Factors Affecting Academic Burnout Among Law Undergraduate Students in China

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Abstract

This study examined factors associated with academic burnout among undergraduate law students at Jianghan University, China. A cross-sectional quantitative survey was conducted using a stratified convenience sampling approach with grade-proportional recruitment quotas. Of 350 questionnaires distributed, 317 were returned and 309 valid responses were retained. The Chinese-language composite questionnaire integrated adapted measures of academic burnout, academic stress, academic self-efficacy, learning motivation, self-compassion, and smartphone addiction. Three experts evaluated content validity, and a separate pilot sample of 57 students was excluded from the main survey. Pearson correlations and multiple linear regression were used. Academic stress and smartphone addiction were positively associated with academic burnout, whereas academic self-efficacy, learning motivation, and self-compassion were negatively associated with academic burnout. The regression model was significant, and explained 68.5% of the variance. Academic stress had the largest positive unique contribution, and learning motivation had the largest negative unique contribution. The remaining predictors were significant but had comparatively modest unique effects. These findings provide context-specific evidence for student support in undergraduate legal education. Because the study used cross-sectional self-report data from one university, the results represent predictive associations rather than causal effects and should not be generalized beyond similar settings without further evidence.

Keywords: academic burnout; academic stress; learning motivation; smartphone addiction; undergraduate law students

Introduction

Chinese and Institutional Context

Academic burnout has become an important issue in higher education because it is closely related to students' learning engagement, academic adaptation, and academic achievement. In student populations, it refers to a negative learning-related psychological state characterized principally by exhaustion and cynical detachment that can emerge under sustained academic demands (Maslach et al., 2001; Schaufeli et al., 2002). Academic burnout is associated with

weaker persistence and poorer academic achievement (Madigan & Curran, 2021). Identifying its correlates is therefore important for understanding academic adjustment and designing appropriate student support.

China's higher education system enrolled 48.46 million students in 2024, with a gross enrolment rate of 60.8% and 20.86 million students in regular undergraduate programmes (Ministry of Education of the People's Republic of China, 2025). A consolidated review of national undergraduate-programme records identified approximately 650 active Law major sites and an annual undergraduate law intake of approximately 165,000 students. The scale and expansion of the sector have increased the diversity of students entering legal education and intensified the need for institution-level evidence on academic adjustment.

Undergraduate legal education combines intensive reading, case analysis, legal reasoning, legal writing, continuous assessment, and examination preparation. Chinese law students may simultaneously prepare for postgraduate entrance examinations, civil-service recruitment, the National Unified Legal Professional Qualification Examination, and a competitive graduate labour market. These overlapping demands can increase perceived academic pressure, deplete sustained attention, weaken motivation, and encourage cynical disengagement from study even when students remain enrolled.

Jianghan University was selected because its Law School offers a complete four-year undergraduate programme within a comprehensive urban university in Wuhan and had a sufficiently large, stable cohort structure for grade-based recruitment. Administrative summaries for the three academic years preceding the survey indicated gradual growth in enrolment together with increases in suspension or withdrawal cases, delayed graduation, and records of at least one failed course. These trends provided a concrete institutional rationale for examining burnout-related demands and resources in this setting.

Table 1 Institutional Context for Undergraduate Law Students, 2022–2025

Academic year	New intake	Total students	Susp./withdr.	Delayed grad.	Course failure, n (%)
2022–2023	318	1,238	8 / 4	21	146 (11.8)
2023–2024	326	1,266	11 / 5	24	161 (12.7)
2024–2025	333	1,294	13 / 6	29	184 (14.2)

Note. Susp./withdr. reports suspensions first and withdrawals second. Values are anonymized annual aggregates prepared from Law School teaching, registration, and student-support summaries.

Academic Burnout in Legal Education

The academic requirements of legal education can operate as persistent demands. Close reading and case synthesis require prolonged concentration; legal reasoning and writing require repeated evaluation and revision; and professional qualification planning extends academic

concerns beyond ordinary coursework. When such requirements accumulate, students may experience attention depletion, emotional exhaustion, motivational decline, and increasingly cynical attitudes toward study. These mechanisms make undergraduate law students a substantively relevant population for a demand–resource analysis of academic burnout.

Academic burnout is associated with both contextual demands and personal resources. Academic stress represents a central academic demand (Bakker & Demerouti, 2007; Jung et al., 2015), while smartphone addiction represents a behavioral risk that may disrupt attention, sleep, self–regulation, and academic routines (Billieux et al., 2015; Kwon et al., 2013; Li et al., 2024). Academic self–efficacy, learning motivation, and self–compassion may function as cognitive, motivational, and emotional resources that support persistence and balanced responses to difficulty (Bandura, 1997; Farisandy et al., 2023; Özhan, 2021; Ryan & Deci, 2020). These five variables were therefore examined within one statistical model.

Research Gap and Study Purpose

Recent syntheses demonstrate substantial attention to burnout among medical and nursing students (Almutairi et al., 2022; Kong et al., 2023), while broader university–student research often combines disciplines. By comparison, context–specific evidence for Chinese undergraduate law students remains limited, and few studies have compared academic stress, academic self–efficacy, learning motivation, self–compassion, and smartphone addiction within a single regression framework. This gap matters because the relative statistical contributions of academic demands, personal resources, and technology–related behavioral risk may differ in legal education.

