

The Relationship Between Emotional Schemas and Self-Compassion with the Regulation of Psychological Needs in Students

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Article Info

Article type:

Original Research

How to cite this article:

Zabihollahi, F., & Vatandost, A. (2026). The Relationship Between Emotional Schemas and Self-Compassion with the Regulation of Psychological Needs in Students. *Journal of Adolescent and Youth Psychological Studies*, 7(2), 1-11.

<http://dx.doi.org/10.61838/kman.jayps.4859>



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ABSTRACT

Objective: This study aimed to examine the relationship between emotional schemas and self-compassion with the regulation of basic psychological needs among university students.

Methods and Materials: This descriptive-correlational study was conducted among 321 university students selected through stratified cluster sampling. Participants completed three standardized instruments measuring emotional schemas, self-compassion, and the regulation of basic psychological needs. Data analysis was performed using descriptive statistics, Pearson correlation coefficients, and multiple linear regression to determine the strength and direction of relationships as well as the predictive power of the studied variables.

Findings: Pearson correlation analysis revealed significant negative correlations between psychological needs regulation and multiple emotional schema components, including rumination ($r = -0.172, p = .002$), blaming others ($r = -0.151, p = .007$), guilt ($r = -0.178, p = .001$), emotional simplification ($r = -0.255, p = .001$), worthlessness ($r = -0.180, p = .001$), lack of control ($r = -0.236, p = .001$), numbness ($r = -0.182, p = .001$), irrationality ($r = -0.267, p = .001$), negative affect persistence ($r = -0.216, p = .001$), and non-agreeableness ($r = -0.222, p = .001$). Total emotional schemas showed a significant negative correlation with psychological needs regulation ($r = -0.238, p = .001$). Significant positive correlations were found between psychological needs regulation and self-kindness ($r = .462, p = .001$), common humanity ($r = .417, p = .001$), and mindfulness ($r = .389, p = .001$), while total self-compassion was strongly correlated with psychological needs regulation ($r = .511, p = .001$). Regression analysis showed that only self-compassion significantly predicted psychological needs regulation ($B = .276, t = 4.430, p = .001$), whereas emotional schemas did not.

Conclusion: Self-compassion plays a significant and unique role in predicting the regulation of psychological needs, while emotional schemas, although correlated, do not independently predict need regulation, highlighting the importance of fostering compassionate self-relating to enhance students' psychological functioning.

Keywords: Emotional schemas; self-compassion; psychological needs regulation; university students; emotional processing

1. Introduction

University students face a growing range of psychological pressures linked to academic demands, uncertain career prospects, and complex social transitions. In this developmental context, the way they understand and manage their emotional experiences, treat themselves in times of difficulty, and regulate their basic psychological needs plays a crucial role in their mental health and adaptation. Self-determination theory posits that optimal functioning depends on the ongoing satisfaction of three fundamental psychological needs—autonomy, competence, and relatedness—and that disturbances in how individuals regulate or satisfy these needs are associated with higher levels of distress and maladjustment (Ryan & Deci, 2017). Recent empirical work has shown that basic psychological needs are not only important outcomes in themselves, but also operate as mechanisms linking broader emotional and relational processes to well-being in adolescents and young adults (Cruz et al., 2024; Gao et al., 2025; Gazo et al., 2023; Kim & Kim, 2025). In the university context, where students are negotiating increased independence and identity exploration, examining how emotional factors shape the regulation of psychological needs is therefore both theoretically and practically important.

Basic psychological needs theory suggests that when the environment supports students' sense of volition, competence, and belonging, they are more likely to internalize values, show sustained motivation, and experience psychological well-being; conversely, chronic frustration or dysregulation of these needs is linked to anxiety, depression, and disengagement (Ryan & Deci, 2017). Studies with adolescents, university students, and adults have shown that the satisfaction and balance of basic needs predict higher engagement, resilience, and adaptive coping across academic and health-related domains (Cruz et al., 2024; Gao et al., 2025; Gazo et al., 2023; Kim & Kim, 2025). For example, research on sport settings suggests that coaches' compassionate behaviors and responsiveness to athletes' needs are associated with stronger need satisfaction and more adaptive motivational patterns (Zamani et al., 2022). Similarly, work on informal digital learning has indicated that need satisfaction promotes resilience and flow experiences, which in turn contribute to sustained engagement and better learning outcomes (Gao et al., 2025). These findings highlight that psychological needs do not operate in a vacuum but are embedded within broader

emotional, cognitive, and relational systems that shape how individuals interpret and respond to daily challenges.

