ORIGINAL ARTICLE

Journal of Emergency Health Care. 2026;15(1): 19
https://doi.org/10.22034/jehc.15.1.19

Explaining The Structural Model of Academic Burnout Based on Early Maladaptive Schemas with the Mediating Role of Academic Self-Defeating Behaviors

Setareh Sadeghi Malvajerdi[1], Narges Babakhani[2]

[1]*M.Sc. in Educational Psychology, Islamic Azad University, Roudehen Branch, Roudehen, Iran.*
[2]*Assistant Professor, Department of Educational Psychology, Islamic Azad University, Roudehen Branch, Roudehen, Iran.*

Article history:

Received: 17 May 2026
Accepted: 25 Jun 2026
Available online: 1 Jul 2026

Keywords:

Academic burnout
Early maladaptive schemas
Self-defeating behaviors

Abstract

Objective: This study aimed to explain the structural model of academic burnout based on early maladaptive schemas (EMS), with academic self-defeating behaviors serving as a mediating variable.
Method: The research employed a correlational design using structural equation modeling (SEM). Data were collected from 212 undergraduate students at Islamic Azad University, Roudehen Branch, during the 2023–2024 academic year. Data were processed and analyzed using SPSS (version 26) and SmartPLS (version 3). It should be noted that more than 250 questionnaires were initially distributed; however, a number of incomplete responses and those containing outlier data were excluded, resulting in a final valid sample of 212 participants.
Findings: The research findings indicate that early maladaptive schemas have a direct effect on academic burnout, as well as an indirect effect mediated by academic self-defeating behaviors.
Conclusion: Early maladaptive schemas, through their influence on individuals' cognitive processing and functioning, can affect various life domains—particularly academic settings—and contribute to outcomes such as diminished educational and academic performance.

Cite this article as: Malvajerdi S, Babakhani N. Explaining The Structural Model of Academic Burnout Based on Early Maladaptive Schemas with the Mediating Role of Academic Self-Defeating Behaviors. J Emerg Health Care. 2026;15(1):19. https://doi.org/10.22034/jehc.15.1.19.

Introduction

Academic burnout is a state of mental and emotional exhaustion resulting from a chronic stress syndrome—encompassing role overload, time pressure, and a lack of necessary resources to fulfill assigned duties and tasks. It manifests through symptoms such as disengagement from academic content, inability to sustain regular class attendance, non-participation in classroom activities, a sense of meaninglessness in academic pursuits, feelings of incapacity to absorb course material, and, ultimately, academic underachievement (1). Researchers contend that academic burnout arises from stressful educational experiences and diminished adaptive capacity (2), and is considered an impediment to academic progress, as it reduces both the quality and quantity of students' academic performance by amplifying stress and generating negative consequences in their educational lives (3).

This construct is conceptualized as a three-dimensional syndrome comprising: emotional exhaustion (a sense of depletion of emotional resources), depersonalization (negative, disengaged, and cynical responses), and reduced personal accomplishment (a feeling of deficiency in competence, productivity, and a sense of low efficacy). In students, these dimensions manifest as exhaustion due to academic demands and requirements (emotional exhaustion), a cynical attitude and lack of interest in

Correspondence:
Setareh sadeghi malvajerdi
E-mail: Setareh.sadeghi90@gmail.com

academic tasks (depersonalization), and feelings of inadequacy (reduced personal accomplishment) (4).

Among the multiple variables that influence academic burnout, early maladaptive schemas (EMS) stand out as self-damaging emotional and cognitive patterns that form in the mind during early development and recur throughout the life course (5). These schemas emerge as a consequence of the frustration and failure to meet fundamental childhood needs, and their intensification—through effects on cognitive processing styles—can lead to academic underperformance and other study-related difficulties (2). Researchers argue that these schemas typically operate at the deepest level of cognition, largely below the threshold of conscious awareness, rendering individuals psychologically vulnerable to disturbances such as depression, anxiety, decision-making procrastination, and dysfunctional interpersonal relationships (6). Empirical findings point to a significant association between EMS and academic burnout (7), as well as between EMS and academic self-defeating behaviors (8).

Academic self-defeating behaviors constitute another variable that meaningfully influences academic burnout. These are actions performed consciously and deliberately that ultimately result in failure or harm to the individual and exert a negative effect on their well-being. Individuals who engage in such behaviors are persistently oriented toward positive outcomes, yet an excessive focus on short-term gains tends to yield long-term negative consequences (9). Research has demonstrated that a substantial and growing number of learners are engaged in self-defeating behaviors, which include procrastination, self-handicapping, over-commitment, invalid self-evaluation, impulsive behavior, and indecisiveness (10). Initially employed as coping mechanisms, these behaviors can rapidly become habitual, as they yield short-term benefits such as pleasure, enjoyment, and a transient boost in self-confidence (11). Studies have established significant associations between academic self-defeating behaviors and related variables, including procrastination and academic burnout (12), as well as self-handicapping and academic burnout (13).