Accordingly, this study provides empirical evidence from one university, compares the independent statistical contributions of five theoretically relevant factors, and offers a contextual basis for student support in a Law School. It does not claim to establish causal mechanisms or represent all undergraduate law students in China.

Research Objectives

The first research objective was to examine the direction and strength of the associations between each of the five predictor variables and academic burnout.

The second objective was to compare their independent statistical contributions in a multiple regression model among undergraduate law students at Jianghan University.

Hypotheses

H1: Academic stress and smartphone addiction are positively associated with academic burnout, whereas academic self–efficacy, learning motivation, and self–compassion are negatively associated with academic burnout among undergraduate law students.

H2: Academic stress and smartphone addiction positively predict academic burnout, whereas academic self–efficacy, learning motivation, and self–compassion negatively predict academic burnout among undergraduate law students.

Literature Review

Academic Burnout

Academic burnout is the student–context adaptation of the broader burnout construct. Burnout was originally conceptualized as a psychological response to prolonged stress and is commonly characterized by exhaustion, cynicism, and reduced efficacy (Maslach et al., 2001). In academic settings, Schaufeli et al. (2002) applied this construct to students and developed the Maslach Burnout Inventory–Student Survey, which conceptualizes academic burnout as exhaustion caused by study demands, cynical or detached attitudes toward learning, and reduced academic efficacy.

In the present study, academic burnout was operationalized through two dimensions: exhaustion and cynicism. Exhaustion refers to students' feelings of emotional and physical depletion caused by academic work, whereas cynicism refers to negative, detached, or indifferent attitudes toward learning and academic tasks. The reduced academic efficacy dimension was not included because academic self–efficacy was examined as an independent variable in the research model. Retaining both reduced academic efficacy and academic self–efficacy could have created conceptual overlap. The factorial validity of the Maslach Burnout Inventory–Student Survey in Chinese student samples has been supported by Hu and Schaufeli (2009), providing an appropriate measurement basis for the present study.

Academic burnout is an important issue in higher education because it may weaken students' learning engagement, persistence, academic adaptation, and academic achievement. Madigan and Curran (2021) found that student burnout is associated with poorer academic achievement. Therefore, examining academic burnout and its related factors is important for understanding students' academic adjustment and for developing educational support strategies.

Academic Stress and Academic Burnout

Academic stress refers to students' perceived pressure when academic demands exceed their available coping resources. These demands may include coursework, assignments, examinations, time constraints, performance expectations, and academic competition. In this study, academic stress is treated as a contextual risk factor that may increase academic burnout.

From the perspective of the Job Demands–Resources model, academic stress can be understood as an academic demand. When academic demands are prolonged and exceed students' available resources, students are more likely to experience psychological resource depletion, emotional exhaustion, and cynical attitudes toward learning (Bakker & Demerouti, 2007). Prior research has also shown that academic stress is positively related to academic burnout among Chinese students, and academic self–efficacy may play a mediating role in this relationship (Jung et al., 2015).

In the context of undergraduate law students, academic stress may be especially relevant because law learning requires extensive reading, case analysis, legal reasoning, examination preparation, and attention to future professional qualifications. When these demands are perceived as excessive or difficult to manage, students may become more vulnerable to academic burnout. Therefore, academic stress was examined in this study as a risk factor that may positively predict academic burnout.

Academic Self–Efficacy and Academic Burnout

Academic self–efficacy refers to students' beliefs about their ability to successfully complete academic tasks and achieve learning goals. According to Bandura's self–efficacy theory, self–efficacy influences individuals' goal choices, effort investment, persistence in the face of difficulty, and emotional reactions during task performance (Bandura, 1997). In academic settings, students with stronger academic self–efficacy are more likely to believe that they can understand course content, manage academic requirements, overcome learning difficulties, and achieve satisfactory academic outcomes.

Academic self–efficacy can be regarded as a protective psychological resource against academic burnout. In educational contexts, it is a domain–specific belief that shapes students' motivation, strategy use, and academic functioning (Pajares, 1996). Students with higher academic self–efficacy may experience a stronger sense of control and competence when facing academic demands, reducing their vulnerability to exhaustion and cynicism. Empirical studies have found that academic self–efficacy is negatively associated with academic burnout among university students (Özhan, 2021). Wang et al. (2024) further reported that academic self–efficacy was related to academic burnout through motivational and engagement–related pathways.

For undergraduate law students, academic self–efficacy may help students cope with complex legal concepts, case analysis, legal writing, and examination preparation. Therefore, academic self–efficacy was examined in this study as a protective factor that may negatively predict academic burnout.

Learning Motivation and Academic Burnout

Learning motivation refers to the psychological process that initiates, directs, and sustains students' learning behavior. It explains why students engage in academic activities, how much effort they invest, and how long they persist when facing academic difficulties. Self–Determination Theory provides an important framework for understanding learning motivation by distinguishing motivation in terms of quality and degree of self–determination (Ryan & Deci, 2000, 2020).

