The Impact of Academic Counseling on Perceived Classroom Assessment with the Mediating Role of Students' Autonomy Support

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Article Info

A B S T R A C T

This study aimed to investigate the effect of academic counseling on perceived classroom assessment, with a specific focus on the mediating role of students' autonomy support in the educational setting. The research employed a descriptive-correlational design with an applied purpose. The statistical population included all first-grade middle school students (both male and female) in Rudsar County during the academic year 2024–2025. A total of 322 students were selected using stratified random sampling based on Krejcie and Morgan's table. Data were collected using three standardized instruments: the Academic Counseling Questionnaire by Wen et al. (2018), the Autonomy Support Questionnaire by Legate et al. (2012), and the Perceived Classroom Assessment Questionnaire by Al-Kharusi et al. (2009). The validity and reliability of the instruments were confirmed through factor analysis and Cronbach's alpha. Data analysis was performed using descriptive statistics, Kolmogorov–Smirnov test for normality, and structural equation modeling (SEM) using SmartPLS software. The results indicated that academic counseling had a significant direct positive effect on students' perceived classroom assessment ($\beta = 0.413$, $t = 10.813$, $p < 0.05$). Academic counseling also positively predicted autonomy support ($\beta = 0.336$, $t = 7.083$, $p < 0.05$), which in turn significantly influenced perceived classroom assessment ($\beta = 0.119$, $t = 2.412$, $p < 0.05$). The mediation analysis confirmed that autonomy support partially mediated the relationship between academic counseling and perceived classroom assessment, with an indirect effect coefficient of 0.040 ($t = 2.209$, $p < 0.05$). The findings underscore the importance of academic counseling as a multidimensional intervention that not only directly enhances students' perception of classroom assessment but also does so indirectly through the development of autonomy. This highlights the need for autonomy-supportive counseling practices to foster meaningful learning environments.
Keywords: Academic Counseling; Perceived Classroom Assessment; Autonomy Support; Self-Determination Theory; Middle School Students

1.   Introduction

In the evolving landscape of education, where the psychological and emotional needs of learners are increasingly recognized as central to academic success, the role of academic counseling and autonomy support has come into sharper focus. As education systems worldwide strive to move beyond content delivery to foster holistic development, the perception students hold of classroom assessment environments becomes a vital indicator of instructional effectiveness. Perceived classroom assessment encompasses students' beliefs about the fairness, transparency, and usefulness of evaluation practices, influencing their engagement, motivation, and achievement. Research has increasingly emphasized that supportive educational environments—especially those that value students' autonomy and provide personalized guidance—can significantly enhance the meaning and impact of assessments from the learner's perspective (Ding et al., 2025; Lin et al., 2024; Y. Wang et al., 2024).

Academic counseling, as an institutionalized support service, aims to promote students' personal, social, and academic development through individualized guidance. It plays a key role in clarifying students' goals, addressing their academic difficulties, and supporting their psychological needs. Recent evidence indicates that academic counseling can enhance motivation, reduce anxiety, and foster adaptive learning strategies, thereby improving students' perceptions of the overall educational environment, including assessment practices (Ajuwon et al., 2024; Caparello et al., 2025; Choi, 2024). Counseling interventions that encourage self-exploration, emotional regulation, and goal-setting may empower students to view assessment not merely as a judgmental tool but as a meaningful feedback mechanism that supports learning (Doshi et al., 2022).

Concurrently, the concept of autonomy support—both from teachers and parents—has emerged as a central pillar in the motivational literature, particularly under the framework of self-determination theory. Autonomy support refers to the ways in which significant others foster a sense of volition and choice in learners, nurturing their intrinsic motivation and psychological well-being (Li et al., 2025; Mammadov & Tozoglu, 2023; Ortiz-Rodríguez et al., 2024). Autonomy-supportive environments have been associated with greater academic engagement, self-regulation, and reduced procrastination (Du et al., 2023; Song et al., 2024; Zhao et al., 2022). By giving students the opportunity to make meaningful choices and express their preferences, autonomy support encourages learners to internalize educational goals, which in turn leads to more positive appraisals of classroom tasks and evaluations (Jiang et al., 2022; Lin et al., 2024).

Although the relationship between autonomy support and academic motivation has been extensively studied, fewer empirical efforts have directly examined how autonomy support mediates the relationship between academic counseling and students' perceptions of classroom assessment. It is plausible to argue that academic counseling can foster autonomy by helping students articulate their learning needs and set personal goals, thereby shaping how they perceive the assessment environment. When counseling emphasizes student voice and choice, it may increase their sense of agency and ownership over their learning process, which is crucial for developing positive perceptions of classroom evaluations (Meng et al., 2025; Qiao & Rameli, 2025; Zhang, 2025). This line of reasoning aligns with findings suggesting that autonomy acts as a psychological conduit through which various educational inputs—such as counseling, teaching style, or parental involvement—translate into improved academic outcomes (Deng, 2024).

