



Resilience in Learning: Investigating the Impact of Adversity Quotient on Academic Burnout among Madrasah Aliyah Students

Nor Diana Fitriyah¹, Arina Mufrihah^{1*}, Zacky Achmed Phahlevi Anami²

¹Universitas Islam Negeri Madura, Indonesia

²Al-Azhar University, Egypt²

*Correspondence author : arinamufrihah@iainmadura.ac.id

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Abstract

This study investigates the relationship between adversity quotient and academic burnout among female students at Madrasah Aliyah Ummul Quro Putri. The research objective was to determine the extent to which internal resilience, specifically the capacity to overcome difficulties, correlates with the level of academic exhaustion experienced in a high-pressure educational setting. Employing a quantitative correlational design, the study utilized a saturated sampling technique, involving the entire population of 70 female students from the 2024–2026 academic year as data sources. Data collection was executed through structured questionnaires based on the CO²RE framework for adversity quotient and the four dimensions of academic burnout, with analysis performed using the *Pearson Product Moment Correlation* via IBM SPSS Statistics. The main findings revealed a significant and strong negative correlation between the two variables, demonstrating that higher levels of adversity quotient are consistently associated with lower levels of academic burnout. These results indicate that a student's internal ability to manage stress and perceive challenges as surmountable serves as a critical protective factor against academic burnout. The significance of this study lies in its empirical evidence that burnout is not merely a product of external workload but is deeply tied to internal resilience. The implications suggest that educational institutions, particularly Islamic schools, should prioritize resilience-building programs to enhance students' psychological hardiness, thereby ensuring long-term academic productivity and well-being.

Introduction

Academic burnout has emerged as a critical global issue in 2025 and 2026, with empirical data indicating that a significant portion of the student population experiences moderate to high levels of exhaustion and cynicism. As recently as late 2025, findings reveal that the prevalence of burnout among students worldwide typically ranges from 38% to over 60% (Krisnawan et al., 2025). Within the school environment, this condition is defined as a complex mental state where students experience profound exhaustion, boredom, and a significant erosion of motivation toward their learning activities (Fernandes et al., 2023; Lu et al., 2025). In Indonesia, this phenomenon is exacerbated by the heightened vulnerability of adolescents to mental health disorders, triggered by an accumulation of psychological burdens and high performance expectations that often exceed their adaptive capacities (Kompas, 2023).

The chronic nature of this crisis is particularly evident in East Java, where 67.66% of junior high school students and 71.12% of high school students have been identified with high levels of academic burnout, characterized by acute emotional exhaustion (Rustam et al., 2023). These findings are further corroborated by national data indicating that 42.28% of students in Indonesia fall into the high burnout category, while only 14.63% report a very low risk level (Supriyanto et al., 2022). Far from being a transient issue, academic burnout represents a multifaceted

psychological challenge that negatively impacts academic consistency and long-term achievement (Aker & Şahin, 2022; Peng et al., 2025). Ultimately, the systemic concentration of burnout at high levels underscores a serious threat to the mental well-being and quality of life of the younger generation in Indonesia.

Empirically, the phenomenon of academic burnout is observable through specific behavioral indicators among students, such as a marked lack of enthusiasm, diminished interest in instructional materials, and a recurring inability to maintain focus during lessons. These students often display physical signs of fatigue, such as frequent yawning, resting their heads on their desks, and appearing lethargic throughout the school day (Chen & Qin, 2024; Yosep et al., 2023). Such burnout is often triggered by environmental and pedagogical factors, including monotonous teaching methods (Wang et al., 2026), a lack of recreational outlets, and a rigid, high-tension learning atmosphere (Asikainen & Katajavuori, 2022). These pressures are frequently amplified for students in Madrasah Aliyah who reside within Islamic boarding school (*pesantren*) environments; the high density of religious and academic activities creates a cumulative physical and psychological burden that accelerates the onset of burnout (Taheri-Kharamah et al., 2024).