In academic contexts, learning motivation commonly includes intrinsic motivation, extrinsic motivation, and amotivation. Intrinsic motivation refers to learning driven by interest, curiosity, and satisfaction in the learning activity itself. Extrinsic motivation refers to learning driven by external goals, rewards, obligations, or future benefits. Amotivation refers to a lack of intention, perceived

value, or motivational regulation in learning. The Academic Motivation Scale developed by Vallerand et al. (1992) provides a widely used measurement framework for these motivational dimensions.

In this study, learning motivation was represented by intrinsic motivation, extrinsic motivation, and reverse-scored amotivation. A prespecified three-factor confirmatory model was retained, and the three subscale scores showed coherent loadings on a higher-order motivational-engagement score. The overall mean score was therefore used for the hypothesis tests, with higher values representing greater motivational engagement. This scoring decision was treated as study-specific rather than as evidence that all motivation types are theoretically interchangeable.

Previous studies have shown that motivation is closely related to academic burnout. Chang et al. (2015) found that motivational factors were associated with academic burnout, while Chang et al. (2016) showed that different motivational types mediated the relationship between perfectionism and academic burnout. Students with stronger learning motivation may be more likely to perceive learning as meaningful, maintain effort, and persist despite academic challenges. Therefore, learning motivation was examined in this study as a protective factor that may negatively predict academic burnout.

Self-Compassion and Academic Burnout

Self-compassion refers to the way individuals respond to themselves when they experience failure, inadequacy, stress, or suffering. Neff (2003) conceptualized self-compassion as consisting of three core components: self-kindness, common humanity, and mindfulness. Self-kindness involves treating oneself with understanding rather than harsh self-criticism. Common humanity refers to recognizing that failure and imperfection are part of shared human experience. Mindfulness involves maintaining balanced awareness of negative emotions without suppressing them or becoming over-identified with them.

In academic contexts, self-compassion can be understood as a protective emotional resource. Students with higher self-compassion are more likely to respond to academic setbacks with understanding and balanced reflection rather than excessive self-blame. This may help reduce emotional exhaustion and prevent cynical or detached attitudes toward learning. Self-compassion may also support emotional adjustment by helping students maintain balanced responses to stressful experiences (Terry et al., 2013). The Self-Compassion Scale–Short Form developed by Raes et al. (2011) provides a validated measurement basis for survey research.

Previous studies have found a negative relationship between self-compassion and academic burnout. Cheraghian et al. (2016) showed that self-compassion was related to academic burnout and mental health among students, while Farisandy et al. (2023) reported that self-compassion was negatively associated with academic burnout among undergraduate students. For undergraduate law students, self-compassion may be particularly important because legal

education often involves strict evaluation, peer comparison, demanding coursework, and uncertainty about future professional development. Therefore, self–compassion was examined in this study as a protective factor that may negatively predict academic burnout.

Smartphone Addiction and Academic Burnout

Smartphone addiction refers to a pattern of smartphone use characterized by difficulty controlling use and continued use despite negative consequences in academic, social, emotional, or daily functioning. Kwon et al. (2013) conceptualized smartphone addiction as sharing several features with behavioral addictions, including loss of control, excessive use, withdrawal–like symptoms, tolerance, and interference with daily activities. Billieux et al. (2015) further emphasized that disordered smartphone–related behaviors should be understood in relation to usage context, psychological mechanisms, and functional impairment.

In academic contexts, smartphone addiction may function as a technology–related behavioral risk factor for academic burnout. Excessive or uncontrolled smartphone use can reduce students' learning efficiency through time displacement, attentional distraction, impaired self–regulation, and sleep disturbance. These problems may be particularly relevant for undergraduate law students because legal education requires sustained reading, careful case analysis, logical reasoning, and examination preparation.

Empirical studies have shown that smartphone addiction is positively associated with academic burnout among students. Noruzi Kuhdasht et al. (2018) found a relationship between smartphone addiction and academic burnout, while Li et al. (2024) reported that smartphone addiction was related to academic burnout among Chinese college students. Therefore, smartphone addiction was examined in this study as a behavioral risk factor that may positively predict academic burnout.

Theoretical Framework and Hypotheses

1. Job Demands–Resources as the Overarching Framework

This study is mainly grounded in the Job Demands–Resources model, self–efficacy theory, Self–Determination Theory, and self–compassion theory. These theories provide a conceptual basis for understanding how academic burnout may be shaped by both risk factors and protective resources among undergraduate law students.

From the perspective of the Job Demands–Resources model, academic burnout may occur when academic demands exceed students' available resources (Bakker & Demerouti, 2007). Academic stress represents the demand side of the model because it reflects workload, examination pressure, time constraints, and performance expectations. When academic stress is prolonged or perceived as excessive, it may consume students' emotional and cognitive resources and increase exhaustion and cynicism. Therefore, academic stress is expected to positively predict academic burnout.

2. Cognitive, Motivational, and Emotional Resources

Academic self–efficacy represents a cognitive personal resource. Based on self–efficacy theory, students who believe that they are capable of completing academic tasks are more likely to invest effort, persist in difficulty, and regulate negative emotional reactions (Bandura, 1997). Therefore, academic self–efficacy is expected to negatively predict academic burnout.

