies have explored the effects of psychotherapy on affect and anxiety symptoms (13, 14, 18), systematic comparisons of schema domains and affective profiles between anxious and non-anxious populations remain limited, particularly within Middle Eastern contexts.

Understanding these differences is of considerable clinical importance. Identifying the specific schema patterns and affective characteristics that distinguish individuals with anxiety disorders from normal individuals can inform assessment, case formulation, and treatment planning. Schema-focused interventions and emotion-focused therapies increasingly demonstrate efficacy in reducing anxiety symptoms, improving emotion regulation, and enhancing marital and interpersonal functioning (18). Moreover, treatment adherence, health anxiety, and psychological well-being are strongly influenced by affective states and cognitive vulnerabilities, reinforcing the need for integrative therapeutic approaches that simultaneously target schemas and affective functioning (6, 16).

Within the Iranian cultural context, additional factors such as sociocultural norms, family structure, and exposure to social stressors further shape the expression of anxiety, schemas, and affective processes. Studies in Iranian samples have documented the associations among maladaptive schemas, psychological

distress, social anxiety, emotion regulation, and behavioral problems, emphasizing the cross-cultural robustness of these constructs while also highlighting culturally specific manifestations (9-11). However, comparative investigations that simultaneously examine schema domains and affective dimensions in Iranian individuals with anxiety disorders versus normal individuals remain scarce.

In light of the theoretical and empirical evidence, an integrated examination of early maladaptive schemas and positive and negative affect offers a comprehensive framework for understanding the cognitive-emotional architecture of anxiety disorders. Such an approach not only advances theoretical models of psychopathology but also provides practical insights for prevention, diagnosis, and intervention strategies aimed at reducing the global burden of anxiety.

Therefore, the aim of the present study was to compare early maladaptive schemas and positive and negative affect in individuals with anxiety disorders and normal individuals.

Methods and Materials

Study Design and Participants

In the present study, the statistical population consisted of all individuals who referred to counseling centers in the city of Qom during **2022–2023**, whose anxiety disorder had been clinically confirmed by a psychiatrist, as well as normal individuals. Using the G*Power software, a total sample size of 60 participants was determined, including 30 individuals with anxiety disorders and 30 normal individuals, who were selected through convenience sampling. Using G*Power for a multivariate analysis of variance (MANOVA) with three dependent variables and two comparison groups, under the stated assumptions, the recommended sample size was 30 participants per group.

Inclusion Criteria

- Clinical confirmation of an anxiety disorder by a psychiatrist
- Absence of severe psychiatric disorders other than anxiety disorders
- No history of psychiatric hospitalization
- Age range between 20 and 50 years
- Residency in the city of Qom
- Provision of informed consent
- Complete completion of the research questionnaires

Exclusion Criteria

- Illiteracy
- Age outside the range of 20–50 years
- Non-residency in the city of Qom
- Withdrawal of consent

One of the common methods of collecting field data is the questionnaire method, which enables large-scale data collection. For the purpose of data collection, questionnaires were selected based on the study variables. The participants were informed that the purpose of the study was purely research-oriented and that all information would remain strictly confidential. After obtaining informed consent, the questionnaires were administered to the participants. Finally, all questionnaires were collected and prepared for data analysis.