Theoretically, academic burnout comprises several dimensions, including emotional, physical, and cognitive exhaustion, as well as a loss of motivation. Emotional exhaustion occurs when students feel overwhelmed by psychological pressure, while physical exhaustion manifests as headaches, nausea, or sleep disturbances; meanwhile, cognitive exhaustion hinders concentration and decision-making, eventually leading to a total decline in academic participation (Ikeda et al., 2024; Ketvel et al., 2023; Kim, 2026). Students suffering from this condition often feel as though their intellectual progress has stagnated, creating a "learning plateau" where the mind can no longer effectively process new information (A'raf, Syah, & Arifin, 2024). Left unaddressed, this emotional instability leads to irritability and a loss of interest in educational goals, ultimately resulting in significant academic decline (Morando et al., 2023; Reyes et al., 2023).

In light of these challenges, students require a high level of Adversity Quotient (AQ), or the internal capacity to face difficulties and bounce back from pressure. AQ was selected over similar constructs like resilience or grit because it provides a more granular framework for measuring an individual's immediate, actionable response to academic setbacks through its specific dimensions of control and endurance (Saxena & Rathore, 2024). AQ serves as a measure of how an individual responds to challenges, encompassing factors such as motivation, character, and persistence (Setyosari et al., 2021; Zhang & Jiang, 2022). This concept of resilience is deeply rooted in Islamic teachings, specifically in Surah An-Nahl (16) verses 41-42, which emphasize the rewards for those who remain patient and maintain trust in God (*tawakkal*) despite facing hardships (Shihab, 2002). Within the context of learning, AQ is vital for maintaining performance and achieving success, as it allows students to control their situation and transform obstacles into opportunities (Tian & Fan, 2014; Zhao & Sang, 2023). According to the CO²RE framework, AQ consists of four dimensions: Control, Origin-Ownership, Reach, and Endurance, which collectively determine a student's ability to remain productive under pressure (Stoltz, 2000; Xiao et al., 2026).

Despite the theoretical significance of Adversity Quotient (AQ), existing literature remains fragmented and fails to provide a comprehensive model for mitigating the chronic academic burnout prevalent in the *pesantren* environment. Previous studies have primarily focused on the relationship between AQ and distal outcomes such as future orientation (Lau & Wijaya, 2021) or self-regulated learning (Rohi & Hidayah, 2021). However, these works often overlook the immediate psychological exhaustion that precedes such outcomes. Furthermore, contemporary burnout research in Islamic educational contexts is limited by a preoccupation with external variables including teaching styles (Jaber et al., 2025) and learning strategies (Fotriani et al., 2024). This focus effectively ignores internal cognitive behavioral mechanisms like the dimensions of control and endurance which allow a student to withstand pressure. There is a distinct empirical void regarding how AQ functions as a direct internal buffer against burnout within the intensive dual curriculum structure of a Madrasah Aliyah. This study addresses these critical gaps by investigating female students at Madrasah Aliyah Ummul Quro. This demographic serves as a vital case study for exploring the interplay between high-density religious academic demands and psychological endurance, an area that has yet to be synthesized in a singular empirical framework (Murrar et al., 2024).

The urgency of this research is driven by the fact that neglecting academic burnout in the *pesantren* environment directly correlates with long term psychological attrition. Without targeted intervention, the systemic pressure of a dual curriculum inevitably leads to academic disengagement and mental health deterioration among Madrasah students. Investigating AQ provides a critical empirical basis for shifting from passive support to active, AQ based counseling interventions. By isolating the dimensions of Control and Endurance, educational institutions can implement specific mentoring protocols that enable students to cognitively reframe stressors as manageable tasks.

This approach offers a strategic framework to maintain productivity and prevent the total collapse of academic motivation in high pressure religious settings. Consequently, this study aims to empirically investigate the negative relationship between Adversity Quotient and academic burnout specifically within the demanding academic landscape of Madrasah Aliyah.

Methods

Design

This study employs a quantitative research design to ensure a structured and objective investigation. Quantitative research is defined as a method based on the positivist philosophy used to examine specific populations or samples, utilizing research instruments for data collection and statistical analysis to test established hypotheses (Sugiyono, 2019). Within this framework, a correlational method is utilized to examine the degree of relationship between variables based on the correlation coefficient (Sahir, 2021). This design allows the researcher to determine the strength and direction of the link between the independent variable, Adversity Quotient (X), and the dependent variable, Academic Burnout (Y).

