



Prediction of Decision-Making Styles Based on Early Maladaptive Schemas and Coping Strategies in Male and Female University Students

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ABSTRACT

Purpose: The present study aimed to predict decision-making styles based on early maladaptive schemas and coping strategies among male and female students of the Zand Institute of Higher Education.

Methods and Materials: This study employed an applied descriptive-correlational design. The statistical population consisted of all male and female students of the Zand Institute of Higher Education during the study period. Using Cochran's formula and cluster random sampling, 367 students (285 females and 82 males) were selected as the research sample. Data collection instruments included the Young Early Maladaptive Schema Questionnaire (Young, 1988), the General Decision-Making Styles Questionnaire developed by Scott and Bruce (Scott & Bruce, 1995), and the Endler and Parker Coping Strategies Questionnaire (Endler & Parker, 1990). Data were analyzed using descriptive statistics, Pearson correlation analysis, independent samples t-test, and simultaneous multiple regression analysis through IBM SPSS Statistics.

Findings The results indicated that the schema domains of disconnection and rejection ($\beta = .198, p = .018$), other-directedness ($\beta = .364, p = .001$), and impaired limits ($\beta = .252, p = .002$) positively predicted spontaneous decision-making style. Disconnection and rejection ($\beta = .420, p = .001$), impaired autonomy ($\beta = .189, p = .010$), other-directedness ($\beta = .156, p = .003$), and impaired limits ($\beta = .384, p = .001$) positively predicted avoidant decision-making style. Disconnection and rejection ($\beta = -.312, p = .001$), impaired autonomy ($\beta = -.389, p = .001$), and other-directedness ($\beta = -.129, p = .021$) negatively predicted intuitive decision-making style. Furthermore, problem-focused coping negatively predicted spontaneous and dependent decision-making styles, whereas emotion-focused and avoidant coping positively predicted maladaptive decision-making styles. Problem-focused coping positively predicted intuitive and rational decision-making styles.

Conclusion: The findings demonstrated that early maladaptive schemas and coping strategies play a significant role in explaining adaptive and maladaptive decision-making styles among university students. Maladaptive schemas and ineffective coping strategies were associated with avoidant, dependent, and spontaneous decision-making patterns, whereas problem-focused coping was associated with more adaptive decision-making styles.

Keywords: decision-making styles, early maladaptive schemas, coping strategies

1. Introduction

Decision-making is one of the central psychological functions through which university students regulate academic, interpersonal, occupational, and developmental demands. During university years, students encounter multiple choices related to academic pathways, career preparation, social relationships, identity formation, and adaptation to stressful conditions. These decisions are not made only through rational information processing; rather, they are shaped by enduring cognitive-emotional patterns, beliefs about the self and others, coping tendencies, perceived autonomy, emotional regulation capacities, and interpersonal experiences. In this context, decision-making styles refer to relatively stable individual differences in how people approach choices, evaluate alternatives, tolerate uncertainty, and respond to internal or external pressure. Rational decision-making generally involves systematic evaluation of information, whereas intuitive decision-making relies more strongly on affective and experiential judgments. Dependent decision-making reflects reliance on others, avoidant decision-making involves postponement or withdrawal from decisions, and spontaneous decision-making is characterized by impulsive and rapid choice behavior. Research among university students has shown that decision-making styles are associated with academic functioning, procrastination, adjustment, and career-related outcomes, making them important psychological variables in student populations (Li et al., 2023; Park et al., 2025; Sagone & Indiana, 2021; Tian & Hou, 2024).

University students' decision-making is especially important because this developmental period often coincides with increased responsibility and decreased external structure. Students are expected to choose academic goals, regulate study behavior, manage interpersonal conflicts, and prepare for future occupational roles. However, psychological distress, fear of failure, perfectionism, low self-efficacy, and career indecision can disrupt adaptive decision-making. For example, perfectionism and psychological distress have been linked to career indecision among college students, suggesting that rigid standards and fear of error may reduce decisional clarity (Tian & Hou, 2024). Similarly, helicopter parenting can affect career decision-making through fear of failure and self-efficacy, indicating that students' decision processes are embedded in relational and developmental contexts (Park et al., 2025). Parental autonomy support, mindfulness, and self-esteem have also been associated with depressive symptoms among

college students, showing that autonomy and self-regulatory resources may influence how students confront emotionally demanding decisions (Tan et al., 2024). These findings support the view that decision-making styles should be examined in relation to deeper psychological structures rather than as isolated cognitive preferences.

One of the most influential constructs for understanding such deeper psychological structures is early maladaptive schemas. Early maladaptive schemas are broad, pervasive, and dysfunctional cognitive-emotional patterns concerning the self, others, and the world, which are generally formed through adverse or unmet emotional needs in childhood and adolescence and may continue to influence functioning across the lifespan. These schemas can shape how individuals interpret ambiguous situations, regulate emotions, evaluate threats, and respond to interpersonal demands. Contemporary studies have linked early maladaptive schemas with a wide range of psychological outcomes, including anxiety, depression, rumination, low resilience, emotion regulation problems, maladjustment, compulsive tendencies, and impaired interpersonal functioning (Anayurt & Yalçın, 2021; Farajlı et al., 2022; Jalilian et al., 2023; Rocha et al., 2023; Sepidkar et al., 2024; Zhang et al., 2025). Because decision-making requires self-trust, emotional regulation, uncertainty tolerance, and cognitive flexibility, maladaptive schemas may directly influence whether students approach decisions rationally and confidently or rely on avoidance, dependency, impulsivity, or emotionally driven responses.