One important set of processes that may influence the regulation of psychological needs involves emotional schemas—individuals' organized beliefs, evaluations, and meta-emotional interpretations about their own emotions (Leahy, 2002, 2019). Emotional schemas can include beliefs that emotions are dangerous, uncontrollable, shameful, or must be suppressed, as well as assumptions about others' willingness to validate or accept one's feelings (Leahy, 2002, 2015). Emotional Schema Theory proposes that these idiosyncratic meaning structures guide how people process emotional experiences, whether they allow themselves to feel and express affect, and how they seek support or regulate distress (Leahy, 2019). When emotional schemas are rigid and maladaptive—for example, when individuals believe that negative emotions will never end, that they will be rejected if they show vulnerability, or that they must always remain in control—emotions are more likely to be managed through avoidance, rumination, or interpersonal withdrawal rather than flexible engagement and problem solving (Edwards et al., 2020; Leahy, 2015).

A growing body of research has linked early maladaptive schemas and emotional schemas to difficulties in regulating psychological needs, suggesting that these deep-seated cognitive-emotional structures may undermine people's capacity to obtain autonomy, competence, and relatedness satisfactions in everyday life (Faustino et al., 2020; Faustino & Vasco, 2020a, 2020b). For instance, studies have shown that maladaptive schemas are associated with greater emotional dysregulation, experiential avoidance, and behavioral patterns that inadvertently frustrate basic needs, such as dependence, isolation, or perfectionism (Faustino et al., 2020; Faustino & Vasco, 2020b). Research integrating behavioral indicators has further demonstrated that individuals with more pervasive maladaptive schemas show less flexible responses to environmental demands and are more likely to remain stuck in cycles of unmet psychological needs (Faustino & Vasco, 2020a). These findings converge with broader work on emotional processing, which emphasizes that constructive engagement with emotion—rather than suppression or chronic overcontrol—is essential for adaptive change and need satisfaction (Greenberg, 2015; Pascual-Leone & Greenberg, 2007). From an integrative psychotherapy perspective, emotional schemas may thus be an important upstream factor influencing how people approach relationships, seek support, and act to meet their psychological needs (Vasco et al., 2018).

Empirical studies conducted in different cultural contexts underscore the clinical relevance of emotional schemas. Work on maladaptive emotional schemas has linked these patterns to a range of emotional problems, including heightened negative affect, emotion dysregulation, and poorer overall emotional functioning (Edwards et al., 2020; Thim, 2017). In Iranian populations, for example, comparisons between individuals with chronic health conditions and healthy controls suggest that maladaptive schemas and cognitive distortions are more prevalent among those with greater emotional and somatic difficulties (Biravand, 2014). Recent intervention research has also begun to evaluate the effects of emotional schema therapy on symptoms of anxiety, emotion regulation, and relational functioning, indicating promising benefits in clinical samples (Razzaghi et al., 2025). Together, these findings suggest that examining emotional schemas in non-clinical groups, such as university students, may shed light on how relatively stable emotional beliefs shape everyday adjustment and the regulation of psychological needs.

Alongside emotional schemas, self-compassion has emerged as a key protective factor associated with psychological health, adaptive motivation, and resilience. Conceptually, self-compassion involves treating oneself with kindness, recognizing one's experiences as part of the shared human condition, and relating to painful thoughts and feelings with mindful awareness rather than over-identification or harsh self-criticism (Neff, 2003). This stance is closely aligned with compassion-focused approaches, which emphasize soothing, validating, and supportive responses to threat and shame-based emotions (Gilbert et al., 2011). Meta-analytic evidence indicates that higher self-compassion is robustly associated with lower levels of depression, anxiety, stress, and psychopathology, and with higher levels of psychological well-being (MacBeth & Gumley, 2012). Longitudinal and correlational studies have further shown that self-compassion buffers the development of depressive symptoms, facilitates healthier responses to failure, and mediates the links between attachment, mattering, and mental and physical health (Raes, 2011; Raque-Bogdan et al., 2011; Shepherd & Cardon, 2009).

