
STUDENT SATISFACTION WITH THE CHOSEN FIELD OF STUDY: DECISIONAL AUTONOMY, ACADEMIC SELF-ESTEEM AND TEACHING QUALITY AT "1 DECEMBRIE 1918" UNIVERSITY OF ALBA IULIA

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Abstract: *The choice of an academic specialisation carries lasting consequences for young people's professional trajectories and psychological well-being, and satisfaction with that choice is a central indicator of the quality of the academic experience. This study examines the level of satisfaction with the chosen specialisation among undergraduates at the "1 Decembrie 1918" University of Alba Iulia (UAB), Romania, and tests its associations with decisional autonomy, year of study, academic self-esteem, perceived employability and perceived teaching quality. A quantitative, cross-sectional survey design was employed, with a structured online questionnaire completed by 148 undergraduate students. Beyond bivariate non-parametric tests (Spearman correlations, Kruskal–Wallis, Mann–Whitney, chi-square and Wilcoxon tests), the analytical strategy was extended with reliability analysis (Cronbach's alpha and McDonald's omega), exploratory factor analysis, hierarchical multiple regression with an ordinal logistic robustness check, and a bootstrapped mediation analysis. Overall satisfaction was high ($M = 4.07$ on a five-point scale) and correlated significantly with the intention to work in the field ($p = .490$), perceived autonomy of choice ($p = .391$), academic self-esteem ($p = .622$), perceived employability ($p = .594$) and teaching quality ($p = .648$), all $p < .001$. In the hierarchical regression, internal and contextual factors together explained 60.6% of the variance in satisfaction, with perceived teaching quality ($\beta = .45$) and perceived employability ($\beta = .27$) the strongest unique predictors, followed by decisional autonomy ($\beta = .19$). Satisfaction fully mediated the relationship between teaching quality and the intention to work in the field (indirect effect = 0.39, 95% bootstrap CI [0.22, 0.60]). Decisional pressure and year of study showed no robust associations with satisfaction. The findings support a multidimensional conceptualisation of academic satisfaction and offer an evidence base for institutional interventions in career counselling, teaching quality and university–labour-market linkages.*

Keywords: *academic satisfaction; decisional autonomy; self-esteem; perceived employability; teaching quality; higher education;*

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INTRODUCTION

The choice of a university specialisation is among the most consequential decisions of early adulthood, shaping professional trajectories, identity formation and psychological well-being over the long term. In a labour market undergoing accelerated transformation, the way students perceive and evaluate their own educational choice has become a matter of interest both for sociological research and for institutional policies of counselling and career guidance. Satisfaction with the chosen specialisation is not merely a subjective indicator of academic comfort: it is associated with persistence in study, engagement in learning activities and the intention to work in the field after graduation, thereby functioning as a bridge between the university experience and integration into the labour market.

In the Romanian context, research explicitly devoted to students' satisfaction with their chosen specialisation remains relatively scarce, although periodic monitoring of the student condition and institutional studies signal both variation in satisfaction across the bachelor's cycle and the importance of early school and career guidance for the quality of educational decisions (Krech, 2025). Much of the international literature, moreover, examines satisfaction either as a global evaluation of the institution or as a correlate of single factors considered in isolation, leaving the joint and relative contributions of psychological and contextual determinants comparatively under-examined, particularly in medium-sized universities outside major academic centres.

The present study addresses this gap through an empirical analysis conducted at the “1 Decembrie 1918” University of Alba Iulia (UAB), a medium-sized public university in Transylvania. It measures students' satisfaction with their chosen specialisation and examines its relationships with a set of internal factors — decisional autonomy and academic self-esteem — and contextual factors — perceived teaching quality, perceived employability and year of study. The research problem may be formulated as follows: to what extent is students' satisfaction with their chosen specialisation associated with individual psychological factors and with contextual features of the educational experience; which of these factors retain unique explanatory power when considered jointly; and to what extent does satisfaction vary across years of study.

The contribution of the article is threefold. First, it provides recent empirical evidence from a Romanian university context that is insufficiently covered by the existing literature. Second, it articulates and tests a multidimensional model of academic satisfaction, moving beyond bivariate description to a hierarchical regression framework that establishes the relative weight of internal and contextual predictors. Third, it tests a mediation model in which satisfaction transmits the effect of perceived teaching quality onto the intention to work in the field, thereby specifying a mechanism through which the quality of the educational experience may shape professional continuity. The remainder of the article is organised as follows: Section 2 develops the theoretical framework and reviews the relevant literature; Section 3 states the objectives, research questions and hypotheses; Section 4 describes the materials and methods; Section 5 reports the results; Sections 6 to 8 discuss the findings, draw conclusions and acknowledge limitations.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Satisfaction, understood as a subjective evaluation resulting from the comparison of expectations with lived experience, has a solid conceptual tradition in the expectation confirmation/disconfirmation model proposed by Oliver (1980), according to which the level of satisfaction depends on the extent to which experience confirms or disconfirms initial expectations. Transposed into an educational context, this model implies that satisfaction with a specialisation is continuously formed and recalibrated as students accumulate direct experience of the actual demands



of the study programme, a dynamic that motivates the present study's attention to year of study and to the evolution of students' perception over time. Early research on student attitudes showed, in the same logic, that global evaluations of the university experience can be anticipated from specific dimensions of that experience and can inform institutional strategic planning (Shim & Morgan, 1990).