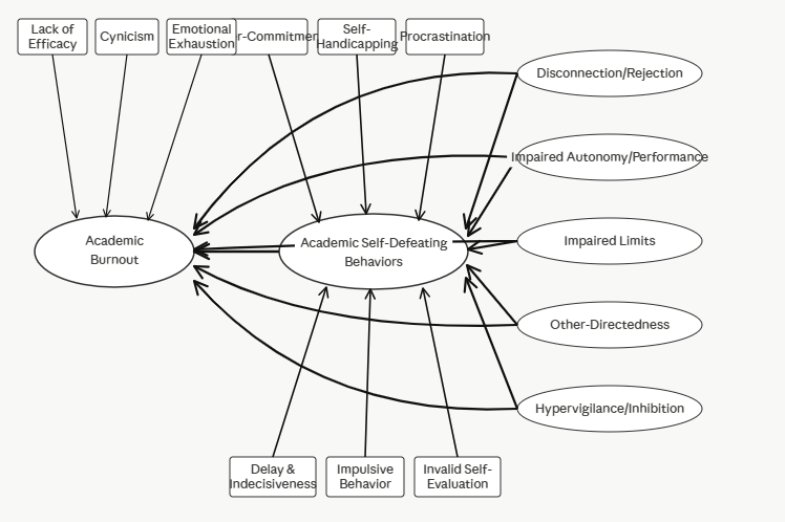

Figure 1. Conceptual model of the study

Awareness of the early maladaptive schemas and academic self-defeating behaviors that may give rise to academic burnout enables a deeper understanding of their underlying causes and contributing factors. By recognizing and comprehending these dynamics, it becomes possible to design programs and strategies aimed at preventing academic burnout or, at a minimum, reducing its impact. Understanding the interrelationships among EMS, academic self-defeating behaviors, and academic burnout allows for the development of more effective intervention and treatment approaches—including academic counseling, time management and stress management skill training, modification of maladaptive schemas, reinforcement of adaptive behaviors, and the provision of social support.

In summary, identifying and understanding mediating factors such as early maladaptive schemas and academic self-defeating behaviors can inform the design of effective prevention and intervention programs to reduce academic burnout and support students' academic growth and achievement. Given that the prevention of and response to learner academic burnout is now regarded as a fundamental concern of every educational institution—since academic burnout can impede academic progress and disrupt learners' normal functioning in educational and learning

environments—it is essential to create optimal conditions for learning and instruction. Accordingly, researchers have consistently sought to identify factors that influence academic burnout and have emphasized the adoption of approaches that facilitate learning. The present study, therefore, aims to present a structural model of academic burnout based on early maladaptive schemas, with academic self-defeating behaviors as a mediating variable. The conceptual model of the study is presented in Figure 1.

Review of Related Literature

Sarkeshikian et al. (2022) investigated the mediating role of intolerance of uncertainty in the relationship between implicit theories of intelligence and academic self-defeating behaviors. Their findings indicated that the proposed model demonstrated acceptable fit indices. Reported path coefficients included: implicit beliefs about intelligence to academic self-defeating behaviors (β = 0.648, p = 0.000), implicit beliefs about intelligence to intolerance of uncertainty (β = 0.566, p = 0.000), and intolerance of uncertainty to academic self-defeating behaviors (β = 0.354, p = 0.000) (14).

Fathi (2022) examined the prediction of students' academic burnout based on time perspective and early maladaptive schemas. The study found that, among the dimensions of EMS, the domains of disconnection/rejection, hypervigilance/inhibition, and impaired limits positively and significantly predicted academic burnout in students. Results further indicated that, among the dimensions of time perspective, negative past positively predicted academic burnout, while future orientation and present hedonistic orientation negatively and significantly predicted it. With respect to EMS dimensions, the domains of disconnection/rejection, hypervigilance/inhibition, and impaired limits positively and significantly predicted academic burnout (7).

Rashidi et al. (2021) evaluated the effectiveness of an academic engagement-based training program on the academic self-defeating behaviors of secondary school students in Ivan. Their findings showed that the mean scores of the academic self-defeating behaviors variable in the experimental group, compared to the control group, decreased significantly at both the post-test and follow-up stages. The engagement-based educational program was thus found to be effective in reducing students' academic self-defeating behaviors (15).

Van Royen et al. (2024) examined the role of early maladaptive schemas in late adolescents experiencing school burnout and depressive symptoms. Positive correlations were found between all EMS and academic burnout symptoms. When controlling for academic burnout symptoms at Time 1, only the EMS of 'emotional deprivation,' 'mistrust/abuse,' 'defectiveness/shame,' 'social isolation/alienation,' 'failure,' 'enmeshment/undeveloped self,' and 'emotional inhibition' showed significant positive correlations with academic burnout at Time 2. The schemas of 'mistrust/abuse,' 'defectiveness/shame,' and 'failure' were associated with both academic burnout and depressive symptoms. Reverse linear regression indicated that, when depressive symptoms were controlled, the schemas of 'vulnerability to harm or illness' and 'insufficient self-control/self-discipline' were uniquely associated with academic burnout symptoms, while 'dependence/incompetence,' 'emotional deprivation,' 'self-sacrifice,' and 'unrelenting standards' were uniquely associated with depressive symptoms when academic burnout was controlled (16).

Method

The present study employed a path analysis approach in which causal relationships were examined through non-experimental, or advanced correlational, methods. The statistical population comprised all undergraduate students enrolled at Islamic Azad University, Roudehen Branch, during the 2023–2024 academic year. A sample of 250 individuals was selected using a non-random convenience sampling procedure, with the following inclusion criteria: age between 20 and 30 years, first-time enrollment in an undergraduate program, and no history of academic withdrawal at the pre-university or university levels. The sample size was determined at 212 participants based on the Tabachnick and Fidell formula, given the 14 variables in the present study. Accounting for potential participant attrition in responding to the research instruments, the initial sample size was increased to 250.