The current study is particularly relevant within the Iranian educational context, where high-stakes examinations and centralized curricula often limit opportunities for student voice and personalized guidance. Middle school students, at a critical stage of identity and motivation development, are particularly vulnerable to the negative effects of rigid assessment environments. Academic counseling in this setting, if appropriately aligned with autonomy-supportive practices, could provide a counterbalance to external control, enhancing students' sense of competence and relatedness. This is supported by cross-cultural findings emphasizing the universality of psychological needs and the benefits of autonomy-supportive interventions even in more hierarchical educational systems (Hanan Ainul Birri Anwar et al., 2025; Tankutay & Çolak, 2025; Tunca, 2024).

Moreover, research has underscored the pivotal role of perceived assessment fairness and usefulness in shaping academic behaviors and emotional responses. Students who perceive assessments as transparent, meaningful, and aligned with their learning efforts are more likely to engage deeply with their studies and less likely to exhibit stress or avoidance behaviors (López-García et al., 2022; Tian et al., 2023; Zhang et al., 2022). This perception is not merely a function of the assessment format but is significantly influenced by the relational and motivational climate of the classroom, including teacher and counselor behaviors (D.

Wang et al., 2024; Wang et al., 2023). Interventions aimed at enhancing student perceptions of classroom assessment must therefore address the broader support structures within schools, particularly those that can influence students' internal motivation and sense of self-direction.

Another important consideration is the interaction between academic counseling and the student's psychological development. Effective counseling does not function in isolation but interacts with other personal and contextual factors, including parental and peer support, resilience, and individual goal orientation (Caparello et al., 2025; Zhang, 2025). Students receiving autonomy-supportive counseling may be better equipped to make sense of their academic challenges, regulate their emotions, and perceive assessments as opportunities for growth rather than judgment. This perspective resonates with the growing literature on positive psychology and its application in school-based counseling (Ortiz-Rodríguez et al., 2024; Y. Wang et al., 2024).

Given the theoretical and empirical underpinnings discussed above, this study aims to investigate the direct effect of academic counseling on students' perceived classroom assessment, as well as the mediating role of autonomy support in this relationship. Building on the principles of self-determination theory and guided by recent empirical findings, the study hypothesizes that students who receive effective academic counseling are more likely to perceive their classroom assessments positively, and that this relationship is partially mediated by the degree to which they feel autonomous in their learning environment (Choi, 2024; Du et al., 2023; Li et al., 2025).

To achieve this, the study focuses on middle school students in Rudsar County, representing a developmental stage at which academic identity, self-regulatory capacities, and attitudes toward assessment are particularly malleable.

2. Methods and Materials

2.1. Study Design and Participants

This research was designed as a descriptive-correlational study with an applied orientation. From a methodological standpoint, the study sought to describe and examine the relationships between variables using real-world data collected from the educational setting. The nature of the study was also causal in that it aimed to explore the effect of academic counseling on students' perceived classroom assessment, with students' autonomy support functioning as a mediating variable. The target population for this research

included all first-grade high school students—both male and female—in Rudsar County during the academic year 2024–2025. This specific population was selected to ensure that the findings would be generalizable to middle school students within the region. The research sought to explore these students' perceptions and experiences regarding academic counseling, autonomy, and classroom evaluation.

Based on Krejcie and Morgan's sampling table, a total sample size of 322 participants was determined to ensure the statistical reliability and validity of the results. A stratified random sampling technique was employed, which allowed every student in the population an equal chance of being selected. This method ensured that different demographic subgroups were proportionally represented in the sample. The stratification was particularly useful in analyzing the influence of demographic characteristics on the relationships among the study variables. The approach contributed to generating a representative and balanced sample, enhancing the external validity of the research findings.

2.2. Measures

To assess perceived classroom assessment, a standardized questionnaire developed by Al-Kharusi et al. (2009) was used. This instrument consists of 16 items covering two main dimensions: learning environment (items 1 to 8) and learning performance (items 9 to 16). The questionnaire is specifically designed to capture students' perceptions of their classroom assessment settings. Responses are measured on a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). This scaling method enables students to express the extent of their agreement or disagreement with each item, thereby offering insight into how they interpret the quality, purpose, and fairness of classroom assessments. The internal consistency of the instrument, as measured by Cronbach's alpha, was reported to be 0.748, indicating acceptable reliability for research use.

To evaluate academic counseling, a standardized questionnaire developed by Wen et al. (2018) was administered. This instrument contains 4 items that aim to measure students' perceptions of the quality and accessibility of academic counseling services available to them. Each item is rated on a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5). This tool allows respondents to communicate how supported they feel in terms of academic guidance, planning, and emotional support regarding their educational journey. With a

Cronbach's alpha of 0.796, the scale demonstrated a high level of internal consistency, supporting its use as a reliable measurement instrument in this study.