If the confirmation of expectations describes the general mechanism through which satisfaction is formed, the conditions under which the initial decision is taken constitute a first explanatory factor. Decisional autonomy in the choice of a specialisation finds its theoretical foundation in Self-Determination Theory (Deci & Ryan, 2000), according to which the satisfaction of the need for autonomy is essential for intrinsic motivation and well-being in educational contexts, an argument directly relevant to the hypothesis linking perceived freedom of choice to subsequent satisfaction. The mere availability of choice, however, does not automatically produce satisfaction: the decision-making process is often marked by information asymmetry, career uncertainty and the difficulty of aligning personal aptitudes with the available educational offer (Davis et al., 2023). Institutions are therefore encouraged to develop longitudinal career-guidance mechanisms capable of reducing the psychological stress associated with important and largely irreversible decisions. In the Romanian context, analyses of school and career guidance in pre-university education show that effective counselling, delivered as early as lower secondary school, contributes to aligning educational demand with the academic offer and with labour-market needs, thereby reducing the risk of drop-out (Krech, 2025), which suggests that the premises of satisfaction with a university specialisation are, in part, laid before admission. Convergently, research on the socio-educational profile of candidates who choose highly selective educational routes highlights that the educational decision reflects combinations of prior schooling, background and preparatory training, and that the analysis of these profiles can guide information and guidance interventions (Pașcan, 2026).

Alongside the autonomy of the initial decision, a second theoretical pillar of the research concerns the relationship between the academic experience and the evaluation of one's own worth. Self-esteem, classically conceptualised as the global evaluation of one's own worth (Rosenberg, 1965) and analysed as the product of experiences of success and social validation (Coopersmith, 1967), is directly relevant here: in the academic context, Alsalkhi (2018) documents a positive relationship between satisfaction with the specialisation pursued and students' self-esteem, suggesting that the specialisation also functions as a source of confirmation of personal worth. In the same vein, Park and Kim (2023) show that academic satisfaction is enhanced when the study programme contributes to the development of a clear professional identity, validating students' self-perception as future specialists in their field. Complementarily, congruence between the individual and the chosen activity is associated with higher professional satisfaction, whereas a person-field mismatch may lead to dissatisfaction and to academic or occupational reorientation (Ghaleb, 2024). Because perceived competence and perceived preparedness for work are conceptually adjacent, the present study also examines empirically, through factor analysis, the extent to which academic self-confidence and employability perceptions constitute distinct or overlapping evaluative dimensions.

Beyond these individual factors, the literature on the educational experience highlights the quality of the teaching process as a central contextual determinant of academic satisfaction. Wong and Chapman (2023) identify teaching, course content and educational interactions as distinct and consistent facets of overall student satisfaction, while Ikram and Kenayathulla (2023) show that teaching materials, infrastructure, methods and assessment directly influence reported satisfaction, recommending systematic investment in these dimensions. The perception of teaching quality is not, however, an objective given: it is constructed in the interaction between students' expectations and teaching styles, and qualitative research shows that discrepancies between expectations and teaching

style, as well as prior schooling experiences, shape attitudes towards lecturers and, implicitly, the evaluation of the academic experience (Rațiu, 2025). The quality of the educational experience also includes accessibility: studies on the academic adaptation of students with disabilities show that satisfaction with educational and support services remains moderate even where social integration is successful, underlining the multidimensional character of students' evaluations of the university environment (Morândău et al., 2025).

The quality of the educational process is a central component of students' academic experience, particularly in contexts in which students must adapt to new instructional environments and forms of pedagogical interaction (Bara, 2013). In the Romanian higher education context, emphasises that students' adaptation to the online educational environment involved multiple changes, including the transition from traditional face-to-face teaching to exclusively online learning formats (Bara, 2023).

A fourth theoretical reference point concerns the relationship between the academic experience and integration into the labour market. The concept of self-perceived employability has become central to research on the education-to-work transition: the systematic review by Duggal et al. (2024) shows that self-perceived employability provides students with the confidence needed to pursue their desired career and is strongly influenced by perceptions of the economic and technological climate, including the anticipated impact of automation on the demand for skills. Research on European youth policies confirms that participation in mobility and skills-development programmes is motivated primarily by professional development and is perceived as improving employment prospects, even though financial and administrative barriers limit equitable access (Reianu & Cozma, 2026). These observations support the relevance of measuring students' perceptions of genuine employment opportunities, of their preparedness for the labour market, of the competences acquired and of their confidence in finding employment, perceptions combined in the present study into a composite index of perceived employability.