Early maladaptive schemas may affect decision-making through several mechanisms. Schemas related to disconnection and rejection may lead students to anticipate criticism, abandonment, or failure, thereby increasing dependence on others or avoidance of autonomous decisions. Schemas involving impaired autonomy and performance may undermine self-efficacy and increase doubt about personal competence, which can contribute to dependent or avoidant decision-making. Other-directedness may promote excessive sensitivity to others' expectations, reducing independent judgment and increasing reliance on external approval. Overvigilance and inhibition may intensify fear of mistakes and overcontrol, while impaired limits may increase impulsivity and insufficient self-regulation. Recent research among university students has shown that early maladaptive schemas are associated with psychological flexibility, perceived support, and self-compassion profiles, suggesting that schema activation may reduce adaptive psychological resources needed for

effective choices (Zhang et al., 2025). Time perspective among university students has also been predicted by early maladaptive schemas through life expectancy, indicating that schemas may shape how students perceive future possibilities and make decisions in relation to long-term goals (Yarandi & Madahi, 2025).

The relevance of early maladaptive schemas is further supported by studies showing their role in emotional and behavioral dysfunction. Early maladaptive schemas have been associated with impulsive and compulsive buying tendencies, reflecting difficulties in self-control and emotionally regulated choice behavior (Rocha et al., 2023). Schema modes and social maladjustment have been linked through difficulty in emotion regulation, suggesting that schema-related processes may disturb social and behavioral adaptation (Sepidkar et al., 2024). In clinical and relational contexts, schema therapy has been shown to reduce maladaptive schemas and associated emotional difficulties, including anxiety, emotional expression problems, emotional maturity deficits, and self-differentiation difficulties (Aflakian et al., 2023; Ahangari et al., 2024; Moharrami et al., 2024; Tahmasebizadeh et al., 2024). These findings collectively imply that schemas are not merely cognitive beliefs but organizing structures that influence affect, coping, interpersonal functioning, and behavioral choices. Therefore, in student populations, early maladaptive schemas may be expected to predict both maladaptive decision-making styles, such as avoidant, dependent, and spontaneous styles, and more adaptive styles, such as rational and intuitive decision-making.

Coping strategies represent another major psychological factor that may influence decision-making styles. Coping strategies refer to cognitive and behavioral efforts used to manage internal and external demands that are appraised as stressful. Problem-focused coping involves active problem solving, planning, and direct engagement with stressors; emotion-focused coping involves efforts to regulate emotional distress; and avoidant coping involves withdrawal, distraction, denial, or disengagement. These strategies are highly relevant to decision-making because decisions often emerge under conditions of uncertainty, pressure, emotional arousal, and conflict. Students who rely on problem-focused coping may be more likely to gather information, evaluate alternatives, and make rational or constructive decisions. In contrast, students who rely heavily on emotion-focused or avoidant coping may be more likely to postpone decisions, seek reassurance, make impulsive choices, or act under emotional pressure. Empirical evidence

indicates that coping strategies are associated with psychological health and career indecision among medical students, highlighting the role of coping in educational and career-related decisions (Zhu et al., 2021). Similarly, coping strategies have been found to predict resilience in psychosomatic patients and to relate to schemas and fear-related outcomes in medical conditions (Arabameri & Khodabakhshi-Koolaei, 2021; Hosseinzadeh et al., 2024; Sobhani et al., 2023).

The connection between early maladaptive schemas and coping strategies is theoretically important because schemas often generate emotional distress, and coping strategies determine how individuals respond to that distress. Maladaptive schemas can promote maladaptive coping responses such as avoidance, surrender, overcompensation, emotional suppression, reassurance seeking, or impulsive behavior. Studies on schemas and coping styles in addictions indicate that schema-related core beliefs may be closely connected with dysfunctional coping patterns (Knapík & Slancová, 2020). Research on early maladaptive schemas and coping among children in advocacy contexts also shows that schema processes and coping responses can be meaningfully intertwined in populations exposed to stress or adversity (Zheng & Nguyen-Feng, 2024, 2025). From the perspective of schema-based psychotherapy, compliant behavior and coping responses can be understood through schema-driven patterns of perception and action, especially under stressful or uncertain conditions (Offurum et al., 2022). Therefore, studying decision-making styles based on both early maladaptive schemas and coping strategies allows for a more integrated psychological explanation than examining either factor alone.

Student decision-making may also be shaped by broader emotional and developmental vulnerabilities. Neuroticism, parenting practices, childhood adversity, and depressive symptoms have been examined in college student populations, showing that emotional vulnerability and family experiences can affect psychological adjustment (Zhao et al., 2025; Zheng et al., 2024). Childhood sexual abuse has been linked to depressive symptoms in female college students through serial mediating processes, indicating that early adverse experiences may continue to influence emotional functioning in young adulthood (Zheng et al., 2024). Helicopter parenting and adolescent development have also been discussed in relation to mental health, suggesting that overcontrolling parenting may interfere with autonomy, self-confidence, and independent decision-making (Srivastav & Mathur, 2021). Parenting



styles have been included in causal models of cognitive emotion regulation and maladaptive schemas, further supporting the developmental roots of schema formation and emotional coping patterns (Razavi et al., 2024). These findings demonstrate that decision-making among students cannot be fully understood without attention to early relational experiences and internalized cognitive-emotional structures.