Self-compassion also appears to play a role in how individuals cope with stress, illness, and chronic pain. For example, in clinical samples, greater self-compassion and acceptance of pain have been associated with lower psychopathology and better adjustment, highlighting the importance of compassionate self-relating in the context of

persistent stressors (Costa & Pinto-Gouveia, 2011). Fear of compassion and difficulties in accessing compassionate states have been linked to higher levels of shame, self-criticism, and emotional distress, underscoring that not everyone finds it easy to be kind to themselves, especially when they hold rigid emotional schemas that devalue vulnerability (Gilbert et al., 2011). In Iranian research, the psychometric properties of translated self-compassion measures have been supported in diverse groups, including prisoners, providing a foundation for investigating self-compassion as a culturally relevant construct in Persian-speaking populations (Shahbazi et al., 2015). Moreover, cross-cultural validation studies suggest that self-compassion can be reliably assessed and shows consistent correlates across different languages and contexts (Kocur et al., 2022).

Recent work has increasingly focused on the connections between self-compassion and basic psychological needs. Studies with university and community samples have found that individuals who are more self-compassionate tend to report higher satisfaction of autonomy, competence, and relatedness, possibly because they are more willing to acknowledge their needs, seek support, and engage in self-care behaviors (Cruz et al., 2024; Gazo et al., 2023). In sport and educational settings, compassionate behaviors—whether directed toward oneself or others—appear to foster environments in which basic needs are more consistently met, which in turn enhances motivation and well-being (Zamani et al., 2022). Research on middle-aged men has also indicated that the satisfaction and balance of basic needs may moderate the impact of biological and psychosocial challenges (such as andropause and loneliness) on depression, suggesting that need processes function as resilience factors across the lifespan (Kim & Kim, 2025). In educational contexts that emphasize learner-centered approaches and emotional support, self-compassion and need satisfaction seem to work together to promote engagement and psychological adjustment (Gao et al., 2025).

The interplay between emotional schemas and self-compassion is particularly relevant for understanding the regulation of psychological needs. Emotional Schema Theory posits that individuals' beliefs about emotions shape whether they respond to distress with self-criticism, avoidance, or compassionate acceptance (Leahy, 2002, 2015, 2019). Rigid negative emotional schemas may make it difficult for students to acknowledge their needs for support, competence, or autonomy, leading to patterns of rumination,

guilt, or interpersonal withdrawal that undermine need satisfaction (Edwards et al., 2020; Thim, 2017). Conversely, self-compassionate students may be more able to validate their emotional experiences, view setbacks as opportunities for growth, and take constructive steps to meet their needs, consistent with emotion-focused and experiential models that emphasize working “through” emotion rather than avoiding it (Greenberg, 2015; Pascual-Leone & Greenberg, 2007). The complementary paradigmatic model in psychotherapy further suggests that integrating cognitive–schema, experiential, and compassion-based perspectives may offer a richer understanding of how emotional processing styles influence need regulation and adaptive functioning (Vasco et al., 2018).

In the Iranian context, research has begun to explore the relations between basic psychological needs, maladaptive schemas, and emotional regulation difficulties in couples and other populations, pointing to complex interactions between cognitive–emotional patterns and need processes (Abdollahi Arpanahi, 2023). Studies on emotional schemas in Iranian samples have highlighted their associations with both psychological and somatic conditions, such as migraine, emphasizing the pervasive impact of maladaptive emotional beliefs on well-being (Biravand, 2014). At the same time, emerging intervention studies targeting emotional schemas, self-compassion, and related constructs—such as emotion-focused schema therapy, compassion-focused forgiveness therapy, and cognitive-behavioral approaches—have demonstrated positive effects on emotional capital, emotion regulation, and interpersonal functioning in vulnerable groups, including women exposed to domestic violence and individuals with anxiety disorders (Khayatan et al., 2025; Razzaghi et al., 2025). These developments underscore the clinical and preventive importance of understanding how emotional schemas and self-compassion are linked to core psychological processes like need regulation among Iranian university students.