The conceptual framework also draws on the broader literature on attachment to organisations and fields of activity, which allows satisfaction to be read not only as an evaluation but also as a bond with a professional trajectory. Research on organisational commitment shows that affective and normative attachment (desire and loyalty rather than constraint) are the dimensions most strongly associated with the intention to remain within an organisation (Tett & Meyer, 1993; Meyer et al., 2002; Somers, 1995; 2009). By analogy, students' satisfaction with their specialisation may be understood as a form of attachment to an educational-professional pathway whose affective component should be reflected in the intention to work in the field after graduation, a relationship tested through the central hypothesis of this research and further specified through the mediation model. Finally, recent computational approaches converge with this multidimensional view: Oubraime et al. (2026) show, on data from 125 students at a technology-oriented university, that satisfaction with the university choice can be predicted with high accuracy from factors such as personal background, social support and the level of prior information about the specialisation, factors that largely overlap with those investigated here.

Taken together, this body of research supports a conceptualisation of satisfaction with the chosen specialisation as the outcome of an interaction between internal factors (decisional autonomy and academic self-esteem) and contextual factors (teaching quality, perceived employability and the temporal position within the study cycle). What remains insufficiently established, particularly in the Romanian context, is the relative weight of these factors when considered simultaneously, and the mechanism through which the quality of the educational experience translates into professional intentions. These two open questions structure the objectives and hypotheses presented in the following section.



RESEARCH OBJECTIVES, QUESTIONS AND HYPOTHESES

The general objective of the research is to measure the degree of satisfaction of UAB students with their chosen specialisation and to analyse it in relation to internal and contextual factors. Six specific objectives derive from this general objective: measuring the degree of satisfaction with the chosen specialisation (O1); assessing the level of autonomy in choosing the specialisation (O2); comparing perceptions of the specialisation among students in different years of study (O3); measuring the level of academic self-esteem in relation to the specialisation (O4); assessing the employment opportunities perceived by students (O5); and evaluating the relationship between teaching quality and satisfaction with the specialisation (O6). Two research questions follow: RQ1 — which internal and contextual factors are associated with satisfaction, and which retain unique explanatory power when considered jointly? RQ2 — does satisfaction vary systematically across years of study?

The central hypothesis (HC) posits that students who are more satisfied with their chosen specialisation report a stronger intention to work in that field after graduation. Five original specific hypotheses were formulated. H1: students who perceive greater freedom in the decision to choose their specialisation report higher satisfaction, whereas students who experienced greater pressure at the moment of the decision report lower satisfaction. H2: the level of satisfaction and the evolution of the perception of the specialisation differ significantly according to the year of study. H3: students with higher academic self-esteem — operationalised through confidence in their own abilities, coping with academic demands and the feeling that their personal worth is confirmed by the specialisation — report higher satisfaction. H4: students who perceive higher employability — genuine employment opportunities, preparedness for the labour market, acquired competences and confidence in finding a job — report higher satisfaction. H5: students who perceive higher teaching quality — interest in course content, perceived usefulness of the subjects studied, and clarity and organisation of teaching — report higher satisfaction.

In addition to the original hypotheses, two hypotheses were proposed during the revision of the analytical strategy, and are explicitly marked as such. H6 (proposed additional): internal and contextual factors jointly predict satisfaction, with contextual factors (teaching quality and perceived employability) adding significant explanatory power over and above sociodemographic characteristics and internal factors, in a hierarchical regression framework. H7 (proposed additional): satisfaction with the specialisation mediates the relationship between perceived teaching quality and the intention to work in the field after graduation. Both additional hypotheses follow logically from the theoretical framework: H6 operationalises the multidimensional model, while H7 specifies the attachment mechanism.

METHODS AND RESEARCH DESIGN

The research was financially supported by the scientific performance scholarship awarded by the "1 Decembrie 1918" University of Alba Iulia and was carried out under the scientific supervision of Lecturer PhD Bogdan Nicolae Mucea.

The research employed a quantitative, cross-sectional design based on the questionnaire survey method, applied to students enrolled on UAB's bachelor's programmes. Because the data were collected at a single point in time and the design is correlational, no causal claims are advanced; associative and predictive language is used throughout, and the mediation analysis is interpreted as a test of consistency with a theoretically specified mechanism rather than as proof of causality.

Sampling was initially planned as quota sampling, with quotas constructed by specialisation and year of study to reflect the structure of the university's student population. The sample actually



achieved comprised 148 respondents, substantially smaller than anticipated — a shortfall that constitutes an important methodological limitation discussed in Section 8. The sex distribution was strongly unbalanced (80.4% women, 18.2% men, 1.4% preferring not to specify), and of the sixteen specialisations represented, more than half were represented by fewer than ten respondents. The mean age was 26.88 years ($SD = 9.36$; median = 22; range 19–53), reflecting the presence of a sizeable group of mature, non-traditional students; correspondingly, 41.5% of respondents were in part-time or full-time employment and a further 4.1% were self-employed. Respondents were relatively evenly divided between urban (58.1%) and rural (41.9%) backgrounds. By year of study, 46.6% were in the first year, 27.7% in the second and 25.7% in the third. The best-represented specialisations were Social Work (36.5%), Human Resources (23.0%) and Sociology (16.2%). *Table 1* summarises the sociodemographic profile of the sample.