To measure student autonomy support, the study employed a standardized 10-item questionnaire developed by Legate et al. (2012). The aim of this instrument is to assess students' perceived level of autonomy in academic settings, particularly within classroom interactions and decision-making processes. Like the other instruments used in the study, it employs a 5-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5), allowing respondents to indicate their personal experiences of autonomy. This instrument enables the identification of how much students feel they are trusted, encouraged to express themselves, and given freedom in their educational environment. The calculated Cronbach's alpha for this scale was 0.835, which reflects excellent internal reliability and reinforces its suitability for this study.

2.3. Data Analysis

The data collected were analyzed using both descriptive and inferential statistical techniques. Descriptive statistics, including frequency distribution, percentage frequencies, means, and standard deviations, were used to summarize and describe the general characteristics of the collected data. These initial analyses helped outline the demographic and psychological profiles of the participants and provided foundational insights into the central tendencies and variability in responses.

To test the research hypotheses, inferential statistical methods were utilized. Initially, the Kolmogorov-Smirnov test was performed to assess the normality of the distribution for each variable. This step was crucial for determining the appropriate analytical procedures. Upon confirming the distributional characteristics of the data, structural equation modeling (SEM) was employed using the SmartPLS software. This analytical technique allowed for the simultaneous examination of direct and indirect relationships among academic counseling, perceived classroom assessment, and autonomy support. SEM was particularly advantageous in testing the mediating role of autonomy support while accounting for measurement errors and the complex nature of interactions among the latent variables in the study.

3.   Findings and Results

The demographic distribution of the participants based on their educational grade revealed a relatively balanced representation across the three levels of middle school. Among the 322 students surveyed, 129 individuals (40.06%) were in the seventh grade, making up the largest proportion of the sample. The eighth grade accounted for 77 participants (23.92%), while 116 students (36.02%) were in the ninth grade. This distribution ensured that the perspectives of students from all three academic levels within the first cycle of secondary education in Rudsar County were adequately captured, thereby enhancing the generalizability and representativeness of the findings.

Table 1

Descriptive Statistics of the Research Variables

Variable	Mean	Standard Deviation	Skewness	Kurtosis	Minimum	Maximum
Academic Counseling	3.48	0.929	-0.154	-1.387	1.75	5.00
Autonomy Support	3.32	0.721	-0.291	-0.401	1.50	4.90
Learning Environment	3.51	0.844	-0.469	-0.493	1.50	4.88
Learning Performance	3.58	0.811	-0.512	-0.939	1.88	4.88
Perceived Classroom Assessment	3.55	0.716	-0.346	-0.901	1.88	4.88

The descriptive statistics in Table 1 provide an overview of the central tendencies and distributional properties of the study's main variables. The mean scores for all variables ranged between 3.32 and 3.58, indicating that participants, on average, responded slightly above the midpoint of the scale on all measures. Academic counseling had a mean of 3.48 and the highest standard deviation (0.929), suggesting greater variability in how students perceived counseling services. Autonomy support had the lowest mean (3.32) and

a relatively lower standard deviation (0.721), reflecting a more consistent perception among students. The subcomponents of perceived classroom assessment—learning environment (M = 3.51) and learning performance (M = 3.58)—also showed moderate averages with acceptable dispersion. Notably, all skewness values were negative, indicating that distributions were slightly left-skewed, and kurtosis values were also negative, reflecting relatively flatter distributions compared to the normal curve.

The ranges of responses indicate diverse student experiences, with minimum values around 1.50 and maximum values close to 5.

Table 2

Correlation Matrix Among the Study Variables

Variables	1. Academic Counseling	2. Autonomy Support	3. Learning Environment	4. Learning Performance	5. Perceived Classroom Assessment
1. Academic Counseling	1	0.349	0.355	0.373	0.419
2. Autonomy Support		1	0.242	*0.138	0.206
3. Learning Environment			1	0.542	0.894
4. Learning Performance				1	0.848
5. Perceived Classroom Assessment					1

The correlation analysis presented in Table 2 reveals significant relationships among the core variables of the study. Academic counseling showed positive and statistically significant correlations with all other variables, including autonomy support ($r = 0.349$, $p < 0.01$), learning environment ($r = 0.355$, $p < 0.01$), learning performance ($r = 0.373$, $p < 0.01$), and perceived classroom assessment ($r = 0.419$, $p < 0.01$). Autonomy support was also significantly related to learning environment ($r = 0.242$, $p < 0.01$) and perceived classroom assessment ($r = 0.206$, $p < 0.01$), though its correlation with learning performance was weaker but still significant ($r = 0.138$, $p < 0.05$). Furthermore, the two dimensions of classroom assessment—learning environment and learning performance—exhibited strong intercorrelations ($r = 0.542$, $p < 0.01$), and both were highly correlated with the overall construct of perceived classroom assessment ($r = 0.894$ and $r = 0.848$, respectively, both $p < 0.01$). These findings suggest that academic counseling and autonomy support play meaningful roles in shaping students' experiences of classroom assessment.