Despite this growing literature, there remains a noticeable gap in research directly examining the combined contribution of emotional schemas and self-compassion to the regulation of psychological needs in non-clinical student populations. Many existing studies have focused on psychopathology, symptom reduction, or interpersonal outcomes, while fewer have explicitly investigated how these emotional constructs predict the way students organize, prioritize, and satisfy their fundamental psychological needs in everyday academic life (Costa & Pinto-Gouveia, 2011; MacBeth & Gumley, 2012; Raes,

2011; Raque-Bogdan et al., 2011). Moreover, given cultural differences in emotional expression, self-criticism, and relational norms, it is important to investigate these relationships in different sociocultural settings, using validated measures and contextually sensitive interpretations (Kocur et al., 2022; Shahbazi et al., 2015). Understanding whether maladaptive emotional schemas undermine need regulation, and whether self-compassion acts as a protective factor in this process, can inform the design of preventive interventions and counseling programs tailored to university students.

In light of the theoretical centrality of basic psychological needs for motivation and well-being, the established links between emotional schemas and emotional dysregulation, and the accumulating evidence for the protective role of self-compassion, it is necessary to clarify how these constructs interrelate in student populations, particularly within the Iranian cultural context (Cruz et al., 2024; Gilbert et al., 2011; Leahy, 2015; Neff, 2003; Ryan & Deci, 2017). Therefore, the present study aimed to examine the relationships between emotional schemas and self-compassion with the regulation of psychological needs among students of Islamic Azad University, Ayatollah Ameli Branch.

2. Methods and Materials

2.1. Study Design and Participants

This study is applied in terms of purpose and descriptive-correlational in terms of implementation and data collection. The statistical population consisted of all students of Islamic Azad University, Ayat Ameli Branch, during the 2023–2024 academic year, totaling 4,500 individuals based on the obtained statistics. To determine the sample size, and in accordance with Krejcie and Morgan’s table, 350 students were selected through stratified cluster sampling. In this procedure, three faculties—Physical Education, Humanities, and Pharmacy—were first randomly selected from among all faculties. Then, four academic majors were selected from each faculty. Next, one or two classes were chosen from each major, and all students in those classes completed the research questionnaires. After collecting the questionnaires and removing defective ones, a total of 321 questionnaires were retained and entered into the statistical analysis program.

After obtaining ethical approval and securing formal authorization from Islamic Azad University, Ayat Ameli Branch, the researcher attended the university, introduced

herself, and selected the sample students. Following the selection of participants, the research questionnaires were distributed and completed individually by the participants. Throughout all stages, the researcher maintained close interaction with the participants and responded to any ambiguities or possible questions. To uphold ethical principles and encourage cooperation, prior to administering the test, participants were provided with general information about the purpose and topic of the research to the extent that it would not influence the study outcomes. Upon assuring participants that their information would not be analyzed individually under any circumstances and that their participation was voluntary, with the freedom to withdraw at any time, they were included in the study sample.

2.2. Measures

Basic Psychological Needs Questionnaire (BPNS) – Guardia, Deci, and Ryan (2000): This scale, developed by Guardia, Deci, and Ryan (2000), measures the extent to which basic needs for autonomy, competence, and relatedness are supported and satisfied. The Basic Psychological Needs Scale consists of 21 items rated on a 5-point Likert scale (1 = completely untrue, 5 = completely true). Items 3, 4, 7, 11, 15, 16, 18, 19, and 20 are reverse-scored. The maximum scores for autonomy, competence, and relatedness are 35, 30, and 45, respectively. Higher scores indicate greater satisfaction of these needs. Guardia et al. reported a reliability coefficient of .92. In Ghorbani's (2004) study, the scale demonstrated desirable validity and reliability, with Cronbach's alpha coefficients ranging from .76 to .79. Psychometric properties of the Persian version have been examined and confirmed in several studies (Besharat, 2012). In a sample of 927 individuals from the general population and university students, Cronbach's alpha for autonomy, competence, and relatedness subscales was .87, .89, and .92 respectively for the general population, and .89, .87, and .91 respectively for students, indicating good internal consistency. Test-retest reliability coefficients over a two- to four-week interval for 127 participants were .77, .73, and .76 for autonomy, competence, and relatedness, respectively ($p = .001$), indicating satisfactory stability. In the present study, Cronbach's alpha reliability was .82.