Research Instruments

- **Young Schema Questionnaire – Short Form (YSQ-SF, 75 Items)**

This scale consists of 75 items rated on a six-point Likert scale ranging from "completely false" to "completely true," and assesses 15 schemas. Higher scores on a given subscale indicate a greater likelihood of the presence of a maladaptive schema in that individual. Waller et al. (2001) reported an internal consistency coefficient of 0.96 for the scale, with all subscale internal consistencies exceeding 0.80. Sadoughi and Aguilar-Vafaei (2008) reported subscale internal consistencies ranging from 0.62 to 0.90, with an overall scale score of 0.94. Test–retest reliability for the subscales ranged from 0.50 to 0.82. Ahi (2005) obtained reliability coefficients for 12 of the 15 subscales proposed by Young (1998) ranging from 0.71 to 0.90, indicating high internal consistency. In the present

study, the Cronbach's alpha coefficient for the maladaptive schemas scale was 0.994 (17).

- **Maslach Burnout Inventory – Student Survey (MBI-SS)**

Developed by Schaufeli et al. (2002), this questionnaire consists of 15 items rated on a seven-point Likert scale ranging from "never" to "always," yielding three subscales: emotional/academic exhaustion (5 items), cynicism (4 items), and lack of efficacy/inefficacy (6 items). Schaufeli et al. (2002) assessed the reliability of this instrument using Cronbach's alpha, obtaining values of 0.82 for emotional exhaustion, 0.70 for cynicism, and 0.75 for lack of efficacy. Sheikh Shebati et al. (2013) reported a Cronbach's alpha of 0.88 for the total scale and a split-half reliability of 0.87, with subscale alphas of 0.78, 0.82, and 0.68, respectively. In the present study, the Cronbach's alpha for academic burnout was 0.964 (18).

- **Cunningham's Self-Defeating Cognitions and Behaviors Questionnaire**

Developed by Cunningham (2007) to assess self-defeating cognitions and behaviors, this questionnaire comprises 21 items evaluating six types of self-defeating behavior: procrastination, self-handicapping, over-commitment, invalid self-evaluation, impulsive behavior (inability to delay gratification), and indecisiveness. In each scenario, respondents are asked to evaluate their performance and cognitions on a five-point scale. The psychometric properties of the procrastination and self-handicapping subscales were examined by Mohammadi et al. (2014) using principal component factor analysis with varimax rotation. Based on the screen plot and eigenvalues greater than one, the extracted factors confirmed those proposed by the scale's original developers. The KMO coefficient was 0.871 ($p = 0.001$). Cronbach's alpha coefficients were 0.62 for procrastination and 0.69 for self-handicapping. Haddad Ranjbar (2018) evaluated the content, face, and criterion validity of this questionnaire as satisfactory, with Cronbach's alpha exceeding 0.70 (19). In the present study, Cronbach's alpha for self-defeating cognitions and behaviors was 0.923.

Table 1. Skewness and Kurtosis Coefficients of Study Variables

Variable	Dimension	Kurtosis	Skewness
Academic Burnout	Emotional Exhaustion	−0.692	0.058
	Cynicism	−0.722	0.031
	Lack of Efficacy	−0.890	−0.010
Academic Self-Defeating Behaviors	Procrastination	0.084	−0.345
	Self-Handicapping	−0.577	0.193
	Over-Commitment	−0.150	−0.048
	Invalid Self-Evaluation	−0.099	−0.346
	Impulsive Behavior	−0.361	0.023
	Delay and Indecisiveness	−0.220	−0.238
Maladaptive Schemas	Disconnection/Rejection	−0.202	−0.268
	Impaired Autonomy/Performance	−0.275	−0.276
	Impaired Limits	−0.240	−0.230
	Other-Directedness	−0.145	−0.259
	Hypervigilance/Inhibition	−0.176	−0.221

Results

According to the descriptive statistics, 53.3% of respondents were female and 87.7% were single. Additionally, 80.7% of participants were not employed at the time of the study. The mean age of the sample was 24.57 years (SD = 3.17), with ages ranging from 20 to 30 years. The 25th percentile was 21 years, the 50th percentile (median) was 25 years, and the 75th percentile was 27 years. To assess the normality of the data distribution, skewness and kurtosis coefficients were computed. Results indicated that the skewness and kurtosis values for all variables fell within the range of (−1, +1), confirming the normality of the data.

Table 2 presents the Pearson correlation coefficients among the study variables' subscales, showing that all relationships are positive and significant at the 1% level ($p < 0.01$). The highest correlation was observed between 'cynicism' and 'procrastination' ($r = 0.974$), while the lowest was between 'hypervigilance/inhibition' and 'impaired limits' ($r = 0.452$). These high values indicate strong associations and internal coherence among the measured dimensions.