Participants

The population in this research comprises all 70 female students at MA Ummul Quro Putri Pamekasan for the 2025–2026 academic year. These subjects, typically aged 15 to 18, share a homogeneous background as residents of an Islamic boarding school navigating an intensive dual curriculum. A saturated sampling technique is applied by including the entire population as the research sample (Lim, 2025; Masuku, 2024). This method is scientifically justified to eliminate sampling error and ensure the highest possible statistical power within a small group (Keshavarzi et al., 2024; Wei et al., 2025). While the findings are context-specific, they offer theoretical generalizability to other Madrasah environments with similar academic demands. By utilizing the total population, this study ensures a robust analysis of the correlation between Adversity Quotient and academic burnout without the risk of selection bias.

Data Collection

Data collection was conducted using two adapted instruments: the Adversity Quotient Questionnaire and the Academic Burnout Questionnaire. These instruments were used to capture students' psychological responses to intensive academic demands in the pesantren context. The Adversity Quotient Questionnaire was used to assess students' capacity to face, manage, and persist through academic difficulties. The Academic Burnout Questionnaire was used to measure students' experiences of exhaustion and declining academic motivation. The blueprint of each instrument is presented in Table 1 and Table 2.

Table 1. Blueprint for Adversity Quotient Variable

Variable	Aspect	Indicators	Favorable Items	Unfavorable Items
Adversity Quotient	Control	Ability to control problems; Goal persistence	1, 2, 5, 6	3, 4, 7, 8
	Origin-Ownership	Self-accountability; Responsibility for outcomes	9, 10, 13, 14	11, 12, 15, 16
	Reach	Containing problem impact; Maintaining life balance	17, 18, 21, 22	19, 20, 23, 24
	Endurance	Persistence until completion; Belief in temporary nature	25, 26, 29, 30	27, 28, 31, 32

Table 2. Blueprint for Academic Burnout Variable

Variable	Aspect	Indicators	Favorable Items	Unfavorable Items
Academic Burnout	Emotional Exhaustion	Feeling pressured/anxious; Difficulty controlling emotions	1, 2, 5, 6, 9, 10	3, 4, 7, 8, 11, 12

Physical Exhaustion	Physical ailments (headaches/nausea); Sleep disturbances; Loss of energy	13, 14, 17, 18, 21, 22	15, 16, 19, 20, 23, 24
Cognitive Exhaustion	Concentration difficulties; Confusion/Forgetfulness; Feelings of failure	25, 26, 29, 30, 33, 34	27, 28, 31, 32, 35, 36
Loss of Motivation	Diminished learning spirit; Boredom; Academic withdrawal	37, 38, 41, 42, 45, 46	39, 40, 43, 44, 47, 48

The Adversity Quotient Questionnaire was constructed based on the CO²RE framework proposed by Stoltz, which consists of Control, Origin-Ownership, Reach, and Endurance, as presented in Table 1. Meanwhile, the Academic Burnout Questionnaire was developed based on four dimensions: emotional exhaustion, physical exhaustion, cognitive exhaustion, and loss of motivation, as presented in Table 2. The Control dimension reflects students' perceived ability to manage problems, while Origin-Ownership refers to students' accountability and responsibility for academic outcomes. Reach indicates the extent to which students can limit the impact of academic problems on other areas of life, whereas Endurance refers to persistence and belief that difficulties are temporary. In the Academic Burnout instrument, the dimensions capture students' emotional pressure, physical fatigue, cognitive difficulties, and reduced motivation in academic activities.

Both instruments used a four-point Likert-type scale to obtain students' responses in a structured and consistent manner. The response options consisted of Strongly Agree (SS), Agree (S), Disagree (TS), and Strongly Disagree (STS). Each response option was assigned a numerical score to support quantitative data analysis. The scoring weight for each alternative answer is presented in Table 3. This scoring system allowed students' subjective responses to be converted into analyzable numerical data.

