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Psychological Approaches to Academic Dropout in University Students: A Case Study

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Abstract: Academic dropout remains one of the most pressing challenges facing European higher education systems, with significant personal, institutional, and socioeconomic consequences. This article examines the psychological determinants of student attrition at Lucian Blaga University of Sibiu (ULBS), Romania, drawing on empirical data, validated survey instruments, and semi-structured interviews conducted between 2022 and 2025 (N = 847 quantitative; n = 32 qualitative). We analyse the roles of academic self-efficacy, intrinsic motivation, emotional dysregulation, and sense of belonging in dropout decisions, and propose a multi-level psychological intervention framework grounded in cognitive-behavioural theory and self-determination theory. Our findings indicate that psychological factors – particularly low academic self-efficacy and unaddressed mental health burden – are primary and independent predictors of dropout intention, explaining 31.4% of unique variance after controlling for sociodemographic variables. Structural equation modelling reveals that emotional dysregulation operates partially through self-efficacy and belonging as

mediators. Qualitative thematic analysis surfaces four experiential themes: the collapse of the competent self, the invisible threshold of escalating distress, motivation without meaning, and help not taken and help not given. Institutional implications and a tiered intervention framework for ULBS counselling services are discussed.

Keywords: academic dropout, psychological intervention, university students, self-efficacy, Romania, higher education, mental health, Lucian Blaga University of Sibiu, self-determination theory, emotional regulation, sense of belonging.

Introduction

Academic dropout – defined as the premature, unplanned withdrawal of a student from a university programme before degree completion – constitutes one of the most pressing challenges facing higher education institutions globally (Tinto, 1975; Bean, 1980). In Romania, official data from the National Institute of Statistics (INS, 2023) indicate that approximately 32% of students enrolling in bachelor's degree programmes across Romanian public universities fail to graduate within the standard programme duration, with a substantial proportion withdrawing entirely. These figures are consistent with broader European trends reported by Eurostat (2022), yet they mask institution-specific dynamics that require context-sensitive analysis.

Lucian Blaga University of Sibiu (ULBS) – one of Romania's most prominent regional universities, founded in 1990 and currently enrolling approximately 17,000 students across ten faculties – is no exception to this phenomenon. Internal retention data suggest that between 15% and 28% of first-year students across various faculties do not advance to the second year of study (ULBS Institutional Report, 2024). While economic and structural factors – such as inadequate financial support, poor academic preparation, and limited perceived labour market relevance – have been extensively documented as contributors to dropout (Hovdhaugen, 2011), the psychological dimension remains comparatively underexplored in the Romanian academic context.

International research has increasingly established that variables such as academic self-efficacy (Bandura, 1997), intrinsic motivation (Ryan & Deci, 2000), emotional regulation capacity (Gross, 2015), and sense of academic belonging (Walton & Cohen, 2011) are robust predictors of student persistence, operating both directly and as moderators of structural risk factors. The present study aims to: (1) identify and analyse the psychological risk factors most strongly associated with dropout intention and actual dropout at ULBS; (2) examine how these factors interact with sociodemographic characteristics; and (3) propose evidence-based psychological interventions adaptable to the institutional context of a mid-sized Romanian university.

Theoretical Framework

Tinto's Interactionalist Model

Vincent Tinto's (1975, 1993) interactionalist model of student departure remains the most cited and debated framework in dropout research. Tinto proposed that student persistence is a function of the degree of academic and social integration achieved within the institution. Students who fail to integrate – either academically or socially – are at elevated risk of departure. While subsequent scholars have critiqued Tinto's model for its cultural assumptions and relative neglect of structural inequities (Braxton et al., 2004), its core emphasis on the student's subjective sense of fit and belonging within the academic community retains considerable empirical support, particularly in European contexts (Thomas, 2012). Applied to ULBS, where a significant proportion of first-year students transition from smaller provincial secondary schools into a substantially larger institutional environment, the integration challenge predicted by Tinto's model is likely to be particularly salient.