Data Collection

Young Early Maladaptive Schemas Questionnaire (1988): The Young Schema Questionnaire – Short Form is a self-report instrument designed to assess early maladaptive schemas. Respondents rate themselves on a five-point Likert scale based on the description of each statement. The questionnaire items are categorized by schemas. This short form assesses 15 early maladaptive schemas, with each schema (subscale) consisting of five items. Participants rate each statement on a five-point Likert scale (very high, high, moderate, low, very low), scored from 5 to 1, respectively. Given that each of the 75 items is scored from 1 to 5, the minimum possible total score is 75 and the maximum is 450. The minimum and maximum scores for each domain were calculated as follows. The first domain, Disconnection and Rejection (emotional deprivation, abandonment/instability, mistrust/abuse, social isolation, defectiveness/shame), includes items 1 to 25, with a maximum score of 150. The second domain, Impaired Autonomy and Performance (failure, dependence/incompetence, vulnerability to harm or illness, enmeshment/undeveloped self), includes items 26 to 45, with a minimum score of 20 and a maximum score of 100. The third domain, Impaired Limits (entitlement and insufficient self-control/self-discipline), includes items 66 to 75, with a minimum score of 10 and a maximum score of 50. The fourth domain, Other-Directedness (subjugation and self-sacrifice), includes items 46 to 55, with a minimum score of 10 and a maximum score of 55. The fifth domain, Overvigilance and Inhibition (emotional inhibition and unrelenting standards/hypercriticalness), includes items 56 to 65, with a minimum score of 10 and a maximum score of 50. The first comprehensive study on the psychometric properties of the Young Schema Questionnaire was conducted by Schmidt, Joiner, Young, and Telch (1995). In a nonclinical population, Cronbach's alpha coefficients for the subscales ranged from .50 to .82. These researchers also demonstrated that the Young Schema Questionnaire had high correlations with measures of psychological distress and personality disorders, indicating satisfactory validity (Schmidt et al., 1995). In Iran, the standardization of this questionnaire was conducted by Ahi (2005) on a sample of 387 university students from Tehran, including 252 females and 135 males, selected through multistage random sampling from Allameh Tabataba'i University, Shahid Beheshti University, Tarbiat Modares University, and the Science and Research Branch. Internal consistency, as measured by Cronbach's alpha, was .97 for females and .98 for males. Accordingly, the reliability coefficients for the schemas were as follows: emotional deprivation (.87), abandonment (.78), mistrust/abuse (.83), social isolation (.87), defectiveness/shame (.88), failure (.90), dependence/incompetence (.86), vulnerability (.90), enmeshment/entrapment (.79), subjugation (.83), self-sacrifice (.82), emotional inhibition (.86), unrelenting standards (.72), entitlement (.84), and insufficient self-control/self-discipline (.87). Zolfaghari, Fathi-Far, and Abedi (2008) administered the short form of the Young Schema Questionnaire to 70 couples. In their study, the internal consistency coefficient for the entire questionnaire, calculated using Cronbach's alpha, was .94. The coefficients for the five domains were as follows: disconnection and rejection (.91), impaired autonomy and performance (.90), impaired limits (.73), other-directedness (.67), and overvigilance and inhibition (.78).

Positive and Negative Affect Schedule (Watson et al., 1988): This questionnaire assesses two subscales—Positive Affect (10 items) and Negative Affect (10 items)—as two orthogonal dimensions, measured on five-point Likert scales with scores ranging from 10 to 50. The psychometric properties of the Persian version of the Positive and Negative Affect Schedule were examined and confirmed in several studies

conducted between 2002 and 2006 on both clinical and nonclinical samples. In these studies, Cronbach's alpha coefficients for the Positive Affect items ranged from .83 to .91 and for Negative Affect from .81 to .89 in clinical samples. In nonclinical samples, these coefficients ranged from .85 to .90 for Positive Affect and from .83 to .88 for Negative Affect. All coefficients were statistically significant at $p < .001$, confirming the internal consistency of the subscales. Convergent and discriminant validity of the Persian version were supported through concurrent administration of the Beck Depression Inventory, Beck Anxiety Inventory, and the General Health Questionnaire in both clinical and nonclinical groups. The correlation coefficients of the Positive and Negative Affect subscales with the Beck Depression Inventory were −.44 and .53, with the Beck Anxiety Inventory were −.38 and .47, with psychological distress were −.42 and .51, and with psychological well-being were .54 and −.43, respectively. All correlations were statistically significant at $p < .001$. The results of confirmatory factor analysis, identifying two factors of Positive Affect and Negative Affect, further supported the construct validity of the Persian version of the questionnaire.

Data analysis

In the present study, after collecting the questionnaires and ensuring their completeness, the scores were calculated using the specified procedures and analyzed using the following statistical methods:

1. Descriptive statistics, including mode, median, mean, standard deviation, variance, and related indices.
2. Inferential statistics, appropriate to the level of measurement and statistical assumptions of the data, using the independent samples *t*-test with SPSS version 26.

Findings and Results

In the present study, within the group of individuals with anxiety disorders, 70% were female and 30% were male. In the normal group, 30% were female and 70% were male. In the group with anxiety disorders, 86.7% were aged 20–30 years, 6.7% were aged 30–40 years, and 6.7% were aged 40–50 years. In the normal group, 16.7% were aged 20–30 years, 43.3% were aged 30–40 years, and 40% were aged 40–50 years. In the group with anxiety disorders, 26.7% had a high school diploma, 30% had an associate degree, and 43.3% had a bachelor's degree. In the normal group, 6.7% had less than a high school diploma, 10% had a high school diploma, 36.7% had an associate degree, 30% had a bachelor's degree, and 16.7% had a master's degree. In the group with anxiety disorders, 63.3% were single and 36.7% were married. In the normal group, 23.3% were single and 76.7% were married. In the group with anxiety disorders, 23.3% were employed, 56.7% were unemployed, and 20% were homemakers. In the normal group, 36.6% were employed, 46.7% were unemployed, and 16.7% were homemakers. In the group with anxiety disorders, 70% had no children, 10% had one child, 13.3% had two children, and 6.7% had more than two children. In the normal group, 40% had no children, 23.3% had one child, 23.3% had two children, and 13.3% had more than two children.