Learning motivation represents a motivational resource. From the perspective of Self–Determination Theory, students with stronger learning motivation are more likely to perceive learning as meaningful and maintain effort when facing academic demands (Ryan & Deci, 2000, 2020). Therefore, learning motivation is expected to negatively predict academic burnout.

Self–compassion represents an emotional resource. Students with higher self–compassion are more likely to respond to academic failure and pressure with self–kindness, awareness of common humanity, and mindful acceptance rather than harsh self–criticism or emotional over–identification (Neff, 2003). Therefore, self–compassion is expected to negatively predict academic burnout.

Finally, smartphone addiction represents a behavioral risk factor. High levels of smartphone addiction may consume students' time and attention, weaken self–regulation, disrupt sleep, and reduce students' capacity to engage in demanding academic tasks (Kwon et al., 2013; Billieux et al., 2015). Therefore, smartphone addiction is expected to positively predict academic burnout.

3. Proposed Framework

Based on the preceding theoretical arguments, the proposed research framework is presented in Figure 1. The paths represent expected positive or negative associations with academic burnout, not causal effects.

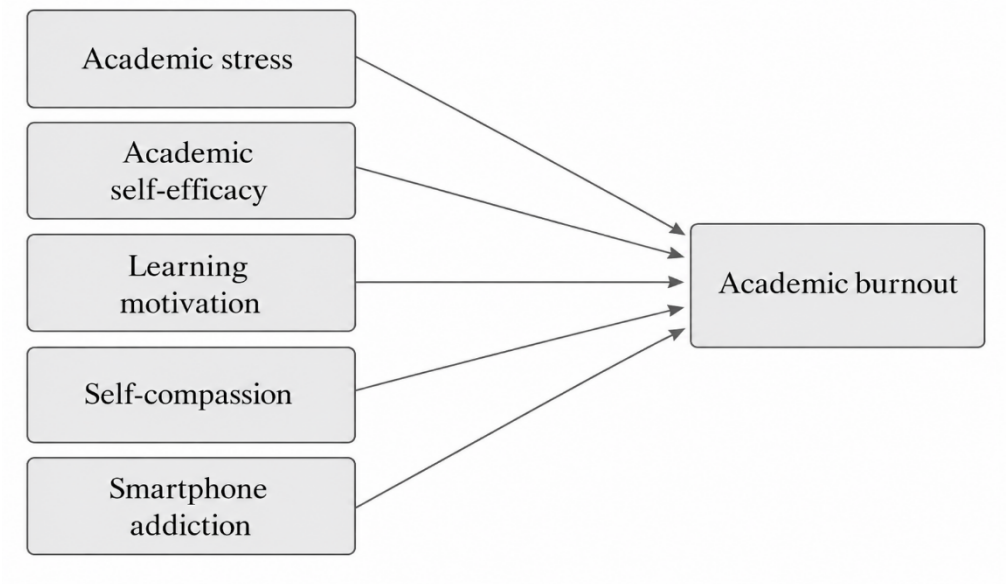


Figure 1 Proposed Research Framework

Expected directions: academic stress (+), academic self–efficacy (–), learning motivation (–), self–compassion (–), and smartphone addiction (+).

Research Methodology

Research Design

This study adopted a cross–sectional quantitative survey design to examine associations between academic burnout and academic stress, academic self–efficacy, learning motivation, self–compassion, and smartphone addiction. Data were collected at one time point; consequently, regression coefficients were interpreted as statistical prediction within the sample rather than causal effects.

Population and Sampling

The sampling frame comprised all 1,294 students registered in Years 1–4 of the undergraduate Law programme in the 2025–2026 academic year: Year 1, 326; Year 2, 333; Year 3, 321; and Year 4, 314. Students were eligible if they were currently enrolled, were at least 18 years old, and consented to participate. Students on exchange or formal leave, members of the pilot sample, and submissions that failed the prespecified screening rules were excluded.

A stratified convenience sampling approach was used. Recruitment quotas were established in proportion to enrolment across Years 1–4 (88, 90, 87, and 85 invitations, respectively; total = 350). The online questionnaire link was distributed through official class groups by academic staff, and eligible students participated voluntarily until the quota for each year was reached. This procedure preserved grade representation but did not constitute random selection from individual student rosters.

Of the 350 questionnaires distributed, 317 were returned, yielding a response rate of 90.6%. Eight submissions were excluded because of invariant responses, completion times below one–third of the median, or inconsistent attention–check responses. The final 309 responses represented 88.3% of all distributed questionnaires and 97.5% of returned questionnaires. The final grade counts were 78, 81, 78, and 72 for Years 1–4, respectively.

Instruments and Scoring

Data were collected through a Chinese–language composite questionnaire integrating adapted measures of six constructs. It contained two demographic items and 50 substantive items rated from 1 (strongly disagree) to 5 (strongly agree). The label Academic Burnout and Its Influencing Factors Questionnaire (ABIFQ) was used only as a shorthand for the composite survey developed for this study and does not denote an independently standardized scale. Construct scores were calculated as item means after the designated reverse scoring.