Table 3. Scoring Weight for Alternatives

No.	Alternative Answer	Code	Weight
1	Strongly Agree	SS	4
2	Agree	S	3
3	Disagree	TS	2
4	Strongly Disagree	STS	1

These procedures were applied to ensure that the data collected were relevant, consistent, and aligned with the research objectives. The use of theoretically grounded instruments also strengthened the construct representation of both Adversity Quotient and Academic Burnout. In addition, the structured scoring system enabled the researchers to analyze students' responses quantitatively and systematically. Therefore, the instruments and scoring procedures used in this study were considered appropriate for examining the relationship between students' adversity quotient and academic burnout in the pesantren context.

Data Analysis

Data analysis follows several stages, starting with instrument testing before proceeding to prerequisite and hypothesis testing. A validity test is conducted to ensure the questionnaire items accurately measure what they are intended to measure; an item is considered valid if the *r*-count exceeds the *r*-table at a 5% significance level (Hidayati, Kusmanto, & Kiswanto, 2023; Sugiarta, Arofiati, & Rosa, 2023). Following a pilot test with 35 respondents, 30 items remained valid for Variable X and 44 items for Variable Y. Subsequently, a reliability test is performed to measure the consistency of the instrument using Cronbach's Alpha, with a threshold of 0.60 (Marar et al., 2023). Results indicated high reliability for both Adversity Quotient ($\alpha=0.847$) and Academic Burnout ($\alpha=0.897$) (Chen et al., 2024). Before hypothesis testing, a normality test is conducted using the Kolmogorov-Smirnov method to ensure the data is normally distributed ($p>0.05$) (Bufetov, 2025). Furthermore, a linearity test is performed to determine if the relationship between the two variables is linear, based on the Deviation from Linearity value ($p>0.05$) (Indartini & Mutmainah, 2024). The hypothesis is tested using the Pearson Product Moment Correlation to determine the strength and direction of the relationship between Adversity Quotient and Academic Burnout (Chou, et al., 2024). The interpretation follows a standardized scale:

Table 4. Interpretation of Correlation Values

Correlation Coefficient	Relationship Strength
0.000 - 0.199	Very Low
0.200 - 0.399	Low
0.400 - 0.599	Moderate
0.600 - 0.799	Strong
0.800 - 1.000	Very Strong

The null hypothesis (H_0) states there is no relationship, while the alternative hypothesis (H_a) states a relationship exists. Decision-making is based on a significance value of $p < 0.05$ or by ensuring the r-count is greater than the r-table (Sawiji et al., 2024).

Results

The following section presents the findings of the study based on statistical analyses conducted using IBM SPSS Statistics 27. Before proceeding to the hypothesis testing, prerequisite tests were performed, including normality and linearity tests, to ensure the data fulfilled the assumptions required for Pearson correlation analysis. The normality test was conducted using the Kolmogorov-Smirnov method as a critical prerequisite for inferential analysis. This step is essential to ensure that the data distribution meets the assumptions required for parametric testing. By confirming normality, the study justifies the use of Pearson Product-Moment Correlation, which offers higher statistical power and more precise estimates of the relationship between variables compared to non-parametric alternatives. Ensuring a normal distribution is vital for maintaining the internal validity of the statistical conclusions.

Table 5. Normality Test Results

	Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Adversity Quotient	,094	70	,200*	,971	70	,098	
Academic Burnout	,081	70	,200*	,985	70	,556	

Based on the results presented in Table 5, the significance values (Sig.) for both Adversity Quotient and Academic Burnout are 0.200. Since these values exceed the 0.05 threshold (α), the data for both variables are concluded to be normally distributed. Following this, a linearity test was performed to verify the relationship between the independent and dependent variables. Confirming both normality and linearity ensures that the dataset satisfies all necessary assumptions for a robust parametric analysis of how Adversity Quotient influences academic burnout.