Table 1. Descriptive Statistics of Early Maladaptive Schemas in Individuals with Anxiety Disorders and Normal Individuals

Variable	Group	N	Mean	SD	Standard Error
Disconnection and Rejection	Anxiety Disorders	30	89.87	17.238	3.147
	Normal	30	48.73	10.938	1.997
Impaired Autonomy and Performance	Anxiety Disorders	30	71.40	13.826	2.524
	Normal	30	36.80	8.711	1.590
Other-Directedness	Anxiety Disorders	30	35.67	7.145	1.305
	Normal	30	22.87	7.276	1.328
Overvigilance and Inhibition	Anxiety Disorders	30	37.70	6.363	1.162
	Normal	30	23.80	5.327	0.972
Impaired Limits	Anxiety Disorders	30	37.03	5.922	1.081
	Normal	30	22.83	4.340	0.792

Table 1 shows that the mean ± standard deviation of Disconnection and Rejection was 89.87 ± 17.238 in the group with anxiety disorders and 48.73 ± 10.938 in the normal group; the mean ± standard deviation of Impaired Autonomy and Performance was 71.40 ± 13.826 in the anxiety disorders group and 36.80 ± 8.711 in the normal group; the mean ± standard deviation of Other-Directedness was 35.67 ± 7.145 in the anxiety disorders group and 22.87 ± 7.276 in the normal group; the mean ± standard deviation of Overvigilance and Inhibition was 37.70 ± 6.363 in the anxiety disorders group and 23.80 ± 5.327 in the normal group; and the mean ± standard deviation of Impaired Limits was 37.03 ± 5.922 in the anxiety disorders group and 22.83 ± 4.340 in the normal group.

Table 2. Results of the Independent Samples t-Test Comparing Early Maladaptive Schemas Between Individuals With Anxiety Disorders and Normal Individuals

Variable	Variance Assumption	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	95% CI Lower	95% CI Upper
Disconnection and Rejection	Equal variances assumed	5.994	.217	11.035	58	.001	41.133	33.672	48.595
	Equal variances not assumed			11.035	49.096	.001	41.133	33.643	48.623
Impaired Autonomy and Performance	Equal variances assumed	5.437	.223	11.597	58	.001	34.600	28.628	40.572
	Equal variances not assumed			11.597	48.892	.001	34.600	28.604	40.596
Other-Directedness	Equal variances assumed	1.309	.257	6.875	58	.001	12.800	9.073	16.527
	Equal variances not assumed			6.875	57.981	.001	12.800	9.073	16.527
Overvigilance and Inhibition	Equal variances assumed	2.353	.555	9.174	58	.001	13.900	1.515	10.867
	Equal variances not assumed			9.174	56.257	.001	13.900	1.515	10.865
Impaired Limits	Equal variances assumed	2.329	.569	10.594	58	.001	14.200	1.340	11.517
	Equal variances not assumed			10.594	53.176	.001	14.200	1.340	11.512

The results of Levene's F test indicate that the assumption of homogeneity of variance for Disconnection and Rejection in individuals with anxiety disorders and normal individuals is supported ($F = 5.994$, $p = .217 > .05$). Therefore, assuming equal variances, the mean difference in Disconnection and Rejection between individuals with anxiety disorders and normal individuals is 41.133. Given the positive mean difference and the results of the independent-samples t test, the null hypothesis of equal means for Disconnection and Rejection between the two groups is rejected ($t(58) = 11.035$, $p = .001 < .05$). Because the mean score for

Disconnection and Rejection is higher in individuals with anxiety disorders than in normal individuals, it can be concluded, with a 95% confidence interval, that there is a significant difference in Disconnection and Rejection between individuals with anxiety disorders and normal individuals.