Table 2 Sources, Dimensions, and Scoring of the Composite Instrument

Construct	Original source	Dimensions and scoring	Items
Academic burnout	Schaufeli et al. (2002); Hu & Schaufeli (2009)	Exhaustion and cynicism; 1–5 scale; no reverse-coded items	10
Academic stress	Sun et al. (2011)	Study pressure, workload, and grade concern; 1–5 scale; no reverse-coded items	13
Academic self-efficacy	Chemers et al. (2001)	Task confidence; 1–5 scale; no reverse-coded items	5
Learning motivation	Vallerand et al. (1992)	Intrinsic, extrinsic, and amotivation; 1–5 scale; 3 amotivation items reversed	11
Self-compassion	Raes et al. (2011)	Six paired components; 1–5 scale; 3 negative-pole items reversed	6
Smartphone addiction	Kwon et al. (2013)	Loss of control and interference; 1–5 scale; no reverse-coded items	5

The reduced academic efficacy dimension of the MBI–Student Survey was omitted to minimize overlap with academic self-efficacy, which was modeled as a separate predictor. This adaptation means that academic burnout in the present study refers specifically to exhaustion and cynicism. For learning motivation, the three amotivation items were reverse-scored before the overall mean was calculated.

Translation and Content Validity

Two bilingual researchers independently translated the selected English items into Chinese, reconciled discrepancies, and produced a synthesized version. A third bilingual specialist who had not seen the originals back-translated the instrument. The research team compared the back-translation with the source items and resolved differences in wording, legal-education relevance, and response intensity. An initial pool of 58 substantive items was reduced by eight items because of redundancy or weak contextual fit, and 12 retained items were linguistically revised before pilot testing.

Three experts in educational psychology, psychometrics, and undergraduate legal education independently evaluated item relevance using scores of −1 (not congruent), 0 (uncertain), and +1 (congruent). The Item–Objective Congruence Index was calculated as the sum of expert ratings divided by three. Initial IOC values ranged from .33 to 1.00. Items below .67 were removed or rewritten; the 50 retained items had final IOC values from .67 to 1.00. Seven retained items scored .67 and were clarified before the pilot test, while the remaining items scored 1.00.

Table 3 Content Validity and Reliability of the Retained Measures

Construct	Final IOC range	Pilot α (n = 57)	Main α (n = 309)
Academic burnout	.67–1.00	.912	.891
Academic stress	.67–1.00	.928	.882
Academic self-efficacy	.67–1.00	.852	.871
Learning motivation	.67–1.00	.903	.869
Self-compassion	.67–1.00	.959	.905
Smartphone addiction	.67–1.00	.889	.869

Construct validity was examined in the main sample using confirmatory factor analysis in IBM SPSS Amos 29. The correlated six-construct measurement model showed acceptable fit, $\chi^2(1,160) = 1,874.52$, $\chi^2/df = 1.62$, CFI = .926, TLI = .921, RMSEA = .045 (90% CI [.041, .049]), and SRMR = .052; standardized item loadings ranged from .57 to .88. For the 11 motivation items, the correlated intrinsic, extrinsic, and amotivation model also fit adequately, $\chi^2(41) = 70.66$, CFI = .975, TLI = .967, RMSEA = .048, and SRMR = .038. After amotivation was reversed, the three subscale scores loaded from .65 to .84 on the prespecified higher-order motivational-engagement score, supporting its use as a study-specific overall measure.

Pilot Test

A pilot test was conducted from 3 to 12 September 2025 with 57 undergraduate students from a comparable law programme at another university in Wuhan. The pilot participants were not included in the population frame or the final sample of 309. Completion feedback led to minor wording adjustments, and Cronbach's alpha values ranged from .852 to .959, supporting progression to the main survey.

Data Collection and Ethics

The main survey was administered online from 15 October to 10 November 2025. The first page explained the study purpose, eligibility requirements, voluntary participation, confidentiality, the right to stop without penalty, and the approximate completion time. Participants provided electronic informed consent before accessing the questionnaire. No names, student numbers, or contact details were collected, and the exported dataset was stored in password-protected files accessible only to the research team.

Ethical approval was granted by the Jianghan University School of Law Research Ethics Committee on 28 August 2025 (JHU-LAW-REC-2025-017). The study procedures followed the principles of the Declaration of Helsinki and applicable university requirements for minimal-risk social-science research.

Data Analysis

Analyses were conducted in IBM SPSS Statistics 29 and IBM SPSS Amos 29. Frequencies and percentages summarized demographic variables; minimums, maximums, means, and standard deviations summarized study variables. No categorical severity labels were applied to scale means. Cronbach's alpha assessed internal consistency, and confirmatory factor analysis examined the prespecified measurement structure.

Pearson correlations tested H1. Multiple linear regression tested H2, with all five predictors entered simultaneously. Linearity, residual normality, homoscedasticity, independence of errors, influential observations, and multicollinearity were evaluated before interpretation. Model effect size was calculated as $f^2 = R^2/(1 - R^2)$, and each predictor's local f^2 was calculated as $t^2/303$; partial correlations were derived from the corresponding t statistic and residual degrees of freedom. Statistical significance was set at $p < .05$. Anonymity, neutral wording, separation of predictor and outcome blocks, Harman's single–factor test, and a one–factor confirmatory model were used to evaluate common–method concerns.