Table 6. Linearity Test Results ANOVA

			Sum of		Mean	F	Sig.
			Squares	df	Square		
Academic Burnout* Adversity Quotient	Between Groups	(Combined)	4865,212	24	202,717	3,397	,000
		Linearity	2749,297	1	2749,297	46,064	,000
		Deviation from Linearity	2115,915	23	91,996	1,541	,106
	Within Groups		2685,774	45	59,684		
	Total		7550,986	69			

The linearity analysis in Table 6 shows a significance value for the "Deviation from Linearity" of 0.106. Because this value is greater than the 0.05 threshold ($p > 0.05$), the relationship between Adversity Quotient and Academic Burnout is confirmed to be linear, thus satisfying the requirement for further correlation testing. After the prerequisite

assumptions were met, a Pearson Product Moment Correlation test was conducted to determine the relationship between Adversity Quotient and Academic Burnout.

Table 7. Correlational Test Results (*Pearson Product Moment*)

		Correlations	
		Daya_Juang	Kejenuhan_Belajar
Adversity Quotient	Pearson Correlation	1	-,603**
	Sig. (2-tailed)		,000
	N	70	70
Academic Burnout	Pearson Correlation	-,603**	1
	Sig. (2-tailed)	,000	
	N	70	70

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the statistical output in Table 7, the significance value (Sig. 2-tailed) is 0.000, which is below the alpha level of 0.05 ($p < 0.05$), indicating a statistically significant relationship. The Pearson correlation coefficient (r) is -0.603, which, according to standard effect size conventions, represents a strong negative correlation. Practically, this value suggests that Adversity Quotient accounts for a substantial portion of the variance in academic burnout, meaning that a student's ability to navigate challenges is a primary determinant of their psychological endurance.

When compared to the r -table value for $N=70$ at a 5% significance level (0.235), the absolute value of the r -count (0.603) is substantially higher than the r -table (0.603 > 0.235). According to the interpretation criteria, a coefficient of 0.603 falls within the 0.600 - 0.799 range, indicating a strong relationship between the variables. Consequently, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted, confirming that there is a significant negative relationship between Adversity Quotient and Academic Burnout among the female students of Madrasah Aliyah Ummul Quro.

In the specific context of an Islamic boarding school, this inverse relationship indicates that students with a high Adversity Quotient are better equipped to handle the systemic pressures of a dual curriculum and intensive religious discipline. Psychologically, this suggests that the dimensions of Control and Endurance enable students to perceive academic fatigue not as a permanent failure, but as a manageable phase of their educational journey. Consequently, as their internal capacity to 'reframe' hardship increases, the symptoms of emotional exhaustion and cynicism significantly decrease. These results confirm that fostering psychological resilience is not just an academic advantage, but a necessary buffer against the chronic stress inherent in high-pressure religious-educational environments.

Discussion

Adversity Quotient and Academic Burnout within the Discourse of Learning Guidance and Counseling

The results of this study demonstrate a significant negative correlation between adversity quotient (AQ) and academic burnout, indicating that higher levels of student resilience correspond to lower levels of academic exhaustion. Conversely, students with a low AQ are more susceptible to burnout during the learning process. In the context of learning guidance and counseling, academic burnout is viewed as a substantial barrier characterized by emotional and physical exhaustion toward school activities. This phenomenon often leaves students feeling profoundly fatigued, yet frequently unable to articulate the underlying causes of their exhaustion (Carrard et al., 2022; Huang et al., 2023).

Resilience in learning within modern education is no longer viewed as a passive survival mechanism, but rather as an adaptive process that enables students to remain effective and thrive despite significant academic disruptions (Bertsia & Poulou, 2023). Its close correlation with the Adversity Quotient (AQ) lies in the role of AQ as an operational framework that determines an individual's response to challenges (Stoltz, 1997). Specifically, the *Control* and *Ownership* dimensions of AQ empower students to take personal responsibility for learning solutions, while the *Reach* and *Endurance* dimensions limit the impact of setbacks, preventing them from spreading systemically to other psychological areas. Consequently, AQ serves as both a scientific predictor and a driver of academic resilience, effectively reducing the intensity of academic problems experienced by students (Baharun & Adhimah,

2019). This ensures that students not only recover from difficulties but also possess the long-term fortitude to navigate complex curricular challenges.