Table 1. Sociodemographic characteristics of the sample (N = 148)

Characteristic	Category	n	%
Sex	Female	119	80.4
	Male	27	18.2
	Prefer not to say	2	1.4
Area of origin	Urban	86	58.1
	Rural	62	41.9
Year of study	Year I	69	46.6
	Year II	41	27.7
	Year III	38	25.7
Employment status	Not employed	72	49.0
	Employed full-time	54	36.7
	Employed part-time	13	8.8
	Self-employed / entrepreneur	6	4.1
	Other	2	1.4
Main specialisations	Social Work	54	36.5
	Human Resources	34	23.0
	Sociology	24	16.2
	Primary and Pre-school Pedagogy	9	6.1
	Other (12 specialisations)	27	18.2



Characteristic	Category	n	%
Age (years)	M = 26.88; SD = 9.36; Mdn = 22; range 19–53		

Note. Employment percentages are computed on 147 valid responses. Age statistics are computed on 146 valid responses.

THE INSTRUMENT USED AND DATA ANALYSIS

The data-collection instrument was a structured questionnaire, administered online, comprising a sociodemographic section (SD1–SD12) and a section of items specific to satisfaction with the specialisation (Q1–Q27), most formulated on five-point Likert scales. The instrument was developed through a structured process: conceptual grounding during regular meetings with the scientific supervisor, documentation based on the specialist literature, operationalisation of the concepts into measurable indicators, and piloting on a sample of 15 students, whose observations informed the final version.

The main dependent variable was current satisfaction with the specialisation (Q7, single item, 1 = not at all satisfied to 5 = very satisfied). The predictor variables were organised into two groups. Internal factors comprised perceived autonomy of choice (Q3) and perceived decisional pressure (Q2), together with a composite score of academic self-esteem obtained as the mean of three items (Q19 — confidence in one's abilities; Q20 — coping with academic demands; Q21 — the feeling that the specialisation confirms one's personal worth). Contextual factors comprised a composite score of perceived teaching quality, the mean of three items (Q8 — interest in course content; Q9 — perceived usefulness of the subjects studied; Q10 — clarity and organisation of teaching), and — as an extension of the original operationalisation of H4, which used two single items — a composite score of perceived employability, the mean of four items (Q23 — genuine employment opportunities; Q25 — preparedness for work in the field; Q26 — competences acquired for the labour market; Q27 — confidence in finding a job after graduation). Year of study (SD8) and the evolution of the perception of the specialisation (Q13) were used for H2, and the intention to work in the field after graduation (Q16.2) as the outcome of the central hypothesis and of the mediation model. The single-item correlations originally specified for H4 (Q23, Q25) are also reported to preserve continuity with the initial design.

The dataset (148 cases, 47 variables) was first audited: no missing values were found on any of the substantive items Q1–Q27; missingness was confined to age (2 cases) and to a conditional employment item. Distributional examination using skewness and kurtosis indicators and Shapiro–Wilk tests indicated significant departures from normality for all main variables (all $p < .001$), with a pronounced negative skew for satisfaction and, especially, perceived autonomy (skewness = -1.96). Bivariate hypothesis tests therefore relied on non-parametric procedures: Spearman rank correlations, the Kruskal–Wallis test with the epsilon-squared (ϵ^2) effect size and Mann–Whitney pairwise comparisons (Bonferroni-corrected, with rank-biserial correlations as effect sizes), the chi-square test of association with Cramér's V, and the Wilcoxon signed-rank test for paired measurements. The significance threshold was set at $\alpha = .05$, and 95% confidence intervals are reported for correlation coefficients.

Three extensions were added to the original analytical strategy. First, the internal consistency of the composite scales was assessed with both Cronbach's alpha and McDonald's omega, and the dimensionality of the ten attitudinal items entering the composites was examined through exploratory factor analysis (principal axis factoring, varimax rotation), preceded by the Kaiser–Meyer–Olkin measure and Bartlett's test of sphericity. Second, to establish the unique contribution of each predictor (H6), a hierarchical multiple linear regression was estimated with satisfaction (Q7) as the dependent variable, entering sociodemographic controls (sex, age, year of study) in Block 1,

decisional variables (autonomy, pressure) in Block 2, academic self-esteem in Block 3 and the contextual composites (teaching quality, employability) in Block 4; multicollinearity (VIF), residual normality, heteroscedasticity (Breusch–Pagan) and influential cases (Cook's distance) were checked, and — because the dependent variable is a five-point ordinal item — a proportional-odds ordinal logistic regression with the same predictors was estimated as a robustness check. Third, the mediation hypothesis (H7) was tested with a simple mediation model (teaching quality → satisfaction → intention to work in the field), with the indirect effect evaluated through percentile bootstrap confidence intervals based on 5,000 resamples. *Table 2* presents the analytical plan linking each hypothesis to its variables, tests and effect sizes. Analyses were conducted on the SPSS 20.