The results of Levene's F test indicate that the assumption of homogeneity of variance for Impaired Autonomy and Performance in individuals with anxiety disorders and normal individuals is supported (F = 5.437, p = .223 > .05). Therefore, assuming equal variances, the mean difference in Impaired Autonomy and Performance between individuals with anxiety disorders and normal individuals is 34.600. Given the positive mean difference and the results of the independent-samples t test, the null hypothesis of equal means for Impaired Autonomy and Performance between the two groups is rejected (t(58) = 11.597, p = .001 < .05). Because the mean score for Impaired Autonomy and Performance is higher in individuals with anxiety disorders than in normal individuals, it can be concluded, with a 95% confidence interval, that there is a significant difference in Impaired Autonomy and Performance between individuals with anxiety disorders and normal individuals.

The results of Levene's F test indicate that the assumption of homogeneity of variance for Other-Directedness in individuals with anxiety disorders and normal individuals is supported (F = 1.309, p = .257 > .05). Therefore, assuming equal variances, the mean difference in Other-Directedness between individuals with anxiety disorders and normal individuals is 12.810. Given the positive mean difference and the results of the independent-samples t test, the null hypothesis of equal means for Other-Directedness between the two groups is rejected (t(58) = 6.875, p = .001 < .05). Because the mean score for Other-Directedness is higher in individuals with anxiety disorders than in normal individuals, it can be concluded, with a 95% confidence interval, that there is a significant difference in Other-Directedness between individuals with anxiety disorders and normal individuals.

The results of Levene's F test indicate that the assumption of homogeneity of variance for Overvigilance and Inhibition in individuals with anxiety disorders and normal individuals is supported (F = 2.353, p = .555 > .05). Therefore, assuming equal variances, the mean difference in Overvigilance and Inhibition between individuals with anxiety disorders and normal individuals is 13.900. Given the positive mean difference and the results of the independent-samples t test, the null hypothesis of equal means for Overvigilance and Inhibition between the two groups is rejected (t(58) = 9.174, p = .001 < .05). Because the mean score for Overvigilance and Inhibition is higher in individuals with anxiety disorders than in normal individuals, it can be concluded, with a 95% confidence interval, that there is a significant difference in Overvigilance and Inhibition between individuals with anxiety disorders and normal individuals.

The results of Levene's F test indicate that the assumption of homogeneity of variance for Impaired Limits in individuals with anxiety disorders and normal individuals is supported (F = 2.329, p = .569 > .05). Therefore, assuming equal variances, the mean difference in Impaired Limits between individuals with anxiety disorders and normal individuals is 14.200. Given the positive mean difference and the results of the independent-samples t test, the null hypothesis of equal means for Impaired Limits between the two groups is rejected (t(58) = 10.594, p = .001 < .05). Because the mean score for Impaired Limits is higher in individuals with anxiety disorders than in normal individuals, it can be concluded, with a 95% confidence interval, that there is a significant difference in Impaired Limits between individuals with anxiety disorders and normal individuals.

Table 3. Descriptive Statistics of Positive and Negative Affect in Individuals with Anxiety Disorders and Normal Individuals

Variable	Group	N	Mean	SD	Standard Error
Positive Affect	Anxiety Disorders	30	21.07	6.710	1.225
	Normal	30	35.40	5.321	0.972
Negative Affect	Anxiety Disorders	30	37.50	6.458	1.179
	Normal	30	19.30	6.132	1.119

Table 3 shows that the mean ± standard deviation of Positive Affect was 21.07 ± 6.710 in the group with anxiety disorders and 35.40 ± 5.321 in the normal group. In addition, the mean ± standard deviation of Negative Affect was 37.50 ± 6.458 in the group with anxiety disorders and 19.30 ± 6.132 in the normal group.

Table 4. Independent Samples t-Test Results Comparing Positive and Negative Affect Between Individuals With Anxiety Disorders and Normal Individuals

Variable	Variance Assumption	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	95% CI Lower	95% CI Upper
Positive Affect	Equal variances assumed	3.335	.565	9.167	58	.001	14.333	-17.463	-11.203
	Equal variances not assumed			9.167	55.137	.001	14.333	-17.467	-11.200
Negative Affect	Equal variances assumed	3.393	.533	11.194	58	.001	18.200	14.945	21.455
	Equal variances not assumed			11.194	57.845	.001	18.200	14.945	21.455

The results of Levene's F test indicate that the assumption of homogeneity of variance for Positive Affect in individuals with anxiety disorders and normal individuals is supported (F = 3.335, p = .565 > .05). Therefore, assuming equal variances, the mean difference in Positive Affect between individuals with anxiety disorders and normal individuals is 14.333. Given the positive mean difference and the results of the independent-samples t test, the null hypothesis of equal means for Positive Affect between the two groups is rejected ($t(58)$ = 9.167, p = .001 < .05). Because the mean score for Positive Affect is higher in normal individuals than in individuals with anxiety disorders, it can be concluded, with a 95% confidence interval, that there is a significant difference in Positive Affect between individuals with anxiety disorders and normal individuals.