Self-Determination Theory (SDT)

Ryan and Deci's (2000) Self-Determination Theory offers a motivational framework of particular relevance to dropout research. SDT posits three fundamental psychological needs – autonomy, competence, and relatedness – whose satisfaction is essential for intrinsic motivation and psychological well-being. When these needs are systematically frustrated, students are likely to disengage motivationally, shifting from intrinsic to extrinsic motivation or towards amotivation, which is strongly predictive of dropout (Vallerand et al., 1997; Guiffrida, 2009). Within the ULBS context, the transition from a directive Romanian secondary education system to the relatively autonomous demands of university learning may pose particular challenges for the satisfaction of needs, especially with respect to perceptions of autonomy and competence.

Social Cognitive Theory and Academic Self-Efficacy

Bandura's (1997) social cognitive theory introduces the construct of self-efficacy – an individual's belief in their capacity to execute specific behaviours to produce particular outcomes – as a central determinant of academic persistence. Students with low academic self-efficacy are more likely to interpret academic difficulties as indicators of fundamental incapacity rather than as manageable challenges, increasing vulnerability to dropout (Robbins et al., 2004). In the Romanian educational context, where competitive national examination systems (Bacalaureat) create sharp distinctions between perceived academic success and failure, many students arrive at university with fragile self-efficacy beliefs highly susceptible to early academic setbacks (Popa, 2019).

Emotional Regulation and Mental Health

A substantial body of research links poor emotional regulation capacity and diagnosable mental health conditions – most notably anxiety disorders and major depression – to academic underperformance and dropout (Eisenberg et al., 2009; Kessler et al., 2005). Gross's (2015) process model of emotion regulation highlights the distinction between adaptive strategies (cognitive reappraisal, acceptance) and maladaptive strategies (expressive suppression, rumination), with the

latter associated with heightened psychological distress and academic disengagement. In a post-pandemic context, elevated rates of emotional dysregulation and mental health burden among students represent a particularly salient risk factor (WHO, 2022; Marcu & Ionescu, 2023).

Methodology

Research Design

This study employs a mixed-methods convergent parallel design (Creswell & Plano Clark, 2017), integrating quantitative survey data with qualitative interview findings. Ethical approval was obtained from the ULBS Research Ethics Committee (Protocol No. 2022-ETH-047). All participants provided written informed consent, and data were anonymised prior to analysis.

Participants and Sampling

A total of 847 students participated in the quantitative phase, recruited via stratified random sampling from six faculties at ULBS. The sample comprised 54.3% female and 45.7% male participants, with a mean age of 20.8 years ($SD = 2.31$). Year-of-study distribution: Year 1 (38.7%), Year 2 (31.4%), Year 3 (29.9%). For the qualitative phase, 32 students who had either formally withdrawn from ULBS or expressed strong dropout intentions were recruited through purposive and snowball sampling and participated in semi-structured interviews lasting 45–75 minutes.

Instruments

The quantitative battery included: (a) the Academic Self-Efficacy Scale (Zimmerman et al., 1992; Romanian adaptation: Negru-Subtirica et al., 2015); (b) the Academic Motivation Scale – University version (AMS-U; Vallerand et al., 1992; Romanian validation: Hanga, 2018); (c) the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004); (d) the Sense of Belonging Instrument – Modified for Higher Education (SOBI-M; Tovar & Simon, 2003); (e) the Patient Health Questionnaire-9 (PHQ-9; Kroenke et al., 2001) and Generalized Anxiety Disorder-7 (GAD-7; Spitzer et al., 2006) for mental health screening; and (f) a purpose-built Dropout Intention Scale (DIS; Ionescu & Preda, 2021). Internal consistency coefficients (Cronbach's α) exceeded 0.78 for all scales in the present sample.

Data Analysis

Quantitative data were analysed using IBM SPSS v.27 and R v.4.2.0. Hierarchical multiple regression identified the unique and combined variance in dropout intention scores accounted for by psychological predictors, after controlling for sociodemographic variables. Structural equation modelling (SEM) was conducted using the lavaan package in R to test mediation and moderation hypotheses. Model fit was evaluated using CFI, RMSEA, and SRMR indices. Qualitative data were analysed using reflexive thematic analysis following Braun and Clarke's (2006) six-phase framework, with NVivo 14 supporting data management.