Table 2. Analytical plan linking hypotheses, variables, statistical tests and effect sizes

Hyp.	Dependent variable	Independent variable(s)	Test / model	Effect size
HC	Intention to work in field (Q16.2)	Satisfaction (Q7)	Spearman correlation	$\rho + 95\% \text{ CI}$
H1	Satisfaction (Q7)	Autonomy (Q3); pressure (Q2)	Spearman correlations	$\rho + 95\% \text{ CI}$
H2	Satisfaction (Q7); perception evolution (Q13)	Year of study (SD8)	Kruskal–Wallis + Mann–Whitney; chi-square	ε^2 ; rank-biserial r ; Cramér's V
H3	Satisfaction (Q7)	Self-esteem composite (Q19–Q21)	Spearman correlation	$\rho + 95\% \text{ CI}$
H4	Satisfaction (Q7)	Employability composite (Q23, Q25–Q27); single items Q23, Q25	Spearman correlations	$\rho + 95\% \text{ CI}$
H5	Satisfaction (Q7)	Teaching quality composite (Q8–Q10); single items	Spearman correlations	$\rho + 95\% \text{ CI}$
H6*	Satisfaction (Q7)	Blocks: demographics; autonomy/pressure; self-esteem; teaching + employability	Hierarchical OLS; ordinal logistic (robustness)	R^2 , ΔR^2 , β ; odds ratios
H7*	Intention to work in field (Q16.2)	Teaching quality via satisfaction (Q7)	Simple mediation, 5,000 bootstraps	Indirect effect + 95% CI

Note. * Proposed additional hypotheses formulated during the revision of the analytical strategy. Assumptions checked: normality (Shapiro–Wilk, skewness/kurtosis) for the choice of non-parametric tests; expected cell frequencies for chi-square; multicollinearity, residual distribution, heteroscedasticity and influential cases for the regression models; proportional odds for the ordinal model.

The questionnaire was distributed online; participation was voluntary and anonymous, respondents gave their consent on the first page of the instrument, and the responses were used exclusively for scientific purposes and in aggregate form. No personally identifying information was collected.

RESULTS

Descriptive statistics and reliability

Table 3 presents the descriptive statistics for the main variables. Students' overall satisfaction with their chosen specialisation registered a high mean of 4.07 on the five-point scale ($SD = 0.96$), with a negatively skewed distribution (skewness = -0.99): most responses were concentrated towards the positive end of the scale. The decisional variables indicated a predominantly autonomous climate: students reported a high degree of perceived freedom in choosing their specialisation ($M =$



4.55) and a relatively low level of pressure at the moment of the decision ($M = 2.17$), suggesting that for most respondents the decision was freely assumed rather than externally imposed. The self-esteem items registered means between 3.77 and 3.98 and the teaching-quality items between 3.89 and 4.01, indicating moderate-to-high self-confidence and a generally positive evaluation of course content and organisation. By contrast, the employability items registered the most reserved evaluations in the instrument — from 3.41 for competences acquired to 3.71 for preparedness — suggesting that students' confidence in their professional prospects is more tempered than their evaluation of the other dimensions. Shapiro–Wilk tests were significant for all variables (all $p < .001$), confirming the systematic departures from normality that justified the recourse to non-parametric bivariate tests.

Table 3. Descriptive statistics for the main variables (five-point scales; $N = 148$)

Variable	M	SD	Mdn	Skew.	Kurt.
Satisfaction with the specialisation (Q7)	4.07	0.96	4	−0.99	0.95
Perceived autonomy of choice (Q3)	4.55	0.80	5	−1.96	3.63
Perceived decisional pressure (Q2)	2.17	1.33	2	0.83	−0.47
Interest in course content (Q8)	3.93	0.85	4	−0.19	−0.92
Usefulness of subjects studied (Q9)	3.89	0.88	4	−0.33	−0.44
Clarity and organisation of teaching (Q10)	4.01	0.93	4	−0.96	1.14
Confidence in own abilities (Q19)	3.98	0.91	4	−0.60	−0.21
Coping with academic demands (Q20)	3.77	0.90	4	−0.36	−0.12
Specialisation confirms personal worth (Q21)	3.88	0.98	4	−0.42	−0.68
Genuine employment opportunities (Q23)	3.62	1.00	4	−0.26	−0.32
Preparedness for work in the field (Q25)	3.71	1.04	4	−0.55	−0.19
Competences acquired for the labour market (Q26)	3.41	0.98	3	−0.19	−0.05
Confidence in finding a job (Q27)	3.49	1.07	3	−0.18	−0.73
Intention to work in the field (Q16.2)	3.69	0.96	4	−0.36	−0.01
Initial enthusiasm, retrospective (Q14)	4.08	0.98	4	−0.73	−0.22
Current satisfaction vs. then (Q15)	4.00	0.97	4	−0.68	−0.16

Note. M = mean; SD = standard deviation; Mdn = median; Skew. = skewness; Kurt. = excess kurtosis. Shapiro–Wilk tests significant for all variables ($p < .001$).