The results of Levene's F test indicate that the assumption of homogeneity of variance for Negative Affect in individuals with anxiety disorders and normal individuals is supported (F = 3.393, p = .533 > .05). Therefore, assuming equal variances, the mean difference in Negative Affect between individuals with anxiety disorders and normal individuals is 18.200. Given the positive mean difference and the results of the independent-samples t test, the null hypothesis of equal means for Negative Affect between the two groups is rejected ($t(58)$ = 11.194, p = .001 < .05). Because the mean score for Negative Affect is higher in individuals with anxiety disorders than in normal individuals, it can be concluded, with a 95% confidence interval, that there is a significant difference in Negative Affect between individuals with anxiety disorders and normal individuals.

Discussion and Conclusion

The present study examined differences in early maladaptive schemas and positive and negative affect between individuals with anxiety disorders and normal individuals. The findings demonstrated that

individuals with anxiety disorders exhibited significantly higher levels of all five schema domains—Disconnection and Rejection, Impaired Autonomy and Performance, Other-Directedness, Overvigilance and Inhibition, and Impaired Limits—compared to normal individuals. In addition, individuals with anxiety disorders showed significantly lower positive affect and significantly higher negative affect. These results provide strong empirical support for cognitive–affective models of anxiety, which posit that dysfunctional cognitive structures and affective dysregulation operate synergistically in the etiology and maintenance of anxiety disorders (1, 6).

The elevated scores on Disconnection and Rejection among individuals with anxiety disorders are particularly noteworthy. This schema domain reflects core beliefs of emotional deprivation, abandonment, mistrust, social isolation, and defectiveness, which predispose individuals to heightened interpersonal threat sensitivity and chronic insecurity. These cognitive patterns intensify vulnerability to anxiety by amplifying perceived danger in social and emotional contexts. Similar findings have been reported in adolescents with social anxiety and in individuals with anxiety and depressive disorders, where Disconnection and Rejection emerged as one of the most robust predictors of symptom severity (9, 10). Longitudinal evidence further supports the causal role of these schemas in anxiety development, demonstrating that early maladaptive schemas prospectively predict anxiety symptoms over time (4). The present findings therefore reinforce the centrality of attachment-related schemas in the cognitive architecture of anxiety disorders.

The Impaired Autonomy and Performance domain was also significantly elevated in the anxiety group, reflecting beliefs of incompetence, vulnerability, failure, and dependence. These schemas undermine individuals' confidence in their capacity to manage life demands and foster chronic apprehension regarding potential harm or loss of control. This result aligns with previous research indicating that vulnerability-related schemas mediate the relationship between childhood maltreatment and later psychological distress (5) and that they serve as key mechanisms linking irrational beliefs to anxiety and distress (7). In Iranian samples, similar patterns have been observed among individuals with depression and anxiety, further supporting the cross-cultural generalizability of these cognitive risk factors (10, 11).

Significant group differences were also observed in Other-Directedness, indicating that individuals with anxiety disorders are more likely to prioritize others' needs, seek excessive approval, and suppress their own emotional needs. This interpersonal orientation fosters chronic self-monitoring and fear of rejection, which are core features of anxiety disorders. Yakın and colleagues (6) emphasized that such schemas interact with deficits in self-compassion and emotion regulation to intensify vulnerability to psychopathology. Moreover, research on parenting styles demonstrates that controlling and conditional parenting contributes to the development of Other-Directedness schemas, which subsequently predict anxiety sensitivity and maladaptive emotional processing (17). Thus, the present findings highlight the interpersonal dimension of anxiety-related schema pathology.

The Overvigilance and Inhibition domain was likewise elevated among anxious participants. This schema domain reflects rigid internal standards, emotional suppression, hyper-responsibility, and excessive threat monitoring. Individuals high in this domain experience persistent internal pressure to control emotions and meet unrealistic expectations, which perpetuates physiological hyperarousal and emotional exhaustion. These results are consistent with findings that maladaptive schemas interact with emotion regulation deficits to produce chronic psychological distress (6, 11). They also align with research demonstrating that

maladaptive emotion regulation strategies mediate the impact of childhood psychological maltreatment on anxiety and depressive symptoms (3).