While burnout emerges from a complex interaction between environmental demands and personal capacity, academic burnout is increasingly understood as a phenomenon heavily mediated by internal psychological dynamics. Recent evidence suggests that personality traits and resilience act as more consistent predictors of stress thresholds than objective workload, positioning internal factors as primary determinants of whether a student succumbs to exhaustion (Chen et al., 2022). This is because internal structures, such as attachment orientations and emotion regulation strategies, function as cognitive filters that dictate whether academic demands are perceived as manageable challenges or debilitating threats (Marques et al., 2023). Furthermore, the efficacy of external resources like social support remains contingent upon an individual's self-esteem to process that support, confirming that environmental interventions are ultimately mediated by internal cognitive evaluations (Zhang et al., 2025). Within this framework, AQ serves as a pivotal internal resource facilitating adaptive coping and cognitive reappraisal, analogous to the role of psychological capital in reducing burnout (Palos, 2023).

The importance of this internal mediation is particularly evident when considering the long-term consequences of burnout on student engagement. Academic burnout cannot be overlooked, as its impact permeates multiple psychological dimensions; for instance, chronic emotional exhaustion correlates strongly and negatively with learning interest, where persistent fatigue gradually erodes a student's connection to the subject matter (Maknunin & Fitriyati, 2024). While previous literature has often positioned learning interest as a consequence of burnout, this study identifies AQ as the foundational factor that determines the degree of burnout itself. By establishing AQ as a vital preventive mechanism, students are better equipped to navigate external pressures effectively, thereby mitigating exhaustion and sustaining success across personal, social, and career domains (Adha et al., 2025; Juwita & Usodo, 2020; Rahmawati et al., 2024).

Dynamics of Adversity Quotient and Academic Burnout: A Learning Psychology Perspective

From the perspective of learning psychology, the negative relationship between AQ and academic burnout aligns with achievement motivation theory. Adversity Quotient (AQ) and achievement motivation are distinct yet dynamically interacting constructs. Rather than being a mere component of achievement motivation, AQ serves as an independent variable that significantly influences a student's drive for success, learning autonomy, and overall academic performance (Safi'i et al., 2021). This logic suggests that the capacity to navigate hardship provides the essential foundation for achievement motivation; without the resilience to manage adversity, the impulse to excel is likely to wither when confronted with complex pressures.

The synergy between these constructs is most evident in the mitigation of academic burnout. Students with high AQ demonstrate superior emotional regulation, utilizing cognitive reappraisal to reframe academic difficulties as growth opportunities rather than threats a trait that aligns with high-achieving individuals who embrace calculated risks and proactive problem-solving (Hanim, 2022). Conversely, a lack of this internal resilience renders students more vulnerable to prolonged stress and a sharp decline in motivation (Rhesma, Murisal, & Octavia, 2026). Thus, AQ functions as both a mitigating factor and a catalyst, ensuring that academic ambition evolves beyond mere intent into sustained, resilient effort.

These findings are consistent with research on self-regulated learning, which posits that superior self-regulation significantly lowers burnout levels (Apriliana & Marsinun, 2022). Students with high AQ demonstrate a greater capacity to organize and manage their learning processes effectively (Rohi, Yuzarion, & Hidayah, 2021). This internal resilience is best illustrated by Paul G. Stoltz's categorization of individuals as *quitters*, *campers*, or *climbers*. While *quitters* surrender and *campers* settle for a plateau, *climbers*—those with high AQ—persist until they reach the summit (Stoltz, 2000). Thus, the "climber" mentality allows students to withstand academic pressure and effectively suppress the onset of burnout.

Trajectories of Adversity Quotient and Student Learning Developmental Aspects

A study indicates a significant link between life adversity profiles and cognitive performance during developmental stages (Nweze et al., 2023). During the senior high school years, students undergo significant cognitive, emotional, and social maturation. At this stage, they develop the intellectual capacity to analyze abstract concepts, formulate hypotheses, and employ systematic problem-solving methods (Mufrihah, 2019). This developmental phase serves as the foundation for AQ, as cognitive maturity allows students to align their learning efforts with long-term aspirations (Aprilyani et al., 2023). When students perceive learning as a strategic step toward future goals rather than

a mere obligation, their persistence increases through a cognitive reframing that mitigates burnout by transforming academic pressure into purposeful effort.