Table 2. Pearson Correlation Coefficients Among Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Emotional	1												
2. Cynicism	.814*	1											
3. Lack of Efficacy	.804*	.955*	1										
4. Procrastination	.814*	.974*	.965*	1									
5. Self-Handicapping	.829*	.971*	.973*	.957*	1								
6. Over-Commitment	.753*	.850*	.826*	.840*	.852*	1							
7. Invalid Self-	.728*	.838*	.828*	.834*	.847*	.914*	1						
8. Impulsive Behavior	.740*	.861*	.823*	.842*	.856*	.897*	.891*	1					
9.	.674*	.730*	.724*	.723*	.735*	.563*	.577*	.577*	1				
10.	.699*	.765*	.772*	.769*	.786*	.628*	.641*	.640*	.762*	1			
11. Impaired	.576*	.685*	.665*	.682*	.680*	.634*	.589*	.620*	.646*	.722*	1		
12. Impaired Limits	.539*	.669*	.669*	.675*	.667*	.596*	.540*	.561*	.503*	.618*	.701*	1	
13. Other-	.671*	.781*	.774*	.779*	.797*	.663*	.653*	.655*	.711*	.823*	.776*	.722*	1
14.	.641*	.659*	.660*	.669*	.668*	.552*	.528*	.523*	.674*	.679*	.538*	.452*	.670*

** Significant at the 1% error level

Table 3. Goodness-of-Fit Indices for the Structural Models

Model	Construct	R^2	SSO	SSE	Q^2	GOF
Main Hypothesis	Academic Self-Defeating Behaviors	0.479	1272.0	872.561	0.314	0.673
	Academic Burnout	0.553	636.0	326.466	0.487	
Sub-Hypotheses	Academic Self-Defeating Behaviors	0.526	1272.0	831.237	0.347	0.686
	Academic Burnout	0.611	636.0	295.932	0.535	

Structural Model Fit

Table 7 reports the goodness-of-fit indices for both structural models.

The R^2 index measures the extent to which an exogenous variable influences an endogenous variable; it is computed solely for dependent or endogenous variables within the model. Chin (1998) proposes threshold values of 0.19, 0.33, and 0.67 as benchmarks for weak, moderate, and strong R^2 values, respectively. The Q^2 criterion (cross-validated redundancy, introduced by Stone and Geisser in 1975) assesses the predictive power of the model; a positive Q^2 for an endogenous construct indicates adequate predictive relevance. Based on the obtained results, the R^2 values for both dependent variables—academic self-defeating behaviors and academic burnout—exceeded 0.33 in both models, indicating moderate predictive power. The Q^2 values were positive for both endogenous constructs in both models, confirming adequate predictive relevance. The GOF index, used to assess overall model quality, yielded values of 0.673 for the main hypothesis model and 0.686 for the sub-hypotheses model, both exceeding the 0.45 threshold and indicating strong overall model quality. Consequently, the quality of the measurement model, structural model, and overall model is confirmed for both models.

In the above figures, bootstrap analysis was employed to compute T-statistics. Given the estimated values depicted in the figures, decisions regarding the acceptance or rejection of significant relationships

between constructs can be made based on whether the observed values on the path between two variables—representing the absolute value of the T-statistic—exceed 1.96, which corresponds to a 95% confidence level.

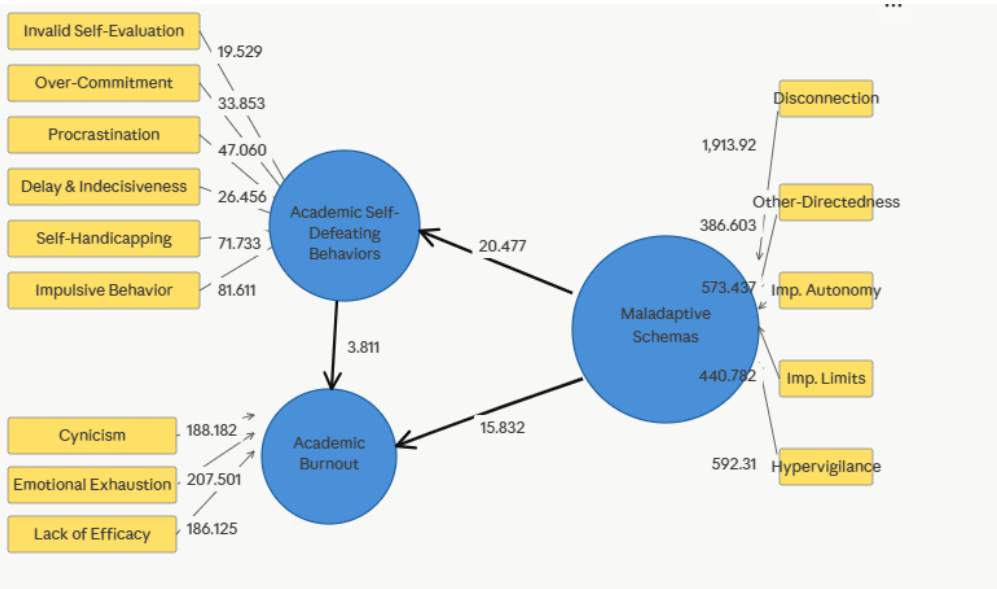

Figure 2. Structural model for the main hypothesis (significance mode)