In addition, modern student life involves emerging stressors that may interact with schemas and coping. Digital overload, digital hoarding, compulsive online behaviors, academic competition, uncertainty about employment, and cultural pressures may all intensify decision-related stress. Vulnerability factors of digital hoarding among university students have been explored with attention to maladaptive perfectionism, showing that contemporary digital behaviors can reflect deeper emotional and cognitive vulnerabilities (Zaremohzzabieh et al., 2024). Cultural perspectives on anxiety during the COVID-19 pandemic also suggest that global and sociocultural stressors can shape emotional responses, uncertainty, and coping patterns (Zhang, 2023). Network approaches to personality typologies and psychosocial stress further indicate that stress-related functioning is multidimensional and may involve interacting personality, emotional, and behavioral systems (Ramos-Vera et al., 2022). These contemporary findings reinforce the importance of studying decision-making styles in relation to both internal schema structures and coping strategies, particularly among university students who must navigate complex academic and psychosocial environments.

Although previous research has examined early maladaptive schemas, coping strategies, emotional regulation, resilience, psychological distress, and career indecision in different populations, fewer studies have directly investigated how early maladaptive schemas and coping strategies simultaneously predict general decision-making styles among male and female university students. This gap is important because decision-making styles are behavioral expressions of deeper psychological processes. A student with strong disconnection and rejection schemas may avoid decisions out of fear of negative evaluation; a student with impaired autonomy schemas may depend on others when making choices; a student with impaired limits may show spontaneous decision-making; and a student who uses problem-focused coping may be more likely to engage in rational and constructive decision-making. Conversely, emotion-focused and avoidant coping may strengthen avoidant, dependent, or impulsive decision patterns.

Therefore, integrating schema theory and coping theory can provide a more comprehensive model for understanding decision-making in university students.

The present study is also significant because it focuses on both female and male students. Gendered socialization, family expectations, emotional expression patterns, and educational experiences may influence how students develop schemas, use coping strategies, and approach decisions. Studies involving women facing psychological abuse, patients managing chronic illness, and students dealing with depressive symptoms or autonomy-related issues show that psychological functioning is shaped by the interaction of personal vulnerability, relational context, and coping resources (Hosseinzadeh et al., 2024; Martínez-González et al., 2021; Tan et al., 2024). Therefore, examining decision-making styles among both female and male students can contribute to a more nuanced understanding of how maladaptive schemas and coping strategies operate in academic populations. Such findings may inform counseling interventions, student support programs, schema-focused education, and decision-making skills training in higher education settings.

From an applied perspective, identifying predictors of decision-making styles can help university counselors and psychologists design preventive and corrective interventions. If maladaptive schemas are found to predict avoidant, dependent, or spontaneous decision-making, schema-based interventions may help students recognize dysfunctional beliefs, strengthen autonomy, regulate emotional responses, and make more adaptive decisions. If coping strategies predict decision-making styles, coping skills training may improve students' ability to manage stress, tolerate uncertainty, and engage in systematic problem solving. Evidence supporting schema therapy, cognitive-behavioral approaches, and interventions targeting emotional maturity, ambiguity tolerance, and self-differentiation indicates that psychological interventions can modify maladaptive cognitive-emotional patterns and improve adaptive functioning (Aflakian et al., 2023; Ahangari et al., 2024; Karabatak, 2023; Moharrami et al., 2024; Tahmasebizadeh et al., 2024). Therefore, the findings of this study may have implications not only for theoretical models of decision-making but also for practical psychological services in universities.

Overall, the literature suggests that early maladaptive schemas provide a deep cognitive-emotional foundation for how students perceive themselves, others, and future outcomes, whereas coping strategies determine how they

respond to stressors and decision-related demands. These two constructs may jointly explain why some students approach decisions rationally and confidently, while others respond through avoidance, dependency, impulsivity, or emotionally driven patterns. Given the role of schemas in psychological distress, coping, resilience, maladjustment, and self-regulation, and given the role of coping strategies in academic and career-related functioning, examining these variables in relation to decision-making styles can advance psychological understanding of student behavior (Faraji et al., 2022; Li et al., 2023; Sepidkar et al., 2024; Zheng & Nguyen-Feng, 2025; Zhu et al., 2021). Therefore, the aim of the present study was to predict decision-making styles based on early maladaptive schemas and coping strategies among male and female students of Zand Institute of Higher Education in Shiraz.

2. Methods and Materials

2.1. Study Design and Participants

In terms of purpose, the present study was classified as applied research, and in terms of methodology, it was considered a descriptive study.

The statistical population of the study consisted of all male and female students at the Zand Institute of Higher Education, with a total population size of 8,000 students. Using Cochran's formula and cluster random sampling, 367 individuals were selected as the sample. Specifically, four academic majors were randomly selected, and from each major, three classes were randomly chosen. All students in these classes were then assessed. After coordination between the researcher and the administrators of the Zand Institute of Higher Education, and after obtaining cooperation from the male and female students selected as the research sample, a total of 367 questionnaires were distributed. Each questionnaire was administered in person after the necessary explanations had been provided to the participants. Following the distribution of the questionnaires, the purpose of the study and the method for completing the questionnaires were fully explained to the participants, and they were also assured of the confidentiality of their information. Subsequently, the completed questionnaires were collected and statistically analyzed. The questionnaires were analyzed using IBM SPSS Statistics at both descriptive and inferential levels. At the descriptive level, indices such as mean, standard deviation, minimum, and maximum values of the research variables were calculated. At the inferential level, hypotheses were examined using multiple

regression analysis and the independent samples t-test. Legal and ethical considerations were observed throughout the study. Efforts were made to adequately inform participants about the research objectives, and they were assured that their information would remain confidential. Furthermore, valid scientific sources and findings from previous studies were utilized throughout the research process, and the principle of honesty in data analysis was strictly observed.