Leahy Emotional Schemas Questionnaire (2002): This questionnaire was developed by Leahy in 2002 and later validated and adapted by Hamidpour in 2011. It contains 28 items and 14 dimensions, including validation, comprehensibility, guilt, simplification of emotions, higher

values, loss of control, numbness, rationality, duration, agreeableness, acceptance of emotions, rumination, expression of emotions, and blaming others. It is scored on a 6-point Likert scale ranging from 1 ("This has not happened to me") to 6 ("This happens to me very much"). Higher scores indicate stronger negative emotional schemas. The minimum possible score is 28 and the maximum score is 140. Scores between 28 and 47 indicate low levels of negative emotions, scores between 47 and 94 indicate moderate levels, and scores above 94 indicate high levels of negative emotions. Leahy (2002) reported Cronbach's alpha reliability of .81. In Birannavand's (2014) study, content validity was assessed by experts in organizational and management sciences, and after incorporating their suggestions, the final version of the questionnaire was approved. Cronbach's alpha reliability was reported as .84. In the present study, Cronbach's alpha reliability was .72.

Self-Compassion Scale (SCS) – Rees et al. (2011): The Self-Compassion Scale exists in long and short forms. The long form was developed by Neff et al. (2003), while the short form was developed by Rees et al. (2011). The short form contains 12 items and six components: self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification. Items are rated on a 5-point Likert scale. Higher scores indicate higher levels of self-compassion. Total scores range from 12 to 60. In Shahbazi et al.'s (2015) study, Cronbach's alpha for the total scale was .91, and alpha coefficients for the subscales—self-kindness, self-judgment, common humanity, isolation, mindfulness, and over-identification—were .83, .87, .91, .88, .92, and .77, respectively. Concurrent and convergent validity were also reported as satisfactory. In the present study, Cronbach's alpha reliability was .87.

2.3. Data Analysis

Descriptive statistical methods (mean, standard deviation, skewness, and kurtosis) and inferential methods (Pearson correlation test and multiple regression analysis) were used for data analysis through SPSS version 26.

3. Findings and Results

Based on the results, 196 participants (61.06%) in this study (students) were female and 125 participants (38.94%) were male. Additionally, 164 participants (51.10%) were undergraduate students, 147 participants (45.79%) were master's students, and 10 participants (3.11%) were studying

at the doctoral level. The descriptive statistics for the research variables are presented below.

Table 1

Descriptive Statistics of Research Variables

Variables	N	Minimum	Maximum	Mean	Standard Deviation
Emotional Schema	321	38.00	132.00	99.934	21.003
Self-Compassion	321	2.00	60.00	38.283	9.848
Psychological Needs Regulation	321	45.00	92.00	70.504	9.417

Accordingly, the mean score of psychological-needs regulation among the students was 70.504 with a standard deviation of 9.417; the mean emotional schemas score among participants was 99.934 with a standard deviation of 21.003; and the mean self-compassion score was 38.283 with a standard deviation of 9.848.

To examine the relationship between emotional schemas, mindfulness, and their dimensions with psychological-needs regulation among students, Pearson correlation analysis was used due to the normal distribution of the data.