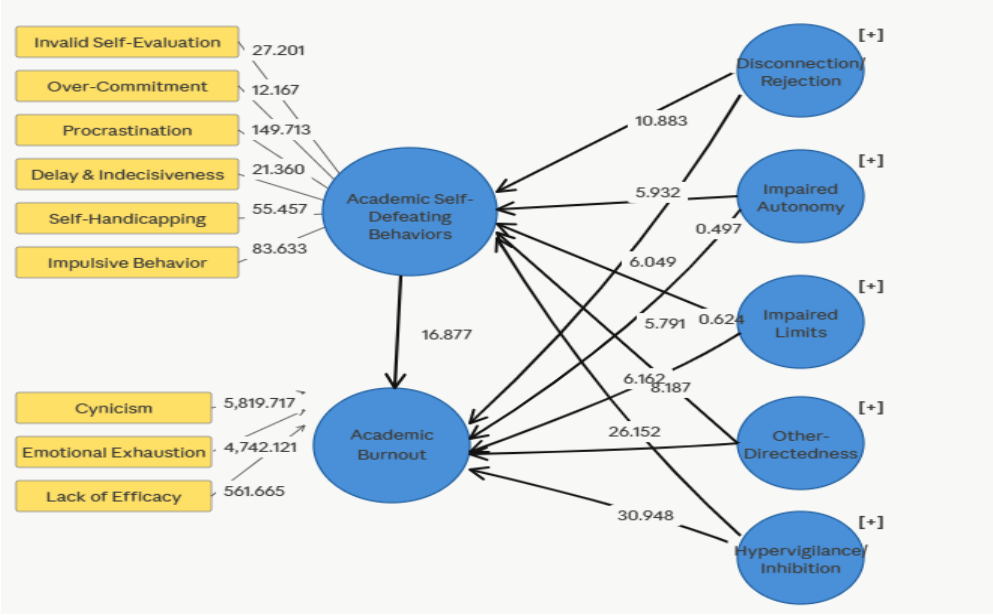

Figure 3. Structural model for the sub-hypotheses (significance mode)

Main Hypothesis

- **Early maladaptive schemas have a direct effect on academic burnout, as well as an indirect effect mediated by academic self-defeating behaviors.**

Given that the T-statistic for the path from maladaptive schemas to academic burnout was 15.832, which exceeds 1.96, the significance of this path coefficient is confirmed. The standardized path coefficient was 0.899 (positive), indicating that, at the 5% error level, early maladaptive schemas directly and significantly predict academic burnout. The effect size of

maladaptive schemas on academic burnout was estimated at 0.942, which exceeds 0.33 and is therefore considered a substantial effect.

Table 4. Model Fit Results for the Main Hypothesis

Direct Path	Standardized Path Coefficient	Standard Error	T-Statistic	p-Value	Effect Size
Academic Self-Defeating Behaviors → Academic	0.258	0.068	3.811	0.000	0.078
Maladaptive Schemas → Academic Self-Defeating Behaviors	0.692	0.034	20.477	0.000	0.921
Maladaptive Schemas → Academic Burnout	0.899	0.057	15.832	0.000	0.942

Table 5. Model Fit Results for the Sub-Hypotheses

Path	Path Coefficient	Standard Error	T-Statistic	p-Value	Effect Size
Disconnection/Rejection → Self-Defeating Behaviors	2.005	0.184	10.883	0.008	0.103
Impaired Autonomy/Performance → Self-Defeating Behaviors	0.876	0.148	5.932	0.027	0.035
Other-Directedness → Self-Defeating Behaviors	0.105	0.018	5.791	0.029	0.001
Impaired Limits → Self-Defeating Behaviors	0.880	0.146	6.049	0.026	0.045
Hypervigilance/Inhibition → Self-Defeating Behaviors	0.326	0.053	6.162	0.025	0.007
Disconnection/Rejection → Academic Burnout	0.292	0.586	0.497	0.668	0.002
Impaired Autonomy/Performance → Academic Burnout	0.305	0.488	0.624	0.596	0.005
Other-Directedness → Academic Burnout	0.568	0.022	26.152	0.001	0.028
Academic Self-Defeating Behaviors → Academic Burnout	0.299	0.018	16.877	0.003	0.109
Impaired Limits → Academic Burnout	1.006	0.123	8.187	0.015	0.069
Hypervigilance/Inhibition → Academic Burnout	1.385	0.045	30.948	0.001	0.143

Examination of Sub-Hypotheses

- **Sub-Hypothesis 1: The disconnection/rejection maladaptive schema has a significant effect on academic burnout.**

The T-statistic for the path from the disconnection/rejection schema to academic burnout was 0.497, which falls below the threshold of 1.96. Accordingly, the significance of this path is not confirmed, and the hypothesis that the disconnection/rejection maladaptive schema directly affects academic burnout is rejected at the 5% error level.

- **Sub-Hypothesis 2: The impaired autonomy/performance maladaptive schema has a significant effect on academic burnout.**

The T-statistic for the path from the impaired autonomy/performance schema to academic burnout was 0.624, which also falls below 1.96. This hypothesis is therefore rejected; the impaired

autonomy/performance maladaptive schema does not directly affect academic burnout at the 5% error level.

- **Sub-Hypothesis 3: The impaired limits maladaptive schema has a significant effect on academic burnout.**

The T-statistic for this path was 8.187, which exceeds 1.96. The path coefficient was 1.006 (positive), confirming the hypothesis at the 5% error level. The impaired limits maladaptive schema directly and significantly predicts academic burnout. The effect size was estimated at 0.069, classified as a weak effect.

- **Sub-Hypothesis 4: The other-directedness maladaptive schema has a significant effect on academic burnout.**

The T-statistic for this path was 26.152, exceeding 1.96. The path coefficient was 0.568 (positive), confirming that the other-directedness maladaptive schema directly and significantly predicts academic burnout at the 5% error level. The effect size was 0.028, classified as weak.

- **Sub-Hypothesis 5: The hypervigilance/inhibition maladaptive schema has a significant effect on academic burnout.**

The T-statistic for this path was 30.948, exceeding 1.96. The path coefficient was 1.385 (positive), confirming the hypothesis. The hypervigilance/inhibition maladaptive schema directly and significantly predicts academic burnout at the 5% error level. The effect size was 0.143, classified as weak.