Table 3

Factor Loadings, T-values, Cronbach's Alpha, Composite Reliability, and AVE for the Research Constructs

Construct	Item	Factor Loading	T-value	AVE	Composite Reliability	Cronbach's Alpha
Academic Counseling	Q01	0.783	41.495	0.641	0.934	0.920
	Q02	0.803	37.219			
	Q03	0.788	29.720			
	Q04	0.844	54.765			
	Q05	0.870	73.662			
	Q06	0.809	36.682			
	Q07	0.777	34.889			
	Q08	0.724	30.237			
Autonomy Support	Q09	0.756	20.495	0.520	0.914	0.897
	Q10	0.711	18.800			
	Q11	0.585	12.095			
	Q12	0.572	12.480			
	Q13	0.694	14.215			
	Q14	0.760	16.867			
	Q15	0.760	26.206			
	Q16	0.844	34.768			
	Q17	0.840	44.552			
	Q18	0.632	12.053			
Learning Environment	Q19	0.860	57.707	0.628	0.931	0.915
	Q20	0.726	18.978			
	Q21	0.827	51.504			
	Q22	0.781	24.331			
	Q23	0.768	27.333			
	Q24	0.837	40.863			
	Q25	0.772	28.828			

Learning Performance	Q26	0.759	20.695	0.567	0.913	0.891
	Q27	0.728	28.103			
	Q28	0.740	34.545			
	Q29	0.750	27.959			
	Q30	0.850	56.516			
	Q31	0.775	36.310			
	Q32	0.738	22.800			
	Q33	0.725	23.044			
	Q34	0.711	20.760			

This table reports the measurement model results, confirming the reliability and validity of all constructs used in the study. The factor loadings for all items are above the threshold of 0.5, and their corresponding t-values are statistically significant, indicating strong item reliability. All constructs also achieved acceptable internal consistency, with Cronbach's alpha and composite reliability values exceeding 0.7. Furthermore, the AVE values for each construct surpassed 0.5, confirming convergent validity. These results demonstrate that the measurement tools are statistically sound for assessing academic counseling, autonomy support, learning environment, learning performance, and perceived classroom assessment.

Table 4

R² Values of Endogenous Variables

Variable	R²
Autonomy Support	0.113
Perceived Classroom Assessment	0.218

The R² values indicate the proportion of variance in the dependent variables explained by the independent variables in the model. Specifically, academic counseling explains 11.3% of the variance in autonomy support, and the combination of academic counseling and autonomy support explains 21.8% of the variance in perceived classroom assessment. While these values suggest modest explanatory power, they still provide evidence of meaningful relationships within the model.

Table 5

Q² Values of Predictive Relevance

Variable	Q²
Autonomy Support	0.047
Perceived Classroom Assessment	0.148

The Q² values presented here were obtained through blindfolding procedures and reflect the predictive relevance of the structural model. A Q² value greater than zero indicates that the model has predictive relevance for the corresponding endogenous construct. The results show that both autonomy support and perceived classroom assessment meet this criterion, suggesting that the model is capable of predicting responses on these variables.

Table 6

Global Model Fit Index (GOF)

GOF Index	Average Communality	Average R²
0.381	0.595	0.165

The global goodness-of-fit (GOF) index of 0.381 indicates an acceptable model fit according to recommended thresholds. This value, which results from the geometric mean of average communality and average R², demonstrates that the model has moderate overall explanatory strength and

measurement quality, supporting its adequacy for evaluating the hypothesized relationships.

Table 7

Structural Model Path Coefficients and Significance Levels

Path	Path Coefficient (β)	t-value	Result
Academic Counseling → Perceived Classroom Assessment	0.413	10.813	Confirmed
Academic Counseling → Autonomy Support	0.336	7.083	Confirmed
Autonomy Support → Perceived Classroom Assessment	0.119	2.412	Confirmed

This table presents the results of hypothesis testing using structural equation modeling. All three hypothesized paths are statistically significant at the 0.05 level. Academic counseling has a strong direct effect on perceived classroom assessment and a moderate effect on autonomy support.

Additionally, autonomy support exerts a small but significant effect on perceived classroom assessment. These findings support the conceptual model and confirm the mediating role of autonomy support.

Table 8

Testing the Main Hypothesis and Mediation Effect

Pathway	β (Direct)	t (Direct)	β (Indirect)	t (Indirect)	Total Effect	Significance	Conclusion
Academic Counseling → Autonomy Support	0.336	7.083	—	—	—	p < 0.05	Confirmed
Autonomy Support → Classroom Assessment	0.119	2.412	—	—	—	p < 0.05	Confirmed
Academic Counseling → Classroom Assessment	0.413	10.813	0.040	2.209	0.453	p < 0.05	Partial mediation confirmed