Results

Prevalence of Psychological Risk Factors

Screening results indicated that 41.7% of the ULBS student sample reported clinically significant levels of anxiety ($GAD-7 \geq 10$), and 28.3% met the threshold for moderate-to-severe depressive symptoms ($PHQ-9 \geq 10$). These figures are notably higher than pre-pandemic estimates for Romanian university populations (Florescu et al., 2018) and align with post-COVID-19 trends documented internationally (Aristovnik et al., 2020). Academic self-efficacy scores were significantly below the scale midpoint for 36.2% of participants, with first-year students scoring lower on average than upper-year students ($M_1 = 47.3$ vs $M_{23} = 53.1$; $t(845) = 6.42$, $p < .001$, $d = 0.44$). Amotivation was endorsed at moderate-to-high levels by 22.8% of the sample.

Predictors of Dropout Intention

Hierarchical regression analysis revealed that, after controlling for sociodemographic variables (Block 1: $\Delta R^2 = .07$, $p < .001$), psychological variables collectively explained an additional 31.4% of variance in dropout intention scores (Block 2: $\Delta R^2 = .314$, $F(5, 834) = 79.23$, $p < .001$). The strongest individual predictors were academic self-efficacy ($\beta = -.42$, $p < .001$), amotivation ($\beta = .38$, $p < .001$), and emotional dysregulation total score ($\beta = .29$, $p < .001$). Sense of belonging was significantly negatively associated with dropout intention ($\beta = -.24$, $p < .001$), while depressive symptom severity contributed uniquely beyond the variance explained by other psychological variables ($\beta = .17$, $p < .001$).

SEM analysis confirmed a partial mediation model in which the relationship between emotional dysregulation and dropout intention was significantly mediated by academic self-efficacy (indirect effect = $-.18$, 95% CI $[-.24, -.12]$, $p < .001$) and sense of belonging (indirect effect = $-.11$, 95% CI $[-.16, -.06]$, $p < .001$). Model fit indices were satisfactory (CFI = .96; RMSEA = .048; SRMR = .051).

Table 1 presents the hierarchical regression summary for psychological predictors of dropout intention.

Table 1

Hierarchical Regression Summary: Psychological Predictors of Dropout Intention (N = 847)

Predictor	B	SE B	β	p
Block 1: Sociodemographic controls				
Year of study	−0.31	0.09	−.12	.001
Gender (female = 1)	−0.18	0.11	−.07	.103
Faculty	0.24	0.08	.14	.003
ΔR^2 Block 1 = .07, $p < .001$				

Block 2: Psychological predictors				
Academic self-efficacy	−0.61	0.07	−.42	< .001
Amotivation (AMS-U)	0.55	0.08	.38	< .001
Emotional dysregulation (DERS)	0.43	0.09	.29	< .001
Sense of belonging (SOBI-M)	−0.34	0.08	−.24	< .001
Depressive symptoms (PHQ-9)	0.26	0.07	.17	< .001
ΔR^2 Block 2 = .314, $p < .001$; Total R^2 = .384				

Note. B = unstandardised coefficient; SE B = standard error; β = standardised coefficient.

Qualitative Findings: Thematic Analysis

Reflexive thematic analysis of the 32 interview transcripts generated four primary themes.

Theme 1 – The Collapse of the Competent Self. Participants described a transition from secondary school environments in which they had been academically successful to a university context perceived as exposing fundamental deficits: “I was always the best student in my high school in Sibiu. When I got here I suddenly felt like I was the most stupid person in the room. I stopped going to seminars because I was afraid to speak” (Participant 07, Year 1, Social Sciences). This pattern resonates with Bandura’s (1997) account of mastery experience as the primary source of self-efficacy.

Theme 2 – The Invisible Threshold. This theme described a pattern in which early, unaddressed psychological distress escalated quietly until dropout or near-dropout: “Nobody asked me if I was okay. I was failing exams and nodidn’t sleep for weeks. I thought maybe I ju no was not university material. It took me a year to realise I might be depressed” (Participant 14, Year 2, Faculty of Science). This theme highlighted critical inadequacies in ULBS’s existing early warning systems for psychological risk.

Theme 3 – Motivation Without Meaning. Students described profound disconnection between their academic programme and personal goals, often as a result of external pressure: “My parents chose law for me. I had no interest. I stayed two years because I was ashamed to leave, but I was never really there” (Participant 22, Year 3, Faculty of Law). This theme resonates strongly with SDT’s account of introjected and external motivation as predictors of amotivation (Vallerand et al., 1997).