2.2. Measures

Young Early Maladaptive Schema Questionnaire: The short form of the Young Early Maladaptive Schema Questionnaire, developed by Jeffrey Young (Young, 1988), consists of 75 items designed to assess 15 early maladaptive schemas across five domains. These five domains include disconnection and rejection (25 items), impaired autonomy and performance (20 items), other-directedness (10 items), overvigilance and inhibition (10 items), and impaired limits (10 items). Each item is rated on a six-point scale ranging from "1 = completely untrue of me" to "6 = describes me perfectly." A higher score on a specific subscale indicates a greater likelihood of the presence of a maladaptive schema in that individual. Ghasi-Zadeh and Abbasian (2009) examined the validity of the questionnaire by assessing the relationship between schemas and the Irrational Beliefs Test, reporting a significant correlation coefficient of 0.36. In the aforementioned study, the reliability of the Young Schema Questionnaire was calculated using Cronbach's alpha coefficient, yielding a reliability coefficient of 0.86.

General Decision-Making Styles Questionnaire (GDMS): The General Decision-Making Styles Questionnaire was developed by Scott and Bruce in 1995 to assess decision-making styles (Scott & Bruce, 1995). This questionnaire evaluates spontaneous, avoidant, intuitive, rational, and dependent decision-making styles. The instrument consists of 25 items, with five items allocated to each decision-making style. Scores on this questionnaire range from 25 to 125. Participants indicate their level of agreement or disagreement with each statement on a five-point Likert scale ranging from "1 = never" to "5 = always." By comparing participants' scores, the dominant decision-making style is identified, with the highest-scoring scale representing the individual's primary decision-making style. The validity of the questionnaire was assessed through exploratory factor analysis, which identified five factors accounting for 51% of the total variance. Reliability, assessed through internal consistency using Cronbach's

alpha coefficient, ranged from 0.70 to 0.78 across the subscales (Scott & Bruce, 1995). Zare and Arab Sheibani (2011) reported a Cronbach's alpha coefficient of 0.75 for the total scale.

Endler and Parker Coping Strategies Questionnaire (1990): This questionnaire was developed in 1990 by Norman Endler and James Parker to assess the ways individuals cope with their problems. The instrument contains 48 items and evaluates three primary coping styles: problem-focused coping, which refers to controlling emotions and planning step-by-step solutions to problems (16 items); emotion-focused coping, in which individuals focus on the emotions resulting from the problem rather than the problem itself and attempt to reduce negative emotions instead of solving the issue (16 items); and avoidant coping, in which individuals avoid confronting the problem (16 items). The avoidant coping subscale is further divided into two dimensions: social diversion (5 items) and distraction (8 items). The remaining three items within the avoidant coping subscale are filler items and are therefore not included in the calculation of the avoidant coping score. The validity of this scale in Iran was examined by Ghorayshi (2001) through calculating the correlation between coping styles and identity types. The findings demonstrated a correlation between problem-focused coping and diffuse identity ($r = 0.22$), as well as a correlation between emotion-focused coping and diffuse identity ($r = 0.34$). Cronbach's alpha coefficients for the problem-focused, emotion-focused, and avoidant coping styles were reported as 0.81, 0.78, and 0.81, respectively. Overall, research findings have indicated that this questionnaire possesses satisfactory validity and reliability. Cronbach's alpha coefficients for the three primary subscales of the test (problem-focused, emotion-focused, and avoidant coping) have been reported to exceed

0.80 across various samples, including adolescents, university students, and adults (Endler & Parker, 1990). The alpha coefficients for the two dimensions of avoidant coping (social diversion and distraction) ranged from 0.72 to 0.84 in the aforementioned samples. In Iran, Shokri et al. (2005) reported Cronbach's alpha coefficients of 0.75 for the problem-focused coping subscale, 0.82 for the emotion-focused coping scale, and 0.73 for the avoidant coping subscale.

2.3. Data Analysis

Data were analyzed using IBM SPSS Statistics at both descriptive and inferential levels. Descriptive statistics included the calculation of means, standard deviations, minimum values, and maximum values for the research variables. At the inferential level, Pearson correlation analysis was employed to examine the relationships among variables, and simultaneous multiple regression analysis was used to predict decision-making styles based on early maladaptive schemas and coping strategies. In addition, the independent samples t-test was applied to compare variables across gender groups.

3. Findings and Results

To collect quantitative information on the study variables in the field setting, raw data were gathered using questionnaires. The raw data were analyzed using IBM SPSS Statistics and appropriate statistical techniques at both descriptive and inferential levels. At the descriptive level, indices such as means and standard deviations of the scores were calculated. At the inferential level, Pearson correlation analysis and multiple regression analysis were employed to test the research hypotheses.

Table 1

Descriptive Statistics of Participants' Maladaptive Schemas, Coping Strategies, and Decision-Making Styles

Variable	Dimensions	Mean	SD	Minimum	Maximum
Early Maladaptive Schemas	Disconnection and Rejection	65.18	11.52	40	89
	Impaired Autonomy	60.17	6.05	42	75
	Other-Directedness	25.41	4.41	16	35
	Overvigilance/Inhibition	25.74	5.12	11	38
	Impaired Limits	28.54	5.95	15	44
Coping Strategies	Problem-Focused Strategy	52.74	9.18	34	74
	Emotion-Focused Strategy	43.29	8.52	22	64
	Avoidant Strategy	43.28	7.02	26	60
Decision-Making Styles	Spontaneous Style	12.22	2.94	6	25
	Avoidant Style	11.15	3.26	5	19
	Intuitive Style	17.23	2.77	11	25
	Rational Style	15.92	3.23	9	24
	Dependent Style	13.67	2.46	9	20

As shown in Table 1, the descriptive statistics related to participants' maladaptive schemas, coping strategies, and decision-making styles are presented in terms of mean, standard deviation, minimum, and maximum values.