The mediation analysis shows that autonomy support partially mediates the relationship between academic counseling and perceived classroom assessment. The direct effect (β = 0.413, t = 10.813) remains significant even when the mediating path is included. The indirect effect through autonomy support (β = 0.040, t = 2.209) is also statistically significant, indicating partial mediation. The total effect of academic counseling on perceived classroom assessment is 0.453, emphasizing its substantial role in enhancing students' perception of classroom assessment.
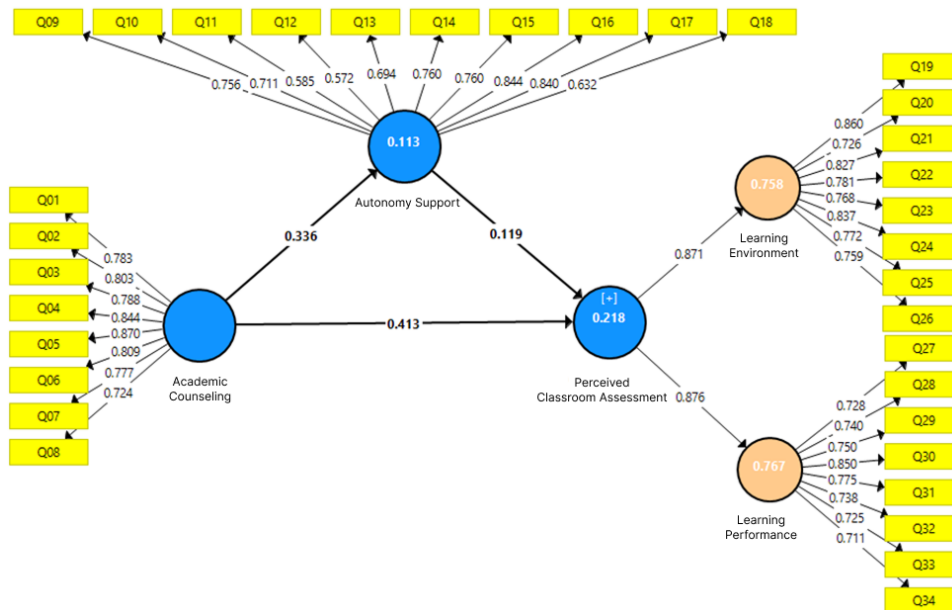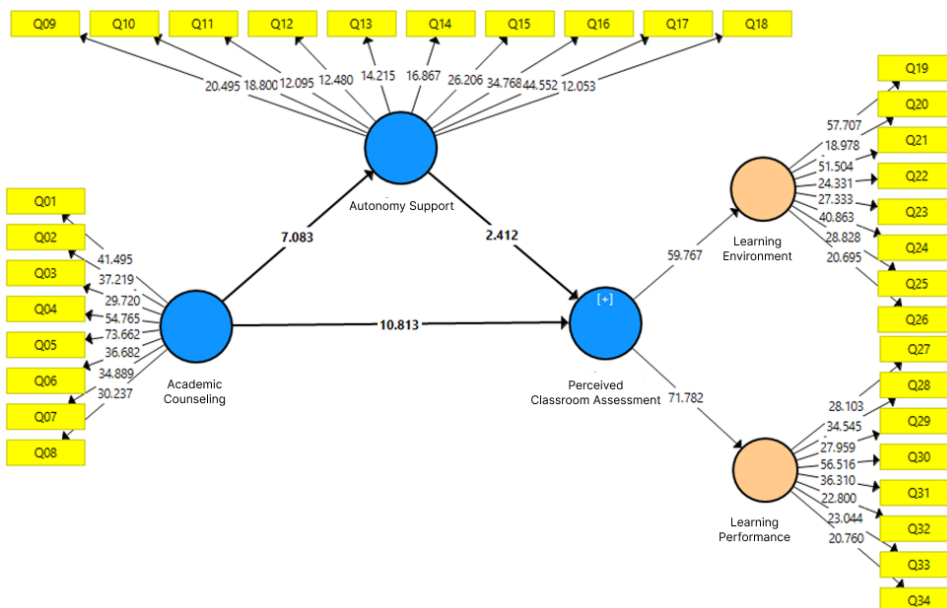
Figure 1

Model with Factor Loadings

Figure 2

Model with T-Values

4.   Discussion and Conclusion

The present study investigated the impact of academic counseling on students' perceived classroom assessment, while also exploring the mediating role of autonomy support in this relationship. The results of the structural model analysis revealed that academic counseling had a direct, statistically significant, and positive effect on perceived classroom assessment. Moreover, academic counseling also positively influenced students' sense of autonomy, and autonomy support, in turn, significantly predicted perceived classroom assessment. The mediation analysis indicated that autonomy support served as a partial mediator in the relationship between academic counseling and perceived

classroom assessment, highlighting the intertwined roles of motivational and relational factors in shaping students' perceptions of their learning environment.

The strong and direct relationship found between academic counseling and perceived classroom assessment aligns with the broader literature suggesting that counseling services in schools are essential not only for students' emotional well-being but also for enhancing their academic experiences. Academic counseling helps students navigate educational challenges, clarify academic goals, and foster motivation, which subsequently leads to a more positive interpretation of assessment practices (Ajuwon et al., 2024; Choi, 2024). When students receive timely, responsive, and empowering guidance, they are more likely to see classroom evaluations as part of a supportive learning system rather than as punitive or arbitrary measures. This view is supported by prior findings that link counseling effectiveness to increased academic self-efficacy and engagement (Caparello et al., 2025; Doshi et al., 2022).