The internal consistency of the composite scales, reported in Table 4, was assessed with both Cronbach's alpha and McDonald's omega. The academic self-esteem scale obtained $\alpha = .698$, 95% CI [.603, .774] and $\omega = .718$ — at the lower boundary of the conventional threshold of .70, acceptable given the small number of items but recommending caution; the teaching-quality scale obtained $\alpha = .765$, 95% CI [.691, .824] and $\omega = .772$, indicating good internal consistency; and the newly

formed perceived-employability scale obtained $\alpha = .862$, 95% CI [.822, .895] and $\omega = .863$, indicating very good internal consistency.

Table 4. Reliability of the composite scales ($N = 148$)

Scale	Items	k	Cronbach's α [95% CI]	McDonald's ω
Academic self-esteem	Q19, Q20, Q21	3	.698 [.603, .774]	.718
Perceived teaching quality	Q8, Q9, Q10	3	.765 [.691, .824]	.772
Perceived employability	Q23, Q25, Q26, Q27	4	.862 [.822, .895]	.863

Note. k = number of items. Composite scores were computed as item means.

Before using the composites in the regression models, the dimensionality of the ten attitudinal items was examined. The Kaiser–Meyer–Olkin measure of sampling adequacy was .856 and Bartlett's test of sphericity was significant, $\chi^2(45) = 713.97$, $p < .001$, confirming the factorability of the correlation matrix. Principal axis factoring with varimax rotation extracted three factors accounting for 58.8% of the common variance, corresponding broadly to the three theoretical constructs: a self-confidence/competence factor (highest loadings: Q19 = .77, Q25 = .70, Q21 = .61), a teaching-quality factor (Q8 = .81, Q9 = .65, Q10 = .47) and an employability factor (Q23 = .76, Q27 = .64). Several items showed secondary cross-loadings — most notably preparedness for work (Q25) and acquired competences (Q26), which loaded on both the competence and the employability factors — indicating that self-perceived competence and employability, while empirically distinguishable, share substantial variance. This overlap is relevant to the interpretation of the multivariate models reported below.

Bivariate associations

Table 5 presents the Spearman correlation matrix for the main variables. Central hypothesis. Current satisfaction (Q7) correlated positively and significantly with the intention to work in the field after graduation (Q16.2), $\rho = .490$, 95% CI [.35, .61], $p < .001$: more satisfied students report a stronger intention of professional continuity in the field, and the central hypothesis is supported.

H1: decisional autonomy and pressure. The first hypothesis was partially supported. Perceived autonomy correlated positively and significantly with satisfaction, $\rho = .391$, 95% CI [.24, .53], $p < .001$, whereas decisional pressure showed no significant correlation with current satisfaction, $\rho = -.045$, $p = .584$. The two decisional variables were themselves negatively correlated, $\rho = -.306$, $p < .001$ — students who perceived greater freedom also reported less pressure — a relationship consistent with their theoretical meaning, even though only autonomy, and not pressure, was associated with satisfaction.

H3, H4 and H5: self-esteem, employability and teaching quality. All three hypotheses were supported. The self-esteem composite correlated strongly with satisfaction, $\rho = .622$, 95% CI [.51, .72], $p < .001$ — one of the strongest bivariate associations in the study. The employability composite correlated at $\rho = .594$, 95% CI [.47, .70], with the two originally specified single items also significant (employment opportunities: $\rho = .537$; preparedness: $\rho = .502$; both $p < .001$), as were the two supplementary employability items (competences acquired: $\rho = .475$; confidence in finding a job: $\rho = .484$). The teaching-quality composite showed the strongest association of all, $\rho = .648$, 95% CI [.54, .74], with each of its components significant (interest in content: $\rho = .595$; usefulness of subjects: $\rho = .472$; clarity and organisation: $\rho = .520$; all $p < .001$); of the three, interest in course

content was most closely linked to satisfaction. The perceived usefulness of practical placements also correlated significantly with satisfaction ($\rho = .482, p < .001$).

Table 5. Spearman correlation matrix for the main variables ($N = 148$)

Variable	1	2	3	4	5	6	7
1. Satisfaction (Q7)	—						
2. Autonomy of choice (Q3)	.391***	—					
3. Decisional pressure (Q2)	-.045	-.306***	—				
4. Academic self-esteem	.622***	.378***	-.134	—			
5. Teaching quality	.648***	.199*	.032	.485***	—		
6. Perceived employability	.594***	.255**	-.118	.682***	.528***	—	
7. Intention to work in field (Q16.2)	.490***	.248**	-.129	.588***	.358***	.655***	—

Note. Composite scores are item means. * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed).