Ethics and Other Declarations

Ethics approval and consent to participate. The Jianghan University School of Law Research Ethics Committee approved the study on 28 August 2025 (JHU–LAW–REC–2025–017). All participants provided electronic informed consent before beginning the questionnaire.

Consent for publication. The manuscript contains no identifiable personal information; separate consent for publication was not applicable.

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Competing interests. The authors declare no competing interests.

Data availability. The de–identified dataset and analysis syntax may be obtained from the corresponding author upon reasonable request and subject to institutional approval.

Research Results

Participant Characteristics

The final sample included 309 students and represented all four academic years. Participant characteristics are summarized in Table 4.

Table 4 Demographic Characteristics of Participants

Characteristic	Category	n	%
Gender	Male	118	38.2
	Female	187	60.5
	Prefer not to say / another identity	4	1.3
Grade level	Year 1	78	25.2
	Year 2	81	26.2
	Year 3	78	25.2
	Year 4	72	23.3
Total		**309**	**100.0**

Reliability and Descriptive Statistics

Cronbach's alpha values ranged from .869 to .905 in the main sample, indicating acceptable to good internal consistency (Table 5).

Table 5 Reliability Analysis of the Scales

Variable	Number of Items	Cronbach's Alpha
Academic burnout	10	.891
Academic stress	13	.882
Academic self-efficacy	5	.871
Learning motivation	11	.869
Self-compassion	6	.905
Smartphone addiction	5	.869

Table 6 presents the observed score distributions. Academic burnout had a mean of 2.61 (SD = 0.83). The remaining means ranged from 2.63 to 3.38. These values describe the present sample and were not interpreted as clinical or diagnostic levels.

Table 6 Descriptive Statistics of the Main Variables

Variable	N	Min	Max	M	SD
Academic burnout	309	1.10	4.60	2.61	0.83
Academic stress	309	1.08	4.54	2.63	0.73
Academic self–efficacy	309	1.20	5.00	3.38	0.92
Learning motivation	309	1.64	4.91	3.36	0.75
Self–compassion	309	1.33	5.00	3.34	0.93
Smartphone addiction	309	1.00	4.80	2.66	0.92

Relationships between the Predictor Variables and Academic Burnout: Results for Research Objective 1 and H1

Pearson correlations for the six study variables are presented in Table 7.

Table 7 Correlation Matrix of the Main Variables

Variable	1	2	3	4	5	6
1. Academic burnout	1					
2. Academic stress	.736**	1				
3. Academic self–efficacy	–.562**	–.520**	1			
4. Learning motivation	–.722**	–.658**	.527**	1		
5. Self–compassion	–.558**	–.519**	.442**	.494**	1	
6. Smartphone addiction	.593**	.524**	–.377**	–.568**	–.427**	1

Note. ** p < .01 (two–tailed).

Academic stress was positively associated with academic burnout ($r = .736$, $p < .001$), and smartphone addiction was also positively associated with academic burnout ($r = .593$, $p < .001$). Academic self–efficacy ($r = –.562$, $p < .001$), learning motivation ($r = –.722$, $p < .001$), and self–compassion ($r = –.558$, $p < .001$) were negatively associated with academic burnout. All five directional relationships proposed in H1 were supported.

Regression Assumptions and Diagnostic Tests

Residual and influence diagnostics supported interpretation of the multiple regression model. Partial–regression plots were approximately linear, the standardized residual scatterplot showed no funnel pattern, and the normal probability plot showed only minor tail deviations. The standardized residuals ranged from –2.87 to 2.63. Durbin–Watson was 1.93, the maximum Cook's distance was .071, and the maximum Mahalanobis distance was 19.84, below the $\chi^2(5, .001)$ reference value of 20.52. Tolerance values ranged from .458 to .655 and VIF values from 1.527 to 2.183.

Table 8 Regression Assumptions and Diagnostics

Diagnostic	Observed result	Reference	Decision
Linearity	Partial–regression plots approximately linear	No systematic curvature	Supported
Residual normality	Standardized residuals −2.87 to 2.63; Q–Q plot acceptable	Most residuals within ±3	Supported
Constant variance	No funnel pattern in residual plot	Approximately constant spread	Supported
Independence	Durbin–Watson = 1.93	Approximately 2	Supported
Influential cases	Maximum Cook's D = .071; maximum Mahalanobis = 19.84	Cook's D < 1; $\chi^2(5, .001)$ = 20.52	No material case
Collinearity	Tolerance .458–.655; VIF 1.527–2.183	Tolerance > .20; VIF < 5	Supported

Harman's single–factor extraction accounted for 31.4% of total variance, and a one–factor confirmatory model fit poorly (CFI = .542, TLI = .521, RMSEA = .121, SRMR = .109). These checks reduced, but did not eliminate, concern that common measurement conditions inflated the observed associations.

Predictors of Academic Burnout: Results for Research Objective 2 and H2

The simultaneous regression model was statistically significant, $F(5, 303) = 131.80$, $p < .001$. The predictors jointly explained 68.5% of the variance in academic burnout (adjusted $R^2 = .680$). The corresponding overall Cohen's f^2 was 2.175 (Table 9).