Furthermore, the study revealed a significant positive path from academic counseling to autonomy support. This indicates that counseling is not merely instrumental but also developmental—it contributes to students' psychological growth by encouraging independence and volitional functioning. Effective academic counseling does more than dispense advice; it creates an environment in which students feel empowered to make informed choices and assume responsibility for their learning. These findings resonate with the work of Hanan Ainul Birri Anwar et al. (2025), who emphasize the role of parental and institutional support in fostering independence among adolescents (Hanan Ainul Birri Anwar et al., 2025). Likewise, studies by Du et al. (2023) and Deng (2024) highlight the ways in which autonomy-supportive interactions—from both teachers and counselors—contribute to the satisfaction of basic psychological needs and promote adaptive academic behaviors (Deng, 2024; Du et al., 2023).

The third major finding in this study—concerning the direct positive effect of autonomy support on perceived classroom assessment—offers further confirmation of the mediating role of motivational constructs in the education process. When students experience a sense of autonomy in their learning environment, they are more likely to perceive assessments as fair, helpful, and conducive to learning. This is in line with the theoretical foundations of self-determination theory, which posits that autonomy is a key psychological need that, when satisfied, enhances intrinsic motivation and meaningful engagement (Li et al., 2025;

Mammadov & Tozoglu, 2023). The results of this study support previous empirical work by Wang et al. (2024) and Ortiz-Rodríguez et al. (2024), who found that autonomy support positively influences students' academic motivation and engagement, leading to more constructive interpretations of academic evaluation (Ortiz-Rodríguez et al., 2024; D. Wang et al., 2024).

The partial mediation found in the current study suggests that academic counseling influences students' perceptions of classroom assessment both directly and indirectly through autonomy support. In other words, while counseling independently improves students' views of assessment, part of this improvement occurs because counseling enhances their autonomy. This insight underscores the need to design counseling practices that not only provide guidance but also actively promote students' psychological agency. It reflects the integrative framework proposed by Lin et al. (2024), who argue that the pathway from teacher support to academic engagement is mediated by motivational constructs such as personal initiative and grit (Lin et al., 2024).

Cross-referencing these results with global trends, it becomes evident that autonomy-supportive counseling practices are universally beneficial, despite cultural differences in educational systems. Even in highly structured and performance-driven contexts like China, studies have shown that parental and teacher autonomy support significantly boosts students' self-efficacy and academic outcomes (Wang et al., 2023; Zhang, 2025; Zhao et al., 2022). This suggests that autonomy is not merely a Western construct but a universally applicable psychological need that, when nurtured, facilitates deeper learning and positive academic identity formation. The fact that autonomy served as a mediator in the current Iranian context supports this universality and highlights the importance of integrating autonomy-enhancing strategies into academic counseling protocols.

Moreover, the results align with research emphasizing the importance of motivational climates in shaping educational outcomes. According to López-García et al. (2022), students' perceptions of fairness and support in the classroom are shaped by the overall motivational climate, which includes the relational behavior of educators and counselors (López-García et al., 2022). When academic counseling is embedded within a supportive and autonomy-affirming climate, it transforms from a remedial service into a proactive developmental tool. This understanding is further corroborated by studies such as those by Tian et al. (2023), who found that life autonomy mediates the relationship

between emotional stress and academic behaviors during challenging periods like the COVID-19 pandemic (Tian et al., 2023).

The theoretical implication of this research lies in its confirmation of the mediating role of autonomy support within the self-determination framework in school settings. It suggests that to improve educational experiences, interventions must move beyond content-focused strategies and address the psychological environment of learning. The practical implication, meanwhile, is that schools need to invest in professional development for counselors that includes training in autonomy-supportive techniques. Such approaches will not only enhance counseling effectiveness but also contribute to creating assessment environments that students perceive as more meaningful and less stressful.

Importantly, the findings also invite a re-evaluation of traditional models of academic assessment, particularly in centralized and exam-oriented systems. By demonstrating that perceived assessment fairness and purposefulness are shaped by psychological and relational factors, the study challenges the assumption that assessments are neutral or static tools. Instead, it presents them as dynamic components of the learning environment that are deeply influenced by student experiences of support and agency (Tankutay & Çolak, 2025; Tunca, 2024).

Despite its valuable contributions, this study has several limitations that should be acknowledged. First, the cross-sectional design restricts the ability to infer causal relationships between academic counseling, autonomy support, and perceived classroom assessment. Longitudinal or experimental designs would be necessary to establish causal links more robustly. Second, the study relied solely on self-report instruments, which are susceptible to social desirability bias and may not fully capture the complexity of students' lived experiences. Third, the sample was limited to middle school students in Rudsar County, which may limit the generalizability of the findings to other educational contexts or age groups. Cultural, socioeconomic, and institutional variations in counseling quality and educational philosophy could influence how students experience both autonomy and assessment. Lastly, the study did not account for potential moderating variables such as gender, academic achievement, or teacher characteristics, which could provide a more nuanced understanding of the dynamics involved.