Differences across years of study (H2)

The comparison of satisfaction among first-, second- and third-year students with the Kruskal–Wallis test yielded a difference that did not reach the conventional threshold of significance, $H(2) = 5.463, p = .065, \varepsilon^2 = .024$, a small effect. The direction of the mean ranks was nonetheless consistent with declining satisfaction over the study cycle: third-year students tended to report lower satisfaction (mean rank = 61.39; $M = 3.76$) than first-year (78.25; $M = 4.20$) and second-year students (80.33; $M = 4.15$). Pairwise Mann–Whitney comparisons showed that the Year I versus Year III contrast was nominally significant before correction ($U = 1622.0$, uncorrected $p = .032$, rank-biserial $r = .24$) but did not survive Bonferroni adjustment ($p = .096$), as was the case for Year II versus Year III (uncorrected $p = .054$; adjusted $p = .161$; rank-biserial $r = .24$).

For the second component of the hypothesis, the association between year of study and the evolution of the perception of the specialisation (Q13) reached significance, $\chi^2(4) = 9.592, p = .048$, Cramér's $V = .180$, a small-to-moderate effect. First-year students overwhelmingly reported an improvement in their perception since beginning their studies (84.1%), compared with 63.4% of second-year and 68.4% of third-year students, who were also the only respondents to report a deterioration. This result must be read with caution, since three of the nine cells of the contingency table had expected frequencies below 5, which reduces the reliability of the chi-square approximation. Overall, H2 was partially supported: differences in overall satisfaction across years remain marginal and small in magnitude, whereas the evolution of the perception of the specialisation differs significantly by year of study.

Hierarchical regression: the joint model (H6)

To establish the unique contribution of each factor, a hierarchical multiple regression was estimated on the 144 cases with complete data on all predictors (excluding two respondents who preferred not to state their sex and two with missing age). The results are summarised in Table 6. Sociodemographic controls alone (Block 1) explained a modest 7.4% of the variance in satisfaction. The decisional variables (Block 2) added 14.1 percentage points ($\Delta R^2 = .141$, $F_{\text{change}} = 12.34, p$



< .001), academic self-esteem (Block 3) a further 17.8 points ($\Delta R^2 = .178$, $F_{change} = 39.79$, $p < .001$), and the contextual composites (Block 4) another 21.3 points ($\Delta R^2 = .213$, $F_{change} = 36.30$, $p < .001$). The final model explained 60.6% of the variance (adjusted $R^2 = .580$), $F(9, 134) = 22.92$, $p < .001$ — supporting H6.

In the final model, perceived teaching quality was the strongest unique predictor ($\beta = .454$, $p < .001$), followed by perceived employability ($\beta = .265$, $p = .001$) and decisional autonomy ($\beta = .189$, $p = .003$). Notably, academic self-esteem — despite its strong bivariate association with satisfaction — did not retain a significant unique coefficient once the contextual composites were entered ($\beta = .098$, $p = .211$), a result attributable to its substantial overlap with perceived employability ($\rho = .682$) rather than to collinearity in the statistical sense (all $VIF \leq 2.12$). Neither sex, age, year of study nor decisional pressure contributed significantly. Diagnostics indicated no influential cases (maximum Cook's distance = .12), no significant heteroscedasticity (Breusch–Pagan $p = .078$) and independent residuals (Durbin–Watson = 2.23); the residuals showed a mild negative skew (−0.50), consistent with the ceiling-compressed dependent variable and motivating the ordinal robustness check.

Table 6. Hierarchical regression predicting satisfaction with the specialisation ($N = 144$)

Predictor (final model)	B	SE	β	p	95% CI for B
Female (vs. male)	0.251	0.137	.103	.069	[−0.02, 0.52]
Age	−0.002	0.006	−.021	.719	[−0.01, 0.01]
Year II (vs. Year I)	0.247	0.134	.116	.068	[−0.02, 0.51]
Year III (vs. Year I)	−0.145	0.135	−.066	.284	[−0.41, 0.12]
Decisional autonomy (Q3)	0.223	0.073	.189	.003	[0.08, 0.37]
Decisional pressure (Q2)	0.052	0.042	.072	.210	[−0.03, 0.14]
Academic self-esteem	0.129	0.103	.098	.211	[−0.07, 0.33]
Perceived teaching quality	0.593	0.093	.454	< .001	[0.41, 0.78]
Perceived employability	0.291	0.087	.265	.001	[0.12, 0.46]

Note. Block summary: Block 1 (sex, age, year) $R^2 = .074$, $p = .030$; Block 2 (+ autonomy, pressure) $R^2 = .215$, $\Delta R^2 = .141$, $p < .001$; Block 3 (+ self-esteem) $R^2 = .393$, $\Delta R^2 = .178$, $p < .001$; Block 4 (+ teaching quality, employability) $R^2 = .606$, $\Delta R^2 = .213$, $p < .001$; adjusted $R^2 = .580$. All $VIF \leq 2.12$.