As shown in Table 2, the results of the Pearson correlation test indicate that all maladaptive schemas had a positive and significant relationship with spontaneous, avoidant, and dependent decision-making styles, whereas all maladaptive schemas had a negative and significant relationship with intuitive and rational decision-making styles. Furthermore,

problem-focused coping showed a negative and significant relationship with spontaneous, avoidant, and dependent decision-making styles, while it demonstrated a positive and significant relationship with intuitive and rational decision-making styles. In addition, avoidant coping and emotion-focused coping had positive and significant relationships with spontaneous, avoidant, and dependent decision-making styles, whereas they had negative and significant relationships with intuitive and rational decision-making styles.

Table 2

Pearson Correlation Matrix Among Research Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Disconnection and Rejection	1												
2. Impaired Autonomy	.726**	1											
3. Other-Directedness	.616**	.479**	1										
4. Overvigilance/Inhibition	.823**	.664**	.585**	1									
5. Impaired Limits	.747**	.825**	.598**	.645**	1								
6. Spontaneous Style	.546**	.421**	.596**	.489**	.534**	1							
7. Avoidant Style	.624**	.476**	.526**	.511**	.604**	.626**	1						
8. Intuitive Style	-.571**	-.559**	-.424**	-.508**	-.484**	-.413**	-.467**	1					
9. Rational Style	-.475**	-.351**	-.515**	-.387**	-.382**	-.513**	-.504**	.662**	1				
10. Dependent Style	.544**	.571**	.485**	.379**	.575**	.520**	.538**	-.501**	-.514**	1			
11. Problem-Focused Coping	-.533**	-.441**	-.529**	-.471**	-.408**	-.603**	-.477**	.688**	.795**	-.529**	1		
12. Emotion-Focused Coping	.488**	.383**	.563**	.421**	.372**	.505**	.523**	-.655**	-.938**	.540**	-.805**	1	
13. Avoidant Coping	.723**	.545**	.634**	.606**	.540**	.588**	.599**	-.641**	-.770**	.473**	-.752**	.825**	1

To predict decision-making styles based on early maladaptive schemas, simultaneous multiple regression

analysis was conducted, and the results are presented in Table 3.

Table 3

Multiple Regression Analysis for Predicting Decision-Making Styles Based on Early Maladaptive Schemas

Criterion Variable	Predictor Variable	B	Std. Error	β	t	p
Spontaneous Style	Disconnection and Rejection	0.050	0.021	0.198	2.382	.018
	Impaired Autonomy	0.063	0.037	0.129	1.703	.089
	Other-Directedness	0.243	0.036	0.364	6.753	.001
	Overvigilance/Inhibition	0.021	0.042	0.036	0.497	.619
	Impaired Limits	0.125	0.040	0.252	3.146	.002
Avoidant Style	Disconnection and Rejection	0.119	0.023	0.420	5.240	.001
	Impaired Autonomy	0.102	0.039	0.189	2.581	.010
	Other-Directedness	0.116	0.039	0.156	3.002	.003
	Overvigilance/Inhibition	0.031	0.045	0.049	0.694	.488
	Impaired Limits	0.211	0.045	0.384	4.969	.001
Intuitive Style	Disconnection and Rejection	0.075	0.021	-0.312	3.636	.001
	Impaired Autonomy	0.178	0.036	-0.389	4.965	.001
	Other-Directedness	0.081	0.035	-0.129	2.313	.021
	Overvigilance/Inhibition	0.011	0.041	-0.021	0.283	.778
	Impaired Limits	0.075	0.039	-0.161	1.941	.053
Rational Style	Disconnection and Rejection	0.077	0.026	-0.276	3.019	.003
	Impaired Autonomy	0.034	0.063	-0.063	0.755	.451
	Other-Directedness	0.290	0.396	-0.396	6.658	.001
	Overvigilance/Inhibition	0.045	0.071	-0.071	0.882	.379
	Impaired Limits	0.036	0.067	-0.067	0.761	.447
Dependent Style	Disconnection and Rejection	0.076	0.018	0.355	4.317	.001
	Impaired Autonomy	0.137	0.031	0.335	4.468	.001
	Other-Directedness	0.135	0.030	0.242	4.529	.001
	Overvigilance/Inhibition	0.169	0.035	0.352	4.887	.001
	Impaired Limits	0.048	0.033	0.116	1.462	.145