- **Sub-Hypothesis 6: Academic self-defeating behaviors have a significant effect on academic burnout.**

The T-statistic for this path was 16.877, exceeding 1.96. The path coefficient was 0.299 (positive), confirming that academic self-defeating behaviors directly and significantly predict academic burnout at the 5% error level. The effect size was 0.109, classified as weak.

- **Sub-Hypothesis 7: The disconnection/rejection maladaptive schema has a significant effect on academic self-defeating behaviors.**

The T-statistic was 10.883, exceeding 1.96. The path coefficient was 2.005 (positive), confirming the hypothesis at the 5% error level. The disconnection/rejection maladaptive schema directly and significantly predicts academic self-defeating behaviors. The effect size was 0.103, classified as weak.

- **Sub-Hypothesis 8: The impaired autonomy/performance maladaptive schema has a significant effect on academic self-defeating behaviors.**

The T-statistic was 5.932, exceeding 1.96. The path coefficient was 0.876 (positive), confirming the hypothesis. The impaired autonomy/performance maladaptive schema directly and significantly predicts academic self-defeating behaviors. The effect size was 0.035, classified as weak.

- **Sub-Hypothesis 9: The impaired limits maladaptive schema has a significant effect on academic self-defeating behaviors.**

The T-statistic was 6.049, exceeding 1.96. The path coefficient was 0.880 (positive), confirming the hypothesis. The impaired limits maladaptive schema directly and significantly predicts academic self-defeating behaviors. The effect size was 0.045, classified as weak.

- **Sub-Hypothesis 10: The other-directedness maladaptive schema has a significant effect on academic self-defeating behaviors.**

The T-statistic was 5.791, exceeding 1.96. The path coefficient was 0.105 (positive), confirming the hypothesis. The other-directedness maladaptive schema directly and significantly predicts academic self-defeating behaviors. The effect size was 0.001, classified as weak.

- **Sub-Hypothesis 11: The hypervigilance/inhibition maladaptive schema has a significant effect on academic self-defeating behaviors.**

The T-statistic was 6.162, exceeding 1.96. The path coefficient was 0.326 (positive), confirming the hypothesis. The hypervigilance/inhibition maladaptive schema directly and significantly predicts academic self-defeating behaviors. The effect size was 0.007, classified as weak.

- **Sub-Hypothesis 12: The five EMS domains (disconnection/rejection, impaired autonomy/performance, impaired limits, other-directedness, and hypervigilance/inhibition) have a significant effect on academic burnout, mediated by academic self-defeating behaviors.**

Given that the t-values for all five indirect paths from the EMS domains to academic burnout (mediated by academic self-defeating behaviors) fall outside the ±1.96 range, the indirect effects of maladaptive schemas on academic burnout through the mediation of academic self-defeating behaviors are confirmed as statistically significant. This sub-hypothesis is therefore supported.

Table 10. Indirect Path Coefficients for the Sub-Hypotheses Model

Indirect Path	Path Coefficient	T-Statistic
Disconnection/Rejection → Self-Defeating Behaviors → Academic Burnout	0.599	9.111
Impaired Autonomy/Performance → Self-Defeating Behaviors → Academic Burnout	0.262	5.576
Other-Directedness → Self-Defeating Behaviors → Academic Burnout	0.031	5.504
Impaired Limits → Self-Defeating Behaviors → Academic Burnout	0.263	5.666
Hypervigilance/Inhibition → Self-Defeating Behaviors → Academic Burnout	0.097	5.768

Discussion

Structural equation modeling was used to examine the direct and indirect effects (via academic self-defeating behaviors) of early maladaptive schemas on academic burnout. Results indicated that this effect was statistically significant at the 95% confidence level. Accordingly, with 95% probability, the researcher's claim—that early maladaptive schema directly and indirectly (through the mediation of academic self-defeating behaviors) affect academic burnout—was confirmed. These findings are consistent with those of previous studies (7, 16). Results further demonstrated that the indirect effect of maladaptive schemas on academic burnout, mediated by academic self-defeating behaviors, is statistically significant, thereby confirming the main hypothesis.

- **Sub-Hypothesis 1: The disconnection/rejection maladaptive schema has a significant effect on academic burnout.**

Structural equation modeling revealed that this effect was not statistically significant at the 95% confidence level. Accordingly, the hypothesis that the disconnection/rejection maladaptive schema directly affects academic burnout was not confirmed and is rejected. This finding is inconsistent with the results of study (7). One possible explanation is that the statistical population in the present study consisted of students in their initial semesters, who, given their sense of support and attachment to peers and classmates, tended to exhibit high motivation and interest in academic activities. Fundamental needs such as security, affection, empathy, and acceptance were being met through external sources—peers and the educational environment—which may have buffered against the experience of academic burnout.

- **Sub-Hypothesis 2: The impaired autonomy/performance maladaptive schema has a significant effect on academic burnout.**

Structural equation modeling indicated that this effect was not statistically significant at the 95% confidence level. The hypothesis is therefore rejected. Autonomy refers to the individual's sense of being able to function independently in the world without continuous support from others. Autonomous individuals believe their environment is safe and that they can live as independent and successful members of society. Such individuals tend to experience satisfaction in educational environments and in their relationships with peers and instructors, drawing a sense of security from these contexts, which may reduce their susceptibility to academic burnout.