Finally, the anxiety group showed significantly higher levels of Impaired Limits, reflecting difficulties in self-discipline, impulse control, and frustration tolerance. Although traditionally associated with externalizing behaviors, impaired limits have increasingly been recognized as contributors to internalizing disorders by undermining adaptive coping and emotional regulation capacities. Marengo and colleagues (8) demonstrated that maladaptive schemas, including impaired limits, predict engagement in risky behaviors and emotional dysregulation among university students. Similarly, Mohammadkhani et al. (19) found that deficits in emotion regulation mediate the effects of cognitive vulnerabilities on maladaptive behaviors and psychological symptoms, suggesting that impaired limits play a broader role in emotional psychopathology.

In addition to schema differences, the present study revealed pronounced affective disparities between the two groups. Individuals with anxiety disorders exhibited significantly lower positive affect and significantly higher negative affect than normal individuals. This affective profile is a hallmark of anxiety pathology and supports the bidimensional model of mood, which posits that positive and negative affect represent relatively independent systems with distinct implications for mental health (12). Elevated negative affect intensifies threat perception, maintains hypervigilance, and reinforces maladaptive coping strategies, while reduced positive affect undermines resilience, motivation, and emotional flexibility.

These findings are consistent with numerous empirical studies demonstrating that anxiety disorders are characterized by heightened negative affect and diminished positive affect (13, 14). Clinical intervention studies further indicate that therapeutic approaches that increase positive affect and reduce negative affect lead to substantial improvements in anxiety symptoms (14, 18). Moreover, negative affect has been identified as a key risk factor for nonsuicidal self-injury and emotional dysregulation, underscoring its central role in severe psychological dysfunction (15).

The integration of cognitive and affective findings in the present study provides strong support for contemporary integrative models of anxiety. Early maladaptive schemas appear to constitute the cognitive foundation of anxiety vulnerability, while affective dysregulation represents the emotional mechanism through which these vulnerabilities manifest clinically. Empirical evidence consistently demonstrates that emotion regulation mediates the relationship between schemas and psychological distress (11, 17). Thus, anxiety disorders may be conceptualized as disorders of both cognition and affect, arising from maladaptive developmental learning and sustained by dysfunctional emotional processing.

Importantly, the cultural context of the present study adds valuable evidence to the growing body of cross-cultural research on anxiety. The replication of schema–affect patterns in an Iranian sample suggests that these mechanisms transcend cultural boundaries, although sociocultural factors may shape their expression and content (9, 10). Understanding these culturally embedded patterns is essential for developing effective assessment tools and culturally sensitive interventions.

Overall, the findings of this study emphasize the necessity of comprehensive treatment approaches that simultaneously target early maladaptive schemas and affective dysregulation. Emerging evidence from emotional schema therapy and integrative cognitive-behavioral interventions demonstrates substantial efficacy in reducing anxiety symptoms, improving emotion regulation, and enhancing relational functioning

(18). These results support the clinical utility of schema-based and affect-focused interventions in the treatment of anxiety disorders.

Several limitations should be considered when interpreting the findings of this study. The sample size was relatively modest, which may limit the generalizability of the results. The use of convenience sampling may also introduce selection bias. Additionally, the cross-sectional design prevents causal inferences regarding the relationships among schemas, affect, and anxiety. Finally, reliance on self-report measures may increase the risk of response bias and shared method variance.

Future studies should employ longitudinal designs to examine the causal pathways linking early maladaptive schemas, affective processes, and anxiety over time. Larger and more diverse samples would improve generalizability. Incorporating biological markers, behavioral measures, and clinician-rated assessments could further strengthen the validity of findings. Comparative studies across different cultural contexts may also deepen understanding of cultural influences on schema development and affective functioning.

Clinical assessment of individuals with anxiety disorders should routinely include evaluation of early maladaptive schemas and affective functioning. Psychotherapeutic interventions should integrate schema modification with emotion regulation training to achieve more comprehensive and enduring treatment outcomes. Preventive programs aimed at early childhood and family environments may help reduce the development of maladaptive schemas and subsequent vulnerability to anxiety disorders.

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Authors' Contributions

All authors equally contributed to this study.

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.

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.

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