As shown in Table 3, the findings demonstrated that the disconnection and rejection domain positively and significantly predicted the spontaneous decision-making style ($\beta = .198, p = .018$). Moreover, the other-directedness domain positively and significantly predicted the spontaneous decision-making style ($\beta = .364, p = .001$), and the impaired limits domain also positively and significantly predicted the spontaneous decision-making style ($\beta = .252, p = .002$). The disconnection and rejection domain positively and significantly predicted the avoidant decision-making style ($\beta = .420, p = .001$). In addition, impaired autonomy positively and significantly predicted the avoidant decision-making style ($\beta = .189, p = .010$), and other-directedness also positively and significantly predicted the avoidant decision-making style ($\beta = .156, p = .003$). Furthermore, impaired limits positively and significantly predicted the avoidant decision-making style ($\beta = .384, p = .001$). The disconnection and rejection domain negatively and significantly predicted the intuitive decision-making style ($\beta = -.312, p = .001$). Likewise, impaired autonomy negatively and significantly predicted the intuitive decision-making

style ($\beta = -.389, p = .001$), and other-directedness also negatively and significantly predicted the intuitive decision-making style ($\beta = -.129, p = .021$). The disconnection and rejection domain negatively and significantly predicted the rational decision-making style ($\beta = -.276, p = .003$), and other-directedness also negatively and significantly predicted the rational decision-making style ($\beta = -.396, p = .001$). Finally, the disconnection and rejection domain positively and significantly predicted the dependent decision-making style ($\beta = .355, p = .001$). In addition, impaired autonomy positively and significantly predicted the dependent decision-making style ($\beta = .335, p = .001$), other-directedness positively and significantly predicted the dependent decision-making style ($\beta = .242, p = .001$), and overvigilance/inhibition also positively and significantly predicted the dependent decision-making style ($\beta = .352, p = .001$).

To predict decision-making styles based on coping strategies, simultaneous multiple regression analysis was performed, and the results are presented in Table 4.

Table 4

Multiple Regression Analysis for Predicting Decision-Making Styles Based on Coping Strategies

Criterion Variable	Predictor Variable	B	Std. Error	β	t	p
Spontaneous Style	Problem-Focused Strategy	0.146	0.022	-0.455	6.490	.001
	Emotion-Focused Strategy	0.069	0.028	0.200	2.443	.015
	Avoidant Strategy	0.172	0.031	0.411	5.584	.001
Avoidant Style	Problem-Focused Strategy	0.011	0.026	-0.030	0.410	.682
	Emotion-Focused Strategy	0.028	0.033	0.073	0.858	.391
	Avoidant Strategy	0.240	0.036	0.516	6.714	.001
Intuitive Style	Problem-Focused Strategy	0.123	0.019	0.404	6.366	.001
	Emotion-Focused Strategy	0.052	0.161	-0.161	2.159	.031
	Avoidant Strategy	0.080	0.202	-0.202	3.019	.003
Rational Style	Problem-Focused Strategy	0.044	0.011	0.126	4.059	.001
	Emotion-Focused Strategy	0.332	0.014	-0.877	24.274	.001
	Avoidant Strategy	0.022	0.015	-0.480	1.471	.142
Dependent Style	Problem-Focused Strategy	0.071	0.020	-0.265	3.497	.001
	Emotion-Focused Strategy	0.091	0.026	0.315	3.566	.001
	Avoidant Strategy	0.005	0.028	0.014	0.176	.861

As shown in Table 4, the results indicated that problem-focused coping negatively and significantly predicted the spontaneous decision-making style ($\beta = -.455, p = .001$), whereas emotion-focused coping ($\beta = .200, p = .015$) and avoidant coping ($\beta = .411, p = .001$) positively and significantly predicted the spontaneous decision-making style. Avoidant coping also positively and significantly predicted the avoidant decision-making style ($\beta = .516, p = .001$). Problem-focused coping positively and significantly predicted the intuitive decision-making style ($\beta = .404, p = .001$). In contrast, emotion-focused coping negatively and significantly predicted the intuitive decision-making style (β

$= -.161, p = .031$), and avoidant coping also negatively and significantly predicted the intuitive decision-making style ($\beta = -.202, p = .003$). Problem-focused coping positively and significantly predicted the rational decision-making style ($\beta = .126, p = .001$), whereas emotion-focused coping negatively and significantly predicted the rational decision-making style ($\beta = -.877, p = .001$). Finally, problem-focused coping negatively and significantly predicted the dependent decision-making style ($\beta = -.265, p = .001$), whereas emotion-focused coping positively and significantly predicted the dependent decision-making style ($\beta = .315, p = .001$).

4. Discussion and Conclusion

The present study was conducted to predict decision-making styles based on early maladaptive schemas and coping strategies among male and female university students. The findings demonstrated that maladaptive schema domains and coping strategies significantly predicted different dimensions of decision-making styles. Specifically, the schema domains of disconnection and rejection, other-directedness, and impaired limits positively predicted spontaneous decision-making style. Furthermore, disconnection and rejection, impaired autonomy, other-directedness, and impaired limits positively predicted avoidant decision-making style. In contrast, disconnection and rejection, impaired autonomy, and other-directedness negatively predicted intuitive decision-making style. Additionally, disconnection and rejection and other-directedness negatively predicted rational decision-making style, whereas disconnection and rejection, impaired autonomy, other-directedness, and overvigilance/inhibition positively predicted dependent decision-making style. Regarding coping strategies, problem-focused coping negatively predicted spontaneous and dependent decision-making styles while positively predicting intuitive and rational decision-making styles. Emotion-focused and avoidant coping strategies positively predicted spontaneous and dependent decision-making styles, while negatively predicting intuitive and rational decision-making styles. These findings indicate that maladaptive cognitive-emotional structures and ineffective coping responses are strongly associated with maladaptive forms of decision-making among university students.

One of the major findings of the study was that the schema domain of disconnection and rejection positively predicted spontaneous, avoidant, and dependent decision-making styles while negatively predicting intuitive and rational decision-making styles. This finding can be explained by the nature of the disconnection and rejection schema domain, which involves expectations of abandonment, emotional deprivation, mistrust, rejection, and instability in interpersonal relationships. Individuals with these schemas often perceive the environment as psychologically unsafe and may experience persistent insecurity regarding their own competence and the reliability of others. As a result, such individuals may avoid careful decision-making processes, rely excessively on others for reassurance, or engage in impulsive and emotionally driven choices in order to reduce uncertainty and emotional tension.