- **Sub-Hypothesis 3: The impaired limits maladaptive schema has a significant effect on academic burnout.**

This effect was statistically significant at the 95% confidence level. The hypothesis is confirmed. This finding is consistent with the results of study (7). When the need for realistic boundaries and self-control is not adequately met, the impaired limits domain—encompassing schemas such as entitlement/grandiosity and insufficient self-control/self-discipline—becomes activated. Individuals within this domain experience recurrent difficulties related to respecting others' rights and tolerating ordinary discomfort, and their low sense of responsibility, discipline, and reciprocal cooperation can contribute to burnout across various contexts.

- **Sub-Hypothesis 4: The other-directedness maladaptive schema has a significant effect on academic burnout.**

This effect was statistically significant at the 95% confidence level. The hypothesis is confirmed. This finding aligns with the results of study (20), which demonstrated a positive and significant relationship between EMS (and their dimensions) and occupational burnout. The other-directedness domain reflects an excessive preoccupation with satisfying others' needs—often at the expense of one's own—stemming from hypersensitivity to others' pain, avoidance of causing harm, and guilt about self-centeredness. This pattern leads to unreliable life decisions, hypersensitivity to

rejection, and ultimately burnout across various life domains.

- **Sub-Hypothesis 5: The hypervigilance/inhibition maladaptive schema has a significant effect on academic burnout.**

This effect was statistically significant at the 95% confidence level. The hypothesis is confirmed, consistent with findings from studies (21, 22).

- **Sub-Hypothesis 6: Academic self-defeating behaviors have a significant effect on academic burnout.**

This effect was statistically significant at the 95% confidence level. The hypothesis is confirmed, consistent with findings from studies (13, 15).

- **Sub-Hypotheses 7–11: Effects of individual EMS domains on academic self-defeating behaviors.**

For all five EMS domains—disconnection/rejection, impaired autonomy/performance, impaired limits, other-directedness, and hypervigilance/inhibition—the T-statistics exceeded 1.96, confirming a statistically significant direct effect on academic self-defeating behaviors in all cases. The hypervigilance/inhibition and other-directedness findings are consistent with Bamber and McMahon (2008) (24), who demonstrated that schemas within these domains are associated with self-defeating behavior problems.

- **Sub-Hypothesis 12: Mediated effects.**

The t-values for all five indirect paths exceeded the ±1.96 threshold, confirming that the indirect effects of all five EMS domains on academic burnout through the mediation of academic self-defeating behaviors are statistically significant. Academic self-defeating behaviors—encompassing procrastination, self-handicapping, over-commitment, invalid self-evaluation, impulsive behavior, and indecisiveness—may yield short-term positive outcomes for individuals but ultimately exert a negative effect on psychological well-being and lead to performance failures.

Conclusion

Early maladaptive schemas are emotional and cognitive patterns that form during early development and, through their repeated activation across the lifespan, can evolve into harmful patterns affecting multiple life domains. By influencing cognitive processing and functioning, these schemas can adversely affect academic performance and contribute to outcomes such as academic underachievement—largely because the individual becomes psychologically vulnerable to disturbances such as depression, anxiety, decision-making procrastination, and dysfunctional interpersonal relationships (7). Academic burnout, in turn, gives rise to cognitive difficulties including anxiety, suppression, depression, and fear. In educational contexts, it manifests as feelings of incompetence, weakened academic performance, non-participation in classroom activities, recurrent fatigue from study-related processes, disengagement from learning, and irregular class attendance.

Academic self-defeating behaviors—conscious actions taken in pursuit of positive short-term outcomes—include procrastination, self-handicapping, over-commitment, invalid self-evaluation, impulsive behavior, and indecisiveness. While such behaviors may appear beneficial in the short term, they ultimately compromise psychological well-being and lead to performance failures (8).

Schema therapy, through the restructuring of early maladaptive schemas, helps individuals challenge dysfunctional beliefs, cultivate a healthy internal voice, and strengthen their healthy mode. It enables individuals to evaluate the validity of their schemas and develop greater emotional awareness, acceptance, and regulatory capacity. Experiential and emotional techniques central to schema therapy assist individuals in reorganizing their emotional experiences, acquiring new learning patterns, regulating interpersonal affect, and developing self-soothing capacities, thereby laying the groundwork for healthy and successful functioning across diverse life situations and reducing the incidence of self-defeating behaviors and burnout in academic, occupational, and psychological domains.

The present study was subject to certain limitations, including restricted generalizability due to its focus on students in their initial semesters and potential measurement error associated with self-report instruments. Future research is therefore recommended to: (a) examine specific EMS subdimensions and self-defeating behavior types separately; (b) extend sampling to more diverse age groups and geographic regions; and (c) employ complementary methods such as structured interviews. From a practical standpoint, it is recommended that counselors and educational administrators identify maladaptive schemas and self-defeating behaviors through psychological assessments, implement corrective interventions, and offer self-regulation skill-building workshops and schema therapy approaches (individual or group) to reduce academic burnout and enhance learner performance.

Acknowledgment

None.

Funding

None.

Authors Contributions

The author conceptualized the study objectives and design.

Ethical Consideration

The research data and literature have not been copied from any works.

References:

[1] Jiang Y, Ge WT, Wu YG, Zhou HZ, Zhang JX. A study of the improvement of academic burnout of students with different learning styles by teacher-student collaborative assessment. Frontiers in Psychology. 2025;16:1504097.