Table 9 Model Summary of Multiple Regression Analysis

R	R^2	Adjusted R^2	Std. Error	F(5, 303)	p	Cohen's f^2
.828	.685	.680	.47025	131.80	< .001	2.175

Table 10 Regression Coefficients and Unique Effect Sizes Predicting Academic Burnout

Panel A. Regression coefficients	B	SE	β	t	p
Constant	3.003	0.335	—	8.959	< .001
Academic stress	0.390	0.053	.341	7.301	< .001
Academic self–efficacy	−0.110	0.036	−.122	−3.054	.002
Learning motivation	−0.318	0.053	−.286	−6.004	< .001
Self–compassion	−0.106	0.035	−.119	−2.999	.003
Smartphone addiction	0.140	0.037	.155	3.794	< .001

Table 10 (continued) Collinearity Statistics and Unique Effect Sizes

Panel B. Collinearity and effect sizes	Tol.	VIF	Partial r	Local f^2
Academic stress	.477	2.096	.387	.176
Academic self–efficacy	.647	1.546	–.173	.031
Learning motivation	.458	2.183	–.326	.119
Self–compassion	.655	1.527	–.170	.030
Smartphone addiction	.624	1.603	.213	.048

All five predictors made statistically significant unique contributions in the proposed directions; therefore, H2 was supported. Academic stress had the largest positive contribution (β = .341, partial r = .387, local f^2 = .176), and learning motivation had the largest negative contribution (β = –.286, partial r = –.326, local f^2 = .119). Smartphone addiction had a smaller positive unique contribution (local f^2 = .048), while academic self–efficacy and self–compassion had comparatively modest negative contributions (local f^2 = .031 and .030, respectively). Statistical significance was therefore not interpreted as equivalent to substantive importance.

Discussion

This study examined the associations of an academic demand, three personal resources, and a behavioral risk with academic burnout among undergraduate law students at one university. The correlation directions supported H1, and all five variables retained significant unique associations in the regression model, supporting H2. The pattern is consistent with a demand–resource interpretation, while the cross–sectional design limits all explanations to association rather than temporal or causal mechanisms.

Academic stress showed the largest positive unique association with academic burnout (local f^2 = .176). This result is consistent with the Job Demands–Resources model, in which sustained demands are associated with resource depletion and exhaustion (Bakker & Demerouti, 2007), and with evidence linking academic stress and burnout among Chinese students (Jung et al., 2015). The effect remained comparatively substantial after the other predictors were controlled. In legal education, accumulated reading, case analysis, legal writing, examinations, and professional qualification planning may make perceived workload and performance pressure especially salient targets for monitoring.

Academic self–efficacy was a statistically significant but comparatively modest negative predictor (local f^2 = .031). The direction accords with self–efficacy theory, which links efficacy beliefs with effort, persistence, and emotional responses to difficult tasks (Bandura, 1997), and with prior university–student findings (Özhan, 2021; Wang et al., 2024). For law students, confidence in interpreting cases, organizing legal arguments, and preparing for assessments may

support adaptive engagement, but the small unique effect indicates that self–efficacy should not be treated as a major determinant in isolation.

Learning motivation had the second–largest unique effect and the largest negative coefficient (local f^2 = .119). This finding is consistent with Self–Determination Theory and research connecting motivation with engagement and academic burnout (Chang et al., 2015, 2016; Ryan & Deci, 2000, 2020). The retained three–factor structure cautions against treating intrinsic motivation, extrinsic motivation, and amotivation as conceptually identical; the overall score in this study represents a supported higher–order motivational–engagement composite. Connecting legal study with professional purpose and meaningful learning opportunities may therefore be relevant, although intervention effects require longitudinal or experimental evidence.

Self–compassion also had a significant but modest negative unique association with burnout (local f^2 = .030). The direction is consistent with the proposition that self–kindness, common humanity, and mindfulness support balanced responses to academic setbacks (Neff, 2003, 2023) and with prior student research (Cheraghian et al., 2016; Farisandy et al., 2023). In a setting involving strict evaluation and peer comparison, self–compassion may be a useful supplementary resource, but its independent statistical contribution was small after the other variables were controlled.

Smartphone addiction had a positive but relatively small unique association with academic burnout (local f^2 = .048), consistent with earlier studies (Li et al., 2024; Noruzi Kuhdasht et al., 2018). Disrupted attention, time displacement, sleep disturbance, and weakened self–regulation offer plausible explanations, particularly where sustained reading is essential. However, the present data cannot determine whether problematic use precedes burnout, follows it as an avoidance response, or operates reciprocally.

The model's R^2 of .685 was high for a cross–sectional self–report study. The constructs are theoretically related, were measured from the same respondents, and were collected in one questionnaire at one time. Procedural controls, the 31.4% first–factor result, and the poor one–factor confirmatory model lessen but do not remove common–method concern. The explained variance and local effect sizes should therefore be interpreted as sample–specific statistical associations that require replication with multi–source, longitudinal, or behavioral measures.

New Knowledge from Research

The new knowledge generated by this study lies in the integration of academic demand, personal resources, and behavioral risk within a single framework applied to undergraduate legal education. Academic stress represents the demand component; academic self–efficacy, learning motivation, and self–compassion represent cognitive, motivational, and emotional resources; and smartphone addiction represents a behavioral risk associated with diminished academic self–regulation.