These findings are consistent with studies indicating that early maladaptive schemas are associated with emotional dysregulation, maladjustment, impulsive tendencies, and psychological distress (Anayurt & Yalçın, 2021; Rocha et al., 2023; Sepidkar et al., 2024). Research has also shown that maladaptive schemas are related to depressive symptoms, rumination, and reduced psychological flexibility, all of which may impair adaptive decision-making processes (Zhang et al., 2025; Zhao et al., 2025; Zheng et al., 2024). Furthermore, schema-driven emotional insecurity may reduce individuals' confidence in intuitive judgments and rational evaluations, thereby increasing avoidant or dependent styles of decision-making.

The results also revealed that impaired autonomy positively predicted avoidant and dependent decision-making styles and negatively predicted intuitive decision-making style. This finding suggests that individuals who perceive themselves as incapable, vulnerable, or dependent are less likely to trust their own internal judgments and more likely to avoid responsibility in decision-making situations. Students with impaired autonomy schemas may fear failure and perceive decisions as threatening because they doubt their own competence and ability to cope with consequences. Such individuals may therefore seek reassurance from others or postpone decision-making in order to reduce anxiety. These findings align with studies demonstrating that fear of failure, low self-efficacy, and autonomy-related difficulties negatively influence decision-making and adjustment among university students (Park et al., 2025; Tan et al., 2024; Tian & Hou, 2024). Similarly, research on helicopter parenting has suggested that overprotective developmental experiences may interfere with independent functioning and decision-making competence (Srivastav & Mathur, 2021). The negative relationship between impaired autonomy and intuitive decision-making may also indicate that students with feelings of incompetence have difficulty relying on internal emotional and experiential cues because these cues are overshadowed by self-doubt and anxiety.

Another important finding was that the schema domain of other-directedness positively predicted spontaneous, avoidant, and dependent decision-making styles while negatively predicting intuitive and rational styles. This schema domain is characterized by excessive focus on the desires, approval, and expectations of others at the expense of personal needs and independent judgment. Individuals with high levels of other-directedness may fear rejection or criticism if they act autonomously, leading them to rely

heavily on external validation during decision-making. Consequently, they may become indecisive, dependent, or emotionally reactive in situations requiring autonomous judgment. These findings are consistent with research demonstrating that maladaptive schemas are associated with interpersonal insecurity, emotional suppression, and maladaptive patterns of self-regulation (Ahangari et al., 2024; Jalilian et al., 2023). Studies have also shown that parenting styles and emotional environments contribute significantly to the development of schema-based relational patterns that later influence emotional functioning and decision behavior (Razavi et al., 2024; Zhao et al., 2025). Rational decision-making requires independent evaluation and objective analysis, whereas excessive orientation toward others may interfere with autonomous cognitive processing and promote conformity-based decisions.

The findings further indicated that impaired limits positively predicted spontaneous and avoidant decision-making styles. Individuals with impaired limits often demonstrate insufficient self-control, impulsivity, and difficulty tolerating frustration. These characteristics may contribute to rapid and poorly considered decisions as well as avoidance of structured problem-solving processes. Spontaneous decision-making, by definition, involves impulsive and hurried responses, which are conceptually compatible with impaired self-regulation and emotional control. Previous studies have similarly linked maladaptive schemas to compulsive and impulsive behaviors (Rocha et al., 2023). Moreover, emotional dysregulation and reduced behavioral control associated with maladaptive schemas may increase vulnerability to maladaptive coping and poor judgment under stressful conditions (Farajī et al., 2022; Sepidkar et al., 2024). These findings suggest that impaired limits may reduce individuals' capacity for delayed gratification and systematic evaluation of alternatives during decision-making.

The schema domain of overvigilance and inhibition positively predicted dependent decision-making style. This finding may reflect the tendency of individuals with excessive self-control, emotional inhibition, and fear of mistakes to seek guidance and reassurance from others in order to minimize perceived risks. Such individuals may avoid independent decisions because they fear criticism, failure, or emotional consequences associated with personal responsibility. This interpretation is supported by studies emphasizing the role of maladaptive schemas in emotional inhibition, social maladjustment, and rigid behavioral regulation (Anayurt & Yalçın, 2021; Sepidkar et al., 2024).

Individuals characterized by chronic vigilance and perfectionistic concerns may perceive decision-making as highly threatening and therefore depend more heavily on external support.

Regarding coping strategies, one of the most important findings was that problem-focused coping negatively predicted spontaneous and dependent decision-making styles while positively predicting intuitive and rational decision-making styles. Problem-focused coping involves active problem solving, planning, emotional regulation, and systematic engagement with stressful situations. Students who utilize this coping strategy are more likely to analyze alternatives logically, evaluate consequences carefully, and trust their ability to manage difficulties. As a result, they demonstrate more rational and adaptive decision-making patterns. These findings are consistent with studies showing that adaptive coping strategies are associated with better psychological health, resilience, and academic adjustment (Hosseinzadeh et al., 2024; Sobhani et al., 2023; Zhu et al., 2021). Rational decision-making requires cognitive flexibility, emotional regulation, and confidence in one's ability to solve problems, all of which are facilitated by problem-focused coping. The negative relationship between problem-focused coping and spontaneous or dependent decision-making also suggests that active coping reduces emotional impulsivity and excessive reliance on others.