Theme 4 – Help Not Taken, Help Not Given. Despite ULBS operating a student counselling service, only 3 of the 32 interview participants had accessed it. Barriers included perceived stigma, limited awareness of available services, perceived inaccessibility of appointments, and distrust in

confidentiality. These findings are consistent with European research on mental health help-seeking in university populations (Hunt & Eisenberg, 2010).

Discussion

The present findings converge to establish that psychological factors constitute a primary, substantially modifiable pathway to dropout at ULBS, consistent with theoretical models by Tinto (1993), Bandura (1997), and Ryan and Deci (2000). The high prevalence of anxiety, depression, and low self-efficacy documented in this sample underscores the urgency of institutional responses that go beyond academic advising and academic performance monitoring.

The mediation model has particularly important practical implications: interventions targeting emotional regulation competencies may have cascading benefits, improving academic self-efficacy and sense of belonging simultaneously. This is consistent with evidence from randomised controlled trials of mindfulness-based and cognitive-behavioural interventions in university populations, which report significant improvements in these mediator variables alongside reductions in dropout-relevant outcomes (Regehr et al., 2013; Conley et al., 2013).

The qualitative finding that students rarely accessed existing counselling services despite high levels of psychological need points to a critical implementation gap at ULBS. Active outreach, destigmatisation campaigns, and integration of psychological literacy into academic curricula are needed to convert availability into utilisation. Comparable challenges have been documented at Romanian universities in Cluj-Napoca and Timișoara (Baban, 2011; Lungu & Cioca, 2022), suggesting this is a systemic issue requiring coordinated national-level policy attention.

Several limitations must be noted. The cross-sectional design limits causal inference. Potential self-selection bias in both samples and restriction to a single institution limit the generalisability of specific prevalence estimates. However, the theoretical mechanisms identified are likely to apply broadly across comparable Romanian regional universities.

Recommendations for Psychological Intervention at ULBS

Tier 1 – Universal Prevention. Integration of psychoeducational modules on stress management, academic self-efficacy building, and motivational clarity into first-year induction programmes. Universal mental health screening using validated instruments (PHQ-9; GAD-7) at matriculation, with automatic referral pathways for students scoring above clinical thresholds. Development of a peer connector programme pairing incoming students with trained upper-year mentors to facilitate academic and social integration consistent with Tinto's (1993) model.

Tier 2 – Targeted Intervention. Structured group-based cognitive-behavioural workshops (6–8 sessions) for students identified through screening or faculty referral as experiencing academic self-efficacy deficits, motivational disengagement, or subclinical emotional difficulties. Evidence from randomised controlled trials supports the efficacy of such group-based approaches (Conley et al., 2013; Regehr et al., 2013).

Tier 3 – Intensive Support. Expansion of individual psychological counselling capacity at the ULBS Counselling Centre, with a target maximum waiting time of two weeks from referral to first appointment. Implementation of formal collaboration protocols between the Counselling Centre, faculty academic advisors, and the student affairs office to enable coordinated responses when students are identified as high-risk.

Institutional Level. Development of a digital early warning system integrating academic performance data with optional student self-report wellbeing indicators, drawing on models implemented at universities in the United Kingdom (Thomas, 2012) and the Netherlands (Vossensteyn et al., 2015). Annual publication of student retention and mental health indicators in ULBS institutional reporting to ensure accountability and benchmarking against comparable institutions.

Conclusion

This study has provided empirical and experiential evidence that psychological factors – particularly academic self-efficacy, motivational quality, emotional regulation, sense of belonging, and mental health status – are central to the dropout phenomenon at Lucian Blaga University of Sibiu, Romania. The structural equation model confirmed that emotional dysregulation operates through both self-efficacy and belonging as mediators, providing a theoretically coherent and practically actionable understanding of the dropout process.

Academic dropout is not merely an administrative statistic; it reflects an educational environment's failure to adequately support the psychological development and well-being of its students. Addressing this failure requires a paradigm shift in how Romanian universities conceptualise student support – from reactive, performance-focused advising towards proactive, psychologically informed care. The tiered intervention framework proposed here provides a practical, evidence-grounded roadmap for ULBS and comparable Romanian regional universities seeking to reduce attrition rates while promoting genuine academic inclusion.

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Conflict of Interest

The author declares no conflict of interest.

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