The framework extends the demand–resource perspective by incorporating a technology-related behavioral risk alongside academic and psychological factors. It suggests that academic burnout in legal education can be understood as a balance between demands that deplete students' resources, personal resources that support adaptation, and behavioral patterns that may interfere with sustained academic engagement. The arrows in Figure 2 represent empirically supported predictive associations rather than causal relationships.

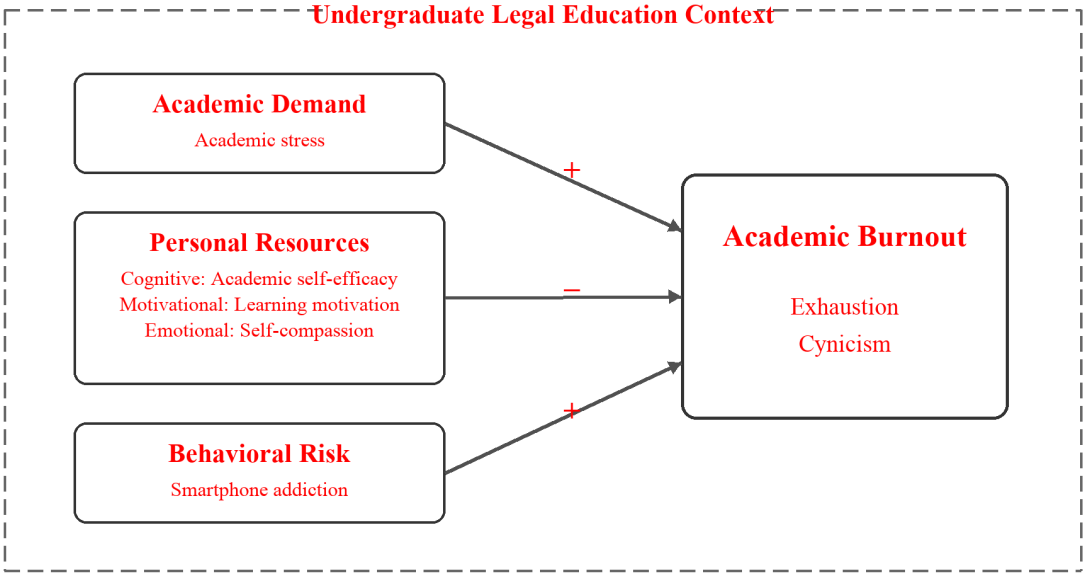


Figure 2 Integrated Demand–Resource–Behavior Framework of Academic Burnout among Undergraduate Law Students

Conclusion

This cross-sectional study examined five predictors of academic burnout among undergraduate law students at Jianghan University. Its scope was limited to one institutional sample and to self-reported academic stress, academic self-efficacy, learning motivation, self-compassion, smartphone addiction, and academic burnout.

With respect to H1, academic stress and smartphone addiction were positively associated with academic burnout, whereas academic self-efficacy, learning motivation, and self-compassion were negatively associated with academic burnout. Therefore, H1 was supported.

With respect to H2, all five variables significantly predicted academic burnout in the multiple regression model. Academic stress was the strongest positive predictor, and learning motivation was the strongest negative predictor. The model explained 68.5% of the variance in academic burnout. Therefore, H2 was supported.

Because the study employed a cross-sectional self-report design at a single university and used nonprobability recruitment within grade quotas, the results should be interpreted as predictive associations rather than causal effects. Generalization to law students in other institutions, regions, or educational systems should be made cautiously.

Suggestions

Practical Implications

Law schools may use periodic, confidential screening during high–demand periods such as midterm and final examinations, thesis preparation, internships, and professional qualification preparation. Workload calendars can help coordinate major papers, case reports, presentations, and examinations across courses. Students showing sustained stress, repeated delays, absence, or disengagement can be offered academic advising or counseling without treating the present scale scores as clinical diagnoses.

Learning support can combine structured reading schedules, staged legal–writing tasks, model answers, clear rubrics, and specific feedback. Moot court, legal aid, court observation, internships, and professional lectures may help students connect course content with professional identity and meaningful goals. These activities are consistent with the observed roles of academic stress, academic self–efficacy, and learning motivation, but their effectiveness should be evaluated directly.

Self–compassion resources can be incorporated into student–support workshops that emphasize balanced reflection after examination failure, difficult feedback, or legal–writing setbacks. Digital self–regulation measures can include notification management, protected deep–reading periods, screen–time limits, and reduced bedtime disruption. These supports should be offered as complementary options rather than as substitutes for workload and curriculum review.

Limitations and Future Research

The single–university, stratified convenience sample limits representativeness; the cross–sectional design does not establish temporal order; and self–report measurement creates possible recall, social–desirability, and common–method bias. The shortened composite instrument, omission of reduced academic efficacy, and study–specific higher–order motivation score also limit comparability with studies using complete standardized scales. Future work should use probability or multi–site samples, retain and test full measurement structures, collect behavioral or administrative indicators, and apply longitudinal, mixed–method, or intervention designs. Replication should also test whether the demand–resource–behavior framework operates similarly across regions, institutions, and academic years.

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