Table 2

Pearson Correlation Matrix of Independent Variables with Psychological Needs Regulation

Variable	N	Pearson Correlation	Sig. Level
Rumination	321	−0.172**	.002
Blaming Others	321	−0.151**	.007
Feelings of Guilt	321	−0.178**	.001
Emotional Simplification	321	−0.255**	.001
Worthlessness	321	−0.180**	.001
Lack of Control	321	−0.236**	.001
Numbness	321	−0.182**	.001
Irrationality	321	−0.267**	.001
Persistence of Negative Feelings	321	−0.216**	.001
Non-Agreeableness	321	−0.222**	.001
Non-Acceptance of Emotions	321	−0.004	.950
Distrust	321	−0.055	.325
Lack of Emotional Expression	321	−0.095	.090
Lack of Comprehension	321	−0.061	.273
Emotional Schemas Total	321	−0.238**	.001
Self-Kindness	321	0.462**	.001
Common Humanity	321	0.417**	.001
Mindfulness	321	0.389**	.001
Self-Judgment	321	−0.434**	.001
Isolation	321	−0.460**	.001
Over-Identification	321	−0.391**	.001
Self-Compassion Total	321	0.511**	.001

The results of the Pearson correlation test in Table 2 show a significant negative relationship between emotional schemas and psychological-needs regulation among students of Islamic Azad University, Ayatollah Ameli Branch ($r = -0.238$, $\text{Sig} = .001$). Additionally, there is a significant positive relationship between self-compassion and

psychological-needs regulation ($r = 0.511$, $\text{Sig} = .001$). The correlations between the dimensions of the research variables and psychological-needs regulation are also presented in the table above. Considering the fulfillment of statistical assumptions, conducting a multiple linear regression analysis was appropriate.

Table 3

Regression Model Summary

Regression Model	R	R ²	Adjusted R ²	Durbin–Watson
Multiple Linear	0.592	0.350	0.342	1.602

Given the Durbin–Watson statistic of 1.602, the residuals (errors) show independence. Based on the results of the linear regression, it can be stated that overall, there is a significant relationship between the independent variables (emotional schemas and self-compassion) and the dependent

variable (psychological-needs regulation) ($R = 0.592$). The adjusted R^2 indicates that 34% of the variance in psychological-needs regulation is explained by the independent variables.

Table 4

ANOVA Analysis of the Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	9932.575	2	2483.144	42.540	.001
Residual	18445.668	316	58.372		
Total	28378.243	320			

Table 4 presents the ANOVA results of the regression analysis. Considering the significance of the F statistic ($F = 42.540$, $\text{Sig} = .001$), it can be concluded that the regression model consisting of the independent variables (emotional schemas and self-compassion) and the dependent variable

(psychological-needs regulation) is appropriate and these variables likely explain variance in psychological-needs regulation among students of Islamic Azad University, Ayatollah Ameli Branch.

Table 5

Regression Analysis Results

Variable	B	Std. Error	Beta	t	p
Intercept	25.328	8.861	–	2.858	.005
Emotional Schemas	–0.025	0.027	–0.056	–0.930	.353
Self-Compassion	0.276	0.062	0.289	4.430	.001

The regression results in Table 5 (unstandardized coefficients, significance levels, and t-values) indicate that among the independent variables, self-compassion ($B = 0.276$, $t = 4.430$, $p = .001$) has a significant positive effect on psychological-needs regulation in students at Islamic Azad University, Ayatollah Ameli Branch. Additionally, emotional schemas ($t = -0.930$, $p = .353$) do not have a significant effect on psychological-needs regulation.

4. Discussion

The purpose of this study was to examine the associations between emotional schemas and self-compassion with the regulation of psychological needs among university students. The findings revealed a significant negative relationship between emotional schemas and psychological needs regulation, while self-compassion exhibited a

significant positive relationship with the regulation of these needs. Furthermore, regression analyses indicated that among the two predictors, only self-compassion significantly contributed to explaining variations in psychological needs regulation. These findings highlight the critical role of adaptive emotional processes, self-relating styles, and emotional meaning structures in shaping students' abilities to meet their basic psychological needs for autonomy, competence, and relatedness.