The findings also showed that emotion-focused coping positively predicted spontaneous and dependent decision-making styles while negatively predicting intuitive and rational decision-making styles. Emotion-focused coping involves concentrating primarily on emotional distress rather than directly addressing the source of the problem. Individuals who rely excessively on emotion-focused coping may become overwhelmed by anxiety, frustration, or uncertainty during decision-making situations, which can impair logical reasoning and increase emotionally reactive or dependent behavior. These findings align with studies linking maladaptive coping patterns with psychological distress, emotional dysregulation, and reduced adjustment (Ramos-Vera et al., 2022; Zhang, 2023). Students who experience elevated emotional distress may struggle to engage in systematic information processing and instead rely on impulsive responses or reassurance from others. Furthermore, emotion-focused coping has been associated with maladaptive schemas and reduced resilience, suggesting that emotional overinvolvement may intensify schema activation and interfere with effective decision-

making (Arabameri & Khodabakhshi-Koolaei, 2021; Farajî et al., 2022).

Avoidant coping positively predicted spontaneous and avoidant decision-making styles while negatively predicting intuitive decision-making style. This finding is theoretically meaningful because avoidant coping reflects attempts to escape stressors rather than confront them directly. Individuals who rely on avoidance may postpone decisions, disengage from responsibility, or act impulsively in order to terminate stressful situations rapidly. These behavioral tendencies are compatible with avoidant and spontaneous decision-making patterns. Previous research has similarly demonstrated that avoidant coping is associated with maladaptive functioning, poor adjustment, and schema-related psychological difficulties (Knapík & Slancová, 2020; Zheng & Nguyen-Feng, 2024, 2025). Students who avoid confronting stressors may fail to develop confidence in their own judgments and therefore become less capable of adaptive intuitive decision-making. In addition, avoidant coping may prevent individuals from engaging in reflective processing and emotional integration, both of which are necessary for effective intuitive judgments.

Overall, the findings of the present study support schema theory and coping-based explanations of decision-making behavior. Early maladaptive schemas appear to provide a cognitive-emotional framework through which individuals interpret situations, evaluate risks, and perceive their own competence, whereas coping strategies determine how individuals behaviorally and emotionally respond to stressful decision-making contexts. The combined influence of maladaptive schemas and ineffective coping strategies may therefore increase vulnerability to maladaptive decision-making patterns among university students. These findings are consistent with contemporary schema-based perspectives suggesting that dysfunctional cognitive-emotional structures contribute to broad impairments in self-regulation, emotional adaptation, and interpersonal functioning (Yarandi & Madahi, 2025; Zaremohzzabieh et al., 2024; Zhang et al., 2025). They also support previous research demonstrating that maladaptive schemas and coping strategies are strongly interconnected and jointly influence psychological adjustment and behavioral outcomes (Hosseinzadeh et al., 2024; Offurum et al., 2022; Razavi et al., 2024).

The findings of this study also have important implications for university counseling and psychological intervention programs. Because maladaptive schemas and ineffective coping strategies were associated with avoidant,

dependent, and spontaneous decision-making styles, interventions targeting these underlying mechanisms may improve students' decision-making competence. Schema-focused interventions can help students identify dysfunctional beliefs regarding autonomy, rejection, and self-worth, while coping-based interventions can strengthen problem-solving skills, emotional regulation, and stress tolerance. Previous studies have demonstrated the effectiveness of schema therapy in improving emotional expression, reducing anxiety, increasing ambiguity tolerance, and enhancing self-differentiation (Aflakian et al., 2023; Ahangari et al., 2024; Moharrami et al., 2024; Tahmasebizadeh et al., 2024). Therefore, integrating schema-focused and coping-focused approaches may be particularly useful in educational and counseling settings for promoting adaptive decision-making among students.

One limitation of the present study was the use of a cross-sectional and correlational design, which prevents causal interpretation of the relationships among variables. Another limitation was reliance on self-report questionnaires, which may have been influenced by response bias, social desirability, or participants' subjective interpretations. In addition, the study sample was limited to students from one higher education institution in Shiraz, which may reduce the generalizability of the findings to students from other universities, cultural contexts, or age groups. The unequal number of male and female participants also may have influenced the statistical balance of the analyses.

Future research should examine the causal relationships among early maladaptive schemas, coping strategies, and decision-making styles using longitudinal or experimental designs. Researchers are also encouraged to investigate mediating and moderating variables such as emotional regulation, self-esteem, resilience, perfectionism, attachment styles, and psychological flexibility. Comparative studies across different academic disciplines, cultural backgrounds, and developmental stages may provide a more comprehensive understanding of schema-based decision-making processes. Furthermore, qualitative approaches could help explore the subjective experiences of students when facing stressful or ambiguous decisions.

From a practical perspective, university counseling centers should develop educational and therapeutic programs aimed at improving adaptive coping skills and modifying maladaptive schema patterns among students. Workshops focused on emotional regulation, self-awareness, problem-solving, and autonomous decision-making may help students reduce avoidant and dependent

tendencies. Screening programs may also be useful for identifying students with severe maladaptive schemas or dysfunctional coping patterns who are at greater risk for poor academic and psychological adjustment. Integrating schema-focused counseling and coping-skills training into student mental health services may ultimately contribute to healthier decision-making, greater psychological resilience, and improved academic functioning.

Authors' Contributions

All authors significantly contributed to this study.

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

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the study and participated in the research with informed consent.

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