The positive correlation between future orientation and AQ supports this view; a clear sense of purpose reinforces student tenacity (Lau & Wijaya, 2021). However, adolescence is also marked by emotional instability (Shin & Bae, 2023; Yangliuqing et al., 2026). If emotional regulation skills are underdeveloped, academic pressure can easily trigger stress and lead to burnout (Rakasiwy & Satwika, 2025). Therefore, the development of AQ in high school students involves both cognitive maturity and emotional regulation. Ultimately, students who achieve this developmental balance possess the internal strength necessary to overcome academic burnout and maintain their educational momentum.

Conclusions

The findings of this study confirm a significant negative relationship between adversity quotient and academic burnout among female students at Madrasah Aliyah. This relationship suggests that internal resilience serves as a critical psychological determinant in how female students navigate the unique dual pressures of rigorous academic curricula and intensive boarding school life. Those possessing a robust capacity to endure and surmount challenges demonstrate higher levels of resilience, effectively shielding them from the physical and emotional exhaustion inherent in such demanding environments. Conversely, a deficiency in adversity quotient renders female students more vulnerable to emotional fatigue, which subsequently manifests as a loss of motivation and a cynical detachment from educational objectives. Ultimately, the ability to perceive obstacles as surmountable challenges rather than terminal barriers is the primary internal mechanism that mitigates the risk of chronic academic burnout within this demographic.

Educational institutions and boarding school administrators are encouraged to integrate gender-responsive character development programs that specifically target the enhancement of female students' adversity quotients. Given that internal psychological factors exert a more profound influence on burnout than external pedagogical strategies, institutional efforts should prioritize mental toughness and resilience training tailored to the social and academic pressures faced by female students. Guidance and counseling teachers should proactively identify female students exhibiting low adversity quotient profiles to provide targeted interventions, thereby preventing the onset of chronic burnout. Furthermore, fostering a dynamic learning atmosphere that permits the healthy expression of emotional stress is essential for maintaining the equilibrium between rigorous academic demands and the overall well-being of female students.

Female students are encouraged to cultivate a clear future orientation, as this serves as a foundational pillar for sustaining academic tenacity. By aligning their current educational efforts with long-term aspirations, they can reframe academic difficulties as strategic milestones rather than burdensome obstacles. For future researchers, it is recommended to explore additional moderating variables, such as peer support systems or emotional intelligence, which may interact with the adversity quotient to influence burnout levels specifically among female students. Such research would contribute to a more comprehensive understanding of the psychological well-being of young women within the socio-cultural context of Islamic boarding schools.

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Author Contributions

Nor Diana Fitriyah served as the lead investigator responsible for conceptualization, primary data collection at the research site, and executing the statistical analysis using IBM SPSS. **Arina Mufrihah** provided methodological oversight, validated the theoretical alignment between Stoltz's and Schaufeli's frameworks, and refined the psychological interpretations within the discussion. **Zacky Achmed Phahlevi Anami** contributed through a comprehensive literature synthesis to establish research novelty, managed the technical formatting and academic

English translation of the manuscript, and conducted the final critical review to ensure logical coherence and adherence to APA standards.

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Conflicts of Interest

The authors declare that there are no financial, personal, or institutional conflicts of interest that could inappropriately influence or bias the findings of this research. While the study was conducted within the specific educational environment of MA Ummul Quro Putri, the researchers maintained complete independence in data collection, analysis, and the reporting of results, ensuring that no commercial affiliations or personal relationships with the institution's administration affected the objectivity of the manuscript.

Ethical Approval

This research was conducted in compliance with institutional ethical standards, following formal approval from the Faculty of Tarbiyah, Universitas Islam Negeri Madura (Ethical approval number: B-348/In.38/FT/TL.00/02/2026). Official permits were secured from the administration of MA Ummul Quro Putri. Prior to data collection, informed consent was obtained from all 70 participants, who were briefed on the voluntary nature of the study, confidentiality, and their right to withdraw at any time. All procedures adhered to institutional guidelines and ethical principles for human participant research in educational settings.

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