The negative association observed between emotional schemas and psychological needs regulation is consistent with theoretical and empirical frameworks emphasizing the restrictive impact of maladaptive emotional beliefs on psychological functioning. Emotional Schema Theory posits that rigid or maladaptive schemas—such as beliefs that emotions are overwhelming, uncontrollable, shameful, or

must be concealed—can interfere with the ability to process affect, communicate needs, and regulate interpersonal experiences effectively (Leahy, 2002, 2015, 2019). Students with such schemas may evaluate emotional experiences through filters of inadequacy or fear, leading to avoidance, suppression, or rumination rather than seeking support or expressing their needs. This interpretation is congruent with research demonstrating that maladaptive schemas are associated with emotional dysregulation, behavioral avoidance, and patterns that frustrate the fulfillment of autonomy, competence, and relatedness (Faustino et al., 2020; Faustino & Vasco, 2020a, 2020b).

The multidimensional correlations found in this study—such as significant negative relationships between psychological needs regulation and emotional schemas like rumination, guilt, lack of control, numbness, irrationality, and non-acceptance—further reinforce previous findings. Research indicates that when individuals rely on emotional schemas that discourage emotional expression or emphasize perceived threat, they are more likely to inhibit communication, withdraw socially, or engage in maladaptive coping (Edwards et al., 2020). Such responses inhibit their ability to form supportive relationships, take initiative, or feel capable in academic and social contexts. The current findings also mirror studies showing that early maladaptive schemas and emotional processing difficulties predict poorer satisfaction of psychological needs, particularly in settings that require interpersonal engagement and autonomy-driven decision-making (Pascual-Leone & Greenberg, 2007; Thim, 2017).

Iranian research supports these conclusions by identifying connections between maladaptive schemas and emotional or behavioral difficulties. For example, schemas related to guilt, dependency, and catastrophic interpretations of emotions have been found among individuals with higher psychological distress, consistent with cognitive-emotional mechanisms described in Schema Therapy (Biravand, 2014). Additionally, studies examining maladaptive schemas in Iranian couples suggest that such schemas interfere with emotional regulation processes, relational functioning, and overall psychological adjustment (Abdollahi Arpanahi, 2023). These culturally relevant findings strengthen the current study's conclusion that emotional schemas can substantially influence students' ability to regulate basic psychological needs.

In contrast to emotional schemas, self-compassion displayed a strong positive association with psychological needs regulation and emerged as the only significant

predictor in the regression model. This finding aligns with existing literature highlighting the adaptive and protective functions of self-compassion in academic, relational, and mental health domains. Self-compassion enables individuals to respond to personal struggles with kindness, mindfulness, and an understanding of shared humanity rather than self-criticism or emotional suppression (Neff, 2003). In doing so, self-compassion protects autonomy by reducing internalized pressures, supports competence by facilitating self-efficacy and emotional resilience, and enhances relatedness by reducing shame-driven withdrawal (Gilbert et al., 2011). The present findings are consistent with evidence showing that self-compassion predicts lower psychopathology and higher well-being across diverse populations (MacBeth & Gumley, 2012).

Furthermore, previous studies have demonstrated that self-compassion promotes need satisfaction by enabling individuals to approach challenges with emotional balance and authentic self-awareness. University students who are self-compassionate tend to acknowledge their needs without judgment, seek social support when appropriate, and adopt problem-solving strategies rather than avoidance. These patterns support research linking self-compassion to greater satisfaction of autonomy, competence, and relatedness (Cruz et al., 2024; Gazo et al., 2023). In addition, findings from educational and sport contexts indicate that compassionate self-relating enhances motivation and engagement by strengthening students' emotional resilience and reducing fear of failure (Gao et al., 2025; Zamani et al., 2022). The present results reinforce these findings by demonstrating that self-compassion is a stronger predictor of psychological needs regulation than emotional schemas, likely due to its flexible, supportive, and growth-oriented functions.

Research on mental health and developmental well-being provides further support for the observed role of self-compassion. Longitudinal studies indicate that higher self-compassion buffers the development of depressive symptoms (Raes, 2011) and enhances mental and physical health through improved emotional regulation and feelings of mattering (Raque-Bogdan et al., 2011). Additionally, the role of self-compassion in coping with failure and emotional setbacks has been emphasized in work environments and leadership studies; individuals who approach personal failure with self-compassion are more likely to show resilience, emotional stability, and adaptive learning (Shepherd & Cardon, 2009). These findings collectively align with the present study's results and suggest that self-

compassion supports psychological needs by fostering an emotionally secure and self-validating inner environment.