Future studies should employ longitudinal designs to trace the development of autonomy and assessment perceptions over time and evaluate the long-term effects of counseling interventions. Including qualitative methods,

such as interviews or focus groups, would also enrich the understanding of how students interpret and internalize autonomy support and assessment practices. Expanding the research to include students from diverse educational systems and cultural backgrounds could test the universality of the findings and identify context-specific nuances. Additionally, future research should explore potential moderators—such as academic self-efficacy, parental involvement, or school climate—that might influence the strength or direction of the observed relationships. Comparative studies between public and private institutions could also uncover systemic differences in how academic counseling is delivered and perceived. Finally, investigating how digital or online counseling formats influence autonomy support and assessment perceptions in virtual learning environments would be timely and relevant.

To enhance the effectiveness of academic counseling, educational institutions should integrate autonomy-supportive techniques into counselor training programs. Counselors should be encouraged to adopt practices that foster student choice, goal-setting, and reflective thinking. Collaboration between counselors and teachers is also essential to ensure that the classroom environment supports the counseling objectives, especially in reinforcing autonomy and assessment clarity. School administrators should develop policies that emphasize holistic student support, including frequent, personalized counseling sessions and feedback mechanisms that validate student voice. Additionally, assessment practices should be revised to reflect student-centered principles—focusing not just on outcomes, but also on growth, effort, and learning strategies. Creating a cohesive, supportive educational ecosystem that aligns counseling, instruction, and assessment can significantly improve student motivation, well-being, and academic achievement.

Authors' Contributions

Authors contributed equally to this article.

Declaration

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

Transparency Statement

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

Ethical Considerations

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

References

Ajuwon, O. A., Animashaun, E. S., & Chiekezie, N. R. (2024). Crisis Intervention, Mediation, Counseling, and Mentoring in Schools: Building Resilient Educational Communities. *International Journal of Applied Research in Social Sciences*, *6*(8), 1593-1611. https://doi.org/10.51594/ijarss.v6i8.1372

Caparello, C., Castellani, L., Loperfido, F. F., Filippello, P., & Sorrenti, L. (2025). Achievement Goals as Mediators in Parental Practices and School Success Relationships. *European Journal of Education*, *60*(2). https://doi.org/10.1111/ejed.70100

Choi, K. H. (2024). A Systematic Literature Review on the Effective Counseling Factors for North Korean Refugee Youth. *Korean Association for Learner-Centered Curriculum and Instruction*, *24*(22), 783-798. https://doi.org/10.22251/jlcci.2024.24.22.783

Deng, Y. (2024). Study on the Relationship Between Parental Autonomy Support, Academic Self-Efficacy, and Career Adaptability of High School Students. *Eer*, *2*(4). https://doi.org/10.18686/eer.v2i4.4474

Ding, Y., Li, X., Li, Y., & Li, J. (2025). Effects of Parental Autonomy Support and Control on Elementary Students' Subjective Well-Being: A Daily Diary Study. https://doi.org/10.21203/rs.3.rs-6399715/v1

Doshi, P. V., Ward, A., & Robak, R. W. (2022). Predictors of Counseling Self-Efficacy: Examining Counselor Trainees' Perception of Supervisory Interaction Style. *Teaching and Supervision in Counseling*. https://doi.org/10.7290/tsc04ax54

Du, W., Li, Z., Xu, Y., & Chen, C. (2023). The Effect of Parental Autonomy Support on Grit: The Mediating Role of Basic Psychological Needs and the Moderating Role of Achievement Motivation. *Psychology research and behavior management*, *Volume 16*, 939-948. https://doi.org/10.2147/prbm.s401667

Hanan Ainul Birri Anwar, M., Hakim, A. R., & Maulidia, A. S. (2025). The Influence of Parents on Adolescent Independence: A Study in the Context of Islamic Boarding Schools and Its Implications for Counseling. *Jurnal Bimbingan dan Konseling Terapan*, *9*(1), 25-35. https://doi.org/10.30598/bkt.v9i1.17107

Jiang, R., Fan, R., Zhang, Y., & Li, Y. (2022). Understanding the Serial Mediating Effects of Career Adaptability and Career Decision-Making Self-Efficacy Between Parental Autonomy Support and Academic Engagement in Chinese Secondary Vocational Students. *Frontiers in psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.953550

Li, Y., Sueb, R., & Hashim, K. S. (2025). The Relationship Between Parental Autonomy Support, Teacher Autonomy Support, Peer Support, and University Students' Academic Engagement: The Mediating Roles of Basic Psychological Needs and Autonomous Motivation. *Frontiers in psychology*, *16*. https://doi.org/10.3389/fpsyg.2025.1503473