[2] Ai E, Mahdinejad V, Jenaabadi H. Effectiveness of schema therapy on academic resilience and academic burnout of medical students. Education Strategies in Medical Sciences. 2021;14(2):20–27. [In Persian]

[3] Khodapanah F, Tamannaeifar M. Academic well-being of adolescent girls: the role of academic self-efficacy and happiness. International Journal of Medical Investigation. 2023;12(2):108–120.

[4] Liu Z, Xie Y, Sun Z, Liu D, Yin H, Shi L. Factors associated with academic burnout and its prevalence among university students: a cross-sectional study. BMC Medical Education. 2023;23(1):317.

[5] Salmalian H, Maleki Pirbazari M, Salehi S. The relationship between early maladaptive schemas of students and their academic burnout and social anxiety: a canonical correlation. Journal of Educational Sciences. 2020;27(1):183–202.

[6] Mourkani SS. The effectiveness of treatment schemas on reducing marital conflicts and increasing mental health. International Journal of Medical Investigation. 2021;10(1):76–84.

[7] Fathi Z. Predicting students' academic burnout based on time perspective and early maladaptive schemas. New Ideas in Psychology. 2022;14(18):3–15. [In Persian]

[8] Sarkeshikian SM, Babakhani N, Bagheri N. Structural equation modeling of academic self-defeating behaviors based on brain-behavioral systems, intolerance of uncertainty, and intelligence beliefs, with the mediating role of academic expectation stress. Educational Research. 2021;(43). [In Persian]

[9] Esmali A, Ghaffari M. Investigating the mediating role of emotional resilience in the relationship between positive and negative perfectionism and academic resilience with academic self-defeating behaviors in medical students. Education Strategies in Medical Sciences. 2025;18(4):15–27.

[10] Najari M, Khezrnezhad A, Khezrnezhad A, Ghaderdoust Z. Determining the effectiveness of a social adjustment training program on academic self-defeating behaviors in male students. New Strategies in Psychology and Educational Sciences. 2021;(12). [In Persian]

[11] Dehban Z, Pirbazari MM, Ashournejad F. The relationship between academic expectation stress and self-defeating behavior and cognition: the mediating role of emotional self-awareness. Mental Wellness. 2024.

[12] Shahbazian Khouniq A, Mesrabadi J, Farid A. The role of academic procrastination and loneliness in students' academic burnout. Rooyesh-e-Ravanshenasi. 2018;7(10):31. [In Persian]

[13] Yazdani SH, Ismaili Shad B. The relationship between academic burnout and academic self-handicapping, with the mediating role of emotional intelligence. Excellence in Counseling and Psychotherapy. 2021;11:58–70. [In Persian]

[14] Sarkeshikian SM, Babakhani N, Bagheri N. The mediating role of intolerance of uncertainty in the relationship between implicit theories of intelligence and academic self-defeating behaviors. Teaching and Learning Research Quarterly. 2022;18(73):24. [In Persian]

[15] Rashidi A, Zandi F, Yarahmadi Y, Akbari M. Effectiveness of an academic engagement-based training program on academic self-defeating behaviors of secondary school students in Ivan. Applied Psychology Quarterly. 2021;15(1):9–23. [In Persian]

[16] Van Royen A, Wante L, Braet C. The role of early maladaptive schemas in late adolescents suffering from school burnout and depressive symptoms. Journal of Affective Disorders Reports. 2024;17:100815.

[17] Sadoughi Z, Aguilar-Vafaei M. Factor analysis of the short form of the Young Schema Questionnaire in a non-clinical Iranian sample. Iranian Journal of Psychiatry and Clinical Psychology. 2008;14(2):214–219. [In Persian]

[18] Hashemi Sheikh Shebati SE, Bazrafkan H, Azizi M. Factor structure of the Maslach Burnout Inventory–Student Survey in female students. Women's Studies. 2013;11(1):175–204. [In Persian]

[19] Haddad Ranjbar S. Development and validation of an acceptance and commitment therapy-based training package for students with academic self-defeating behaviors and comparison of its effectiveness with a cognitive-behavioral training program on motivational beliefs, academic emotions, and time perspective [Doctoral dissertation]. Allameh Tabataba'i University; 2018. [In Persian]

[20] Amini Z, Khoshravesh V. The relationship between early maladaptive schemas and occupational burnout with the mediating role of psychological capital. Management and Educational Perspectives. 2020;2(3):133–163. [In Persian]

[21] Khakpour R, Sedigh M. Early maladaptive schemas and burnout symptoms in counselors/psychotherapists. Sixth

Congress of the Iranian Psychological Association; 2017. [In Persian]

[22] Moradi Ghahdarijani M, Homayi R, Norouzi M. Determining the relationship between early maladaptive schemas and burnout among middle school teachers in Isfahan. Second National Conference on Psychology and Behavioral Sciences; 2014. [In Persian]

[23] Mohammadi SD, Rafieipour Alavi F, Amini Qomi M, Amiri H. Examining the relationship between early maladaptive schemas and happiness in adolescents. Qom University of Medical Sciences Journal. 2016;10(11):42–50. [In Persian]

[24] Bamber M, McMahon R. Danger—early maladaptive schemas at work: the role of early maladaptive schemas in career choice and the development of occupational stress in health workers. Clinical Psychology and Psychotherapy. 2008;15:96–112.