Emerging research in Iran also highlights the transformative role of compassion-based interventions. For instance, studies show that compassion-focused therapy and emotion-focused schema therapy improve emotional capital, emotional regulation, and relationship satisfaction in vulnerable populations (Khayatan et al., 2025; Razzaghi et al., 2025). These results support the idea that building compassion skills may enhance psychological needs satisfaction by helping individuals reduce self-criticism, develop healthier emotional interpretations, and engage in more supportive interpersonal behaviors.

From a broader experiential perspective, the findings of this study align with Emotion-Focused Therapy, which emphasizes the role of emotional processing and compassionate self-relating in promoting psychological integration and change (Greenberg, 2015; Pascual-Leone & Greenberg, 2007). According to these models, adaptive emotional functioning emerges when individuals engage constructively with their emotions rather than suppressing or overidentifying with them. Self-compassion facilitates this engagement, enabling individuals to explore their emotions safely while meeting their psychological needs for autonomy and relatedness. Emotional schemas, however, may hinder this process by generating fear, avoidance, or dysregulated emotional responses.

The compatibility of findings with Self-Determination Theory also strengthens their theoretical significance. Self-compassion appears to support psychological needs by promoting internal autonomy, reducing dependency on external validation, and encouraging authentic functioning (Ryan & Deci, 2017). Conversely, maladaptive emotional schemas may undermine psychological needs by generating internal conflicts, emotional rigidity, or excessive self-criticism, all of which impede optimal self-regulation. The results of this research thus help bridge two theoretical traditions—emotion-focused and motivational—by highlighting how emotional meaning structures and self-relating styles converge to shape psychological needs regulation among university students.

5. Conclusion

The findings of this study demonstrate that self-compassion serves as a key factor in supporting students' ability to regulate their basic psychological needs, while emotional schemas, despite their associations with need

regulation, do not independently predict these outcomes. This suggests that compassionate self-relating may help students navigate emotional challenges more effectively, empowering them to meet their needs for autonomy, competence, and relatedness. Strengthening self-compassion may therefore play an important role in enhancing students' overall psychological adjustment, emotional resilience, and well-being within academic environments.

6. Limitations & Suggestions

This study, like many psychological investigations, possesses limitations that should be acknowledged. First, the sample was limited to students from one university, which restricts the generalizability of the results to broader student populations. Second, the study employed self-report questionnaires, which may be influenced by response biases such as social desirability or limited self-awareness. Third, the cross-sectional design prevents any causal interpretation of the observed relationships. Fourth, while the study included validated measures, cultural factors influencing emotional schemas or self-compassion may not be fully captured by standardized instruments. Finally, potential mediating or moderating variables—such as resilience, social support, or personality traits—were not examined and may have influenced the associations observed.

Future studies should expand the sample to include students from different universities, regions, and cultural backgrounds to improve generalizability. Longitudinal and experimental designs are recommended to clarify causal relationships and temporal dynamics among emotional schemas, self-compassion, and psychological needs regulation. Researchers may also explore potential mediators and moderators, such as emotional intelligence, mindfulness, resilience, or interpersonal functioning, to better understand underlying mechanisms. Additionally, qualitative or mixed-methods studies could provide deeper insight into students' lived experiences of emotional schemas and need regulation. Intervention-based studies examining the effects of compassion-focused, schema-focused, or emotion-focused programs on psychological needs regulation would also contribute valuable evidence for applied contexts.

In practical settings, counselors and educators should encourage self-compassion skills among students to strengthen their emotional resilience and ability to meet their psychological needs. Workshops or training programs can

help students recognize maladaptive emotional schemas and develop healthier ways of understanding and responding to their emotions. Universities may incorporate psychoeducational modules into orientation programs, academic skill workshops, or counseling services to foster supportive emotional climates. Creating environments that reduce self-criticism, validate emotional experiences, and promote constructive emotional expression can further enhance students' motivation, well-being, and academic functioning.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

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

Funding

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

Authors' Contributions

This article is derived from the first author's doctoral dissertation. All authors equally contributed to this article.

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