Lin, W., Yu, Q., Huang, H., & Cai, J. (2024). Teacher Autonomy Support and Academic Engagement: The Chain-Mediated Role of Personal Growth Initiative and Academic Grit. https://doi.org/10.21203/rs.3.rs-4945385/v1

López-García, G. D., Poyatos, M. C., Burgueño, R., & Granero-Gallegos, A. (2022). Teaching Style and Academic Engagement in Pre-Service Teachers During the COVID-19 Lockdown: Mediation of Motivational Climate. *Frontiers in psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.992665

Mammadov, S., & Tozoglu, D. (2023). Autonomy Support, Personality, and Mindset in Predicting Academic Performance Among Early Adolescents: The Mediating Role of Self-determined Motivation. *Psychology in the Schools*, *60*(10), 3754-3769. https://doi.org/10.1002/pits.22966

Meng, F., Zhao, Y., & Zang, Z. (2025). Academic Procrastination Among Doctoral Students in China: The Role of Supervisory Support, Research Self-Efficacy, and Persistence Intention. *Sage Open*, *15*(1). https://doi.org/10.1177/21582440251330221

Ortiz-Rodríguez, V., Vergara-Torres, A. P., Ramírez-Nava, R., Rodríguez, J. L. T., & Walle, J. M. L. (2024). Association Between Autonomy Support, Academic Motivation, and Life Skills in Pre-Service Physical Education Teachers and Pre-Service Sport Coaches. *Frontiers in Education*, *9*. https://doi.org/10.3389/feduc.2024.1424359

Qiao, L., & Rameli, M. R. M. (2025). How to Release Stress From Future Uncertainty: A Sequential Mediation Study Based on Self-Determination Theory. *Social Behavior and Personality an International Journal*, *53*(3), 1-10. https://doi.org/10.2224/sbp.14496

Song, L., Zhan, Q., Cao, L., & Luo, R. (2024). Parent Autonomy Support and Undergraduates' Academic Engagement in Online Learning: The Mediate Role of Self-Regulation. *Psicologia Reflexão E Crítica*, *37*(1). https://doi.org/10.1186/s41155-024-00330-1

Tankutay, H. K., & Çolak, İ. (2025). How School Principals' Empowering Leadership Influences Teacher Autonomy: The Mediating Role of Teachers' Academic Optimism. *British Educational Research Journal*. https://doi.org/10.1002/berj.4125

Tian, X., Liu, X., Xiao, Z., & Lin, Q. (2023). Undergraduates' Negative Emotion and Academic Procrastination During COVID-19: Life Autonomy as a Mediator and Sense of School Belonging as a Moderator. *Psychology research and behavior management*, *Volume 16*, 3151-3169. https://doi.org/10.2147/prbm.s413738

Tunca, A. (2024). Adolescents' Perceptions of Autonomy-Supportive Parents and Social-Emotional Health: Serial Multiple Mediation of Positive Stress and Mental Toughness. *Journal of Psychologists and Counsellors in Schools*, *34*(4), 399-414. https://doi.org/10.1177/20556365241295297

Wang, D., Qiu, Q., Wang, L., Yu, J., & Ran, A. (2024). Empowering the Digital Learner: Exploring the Relationship Between Teacher Support, Autonomy in Technology, and

Self-efficacy in Chinese Vocational Colleges. *Psychology in the Schools*, *61*(12), 4483-4496. https://doi.org/10.1002/pits.23294

Wang, J., Liu, M., Kou, G., Li, J., & Zhang, X. (2023). The Influence of Parental Autonomy Support on Adolescent Academic Achievement: A Moderated Mediation Model. *Advances in Education Humanities and Social Science Research*, *6*(1), 358. https://doi.org/10.56028/aehssr.6.1.358.2023

Wang, Y., Luo, W., Liao, X., & Zhao, P. (2024). Exploring the Effect of Teacher Autonomy Support on Chinese EFL Undergraduates' Academic English Speaking Performance Through the Mediation of Basic Psychological Needs and Classroom Engagement. *Frontiers in psychology*, *15*. https://doi.org/10.3389/fpsyg.2024.1323713

Zhang, Y.-H., Zhao, Y., Luo, Y.-Y., Yang, X., & Tan, D. W. (2022). The Relation Between Autonomy Support and Music Enjoyment in Online Learning for Music Undergraduates in the Post-Covid-19 Era. *Frontiers in psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.1062546

Zhang, Y. (2025). Which One Has a Greater Influence On the Performance Goals of Chinese High School Students, Parents Or teachers: The Mediating Role Of psychological Resilience. *Asian Education and Development Studies*, *14*(3), 605-623. https://doi.org/10.1108/aeds-01-2025-0019

Zhao, W., Wang, X., Li, J., Li, Q., & Chen, C. (2022). "Time Is My Own Treasure": Parental Autonomy Support and Academic Procrastination Among Chinese Adolescents. *Psychology research and behavior management*, *Volume 15*, 2773-2782. https://doi.org/10.2147/prbm.s373033