Because the dependent variable is a five-point ordinal item, the final model was re-estimated as a proportional-odds ordinal logistic regression (McFadden pseudo- $R^2 = .388$). The pattern was closely replicated: teaching quality (OR = 8.71, 95% CI [4.13, 18.36], $p < .001$, per composite point), employability (OR = 2.55 [1.32, 4.91], $p = .005$) and autonomy (OR = 2.01 [1.20, 3.36], $p = .008$) remained significant predictors. Self-esteem reached marginal significance in the ordinal specification (OR = 2.18 [1.02, 4.64], $p = .043$), suggesting that its unique contribution is fragile and sensitive to model specification rather than clearly absent — a nuance taken up in the Discussion.

Mediation: from teaching quality to professional intention (H7)

The mediation model tested whether satisfaction transmits the association between perceived teaching quality and the intention to work in the field. Teaching quality predicted satisfaction ($a =$

0.861, $p < .001$), and satisfaction predicted intention when controlling for teaching quality ($b = 0.454$, $p < .001$). The indirect effect was significant, $ab = 0.391$, 95% percentile bootstrap CI [0.221, 0.595] (5,000 resamples), while the direct effect of teaching quality on intention became non-significant once satisfaction was included ($c' = 0.081$, from a total effect of $c = 0.472$), with approximately 83% of the total effect transmitted through satisfaction. The pattern is consistent with full mediation: within the limits of the cross-sectional design, the quality of teaching appears to shape professional intentions primarily insofar as it shapes satisfaction with the specialisation. H7 was therefore supported.

Additional exploratory analyses

Several exploratory analyses complete the picture. Satisfaction did not differ significantly across the sixteen specialisations represented (Kruskal–Wallis $H(15) = 20.687$, $p = .147$), a result to be read cautiously given the severe numerical imbalance between programmes. Neither sex ($U = 1575.5$, $p = .870$; women $M = 4.08$, men $M = 4.04$) nor area of origin ($U = 2611.0$, $p = .822$; urban $M = 4.08$, rural $M = 4.06$) was associated with satisfaction, with rank-biserial effect sizes close to zero — suggesting that, in this sample, demographic characteristics matter far less than the content of the educational experience.

The comparison between retrospectively reported initial enthusiasm (Q14) and current satisfaction relative to that moment (Q15), using the Wilcoxon signed-rank test, indicated no significant aggregate change ($W = 1153.0$, $p = .457$, $r \approx .06$). Individual trajectories were nonetheless heterogeneous: 39 respondents (26.4%) reported lower current satisfaction than initial enthusiasm, 32 (21.6%) reported an increase, and 77 (52.0%) no change. Concurrent validity indicators were reassuring: willingness to choose the same specialisation again and willingness to recommend it correlated very strongly with satisfaction ($\rho = .673$ and $\rho = .701$ respectively, both $p < .001$), confirming that the single-item satisfaction measure captures a coherent general attitude towards the chosen specialisation rather than a merely momentary evaluation. *Table 7* summarises the hypothesis tests and their outcomes.

Table 7. Summary of hypotheses, statistical results and empirical support (N = 148)

Hyp.	Relationship tested	Key statistic	Support
HC	Satisfaction → intention to work in field	$\rho = .490$, $p < .001$	Supported
H1	Autonomy (+) and pressure (−) → satisfaction	$\rho = .391$, $p < .001$ / $\rho = -.045$, $p = .584$	Partially supported
H2	Year of study → satisfaction; → perception evolution	$H(2) = 5.463$, $p = .065$, $\varepsilon^2 = .024$ / $\chi^2(4) = 9.592$, $p = .048$, $V = .180$	Partially supported
H3	Academic self-esteem → satisfaction	$\rho = .622$, $p < .001$ (unique β n.s. in joint model)	Supported (bivariate)
H4	Perceived employability → satisfaction	Composite $\rho = .594$; Q23 $\rho = .537$; Q25 $\rho = .502$; all $p < .001$	Supported
H5	Teaching quality → satisfaction	Composite $\rho = .648$; items $\rho = .472-.595$; all $p < .001$	Supported
H6*	Joint hierarchical model	Final $R^2 = .606$; ΔR^2 Block 4 = .213, $p < .001$	Supported
H7*	Satisfaction mediates teaching quality →	$ab = 0.391$, 95% CI [0.221, 0.595]; c' n.s.	Supported

Hyp.	Relationship tested	Key statistic	Support
	intention		

Note. * Proposed additional hypotheses. n.s. = not significant.

DISCUSSION

The study set out to establish which internal and contextual factors are associated with students' satisfaction with their chosen specialisation, which of them retain unique explanatory power when considered jointly, and whether satisfaction varies across the study cycle. Three sets of findings deserve interpretation: the confirmation of satisfaction as a bridge to professional intention; the reconfiguration of the relative weight of predictors once they are modelled jointly; and the largely null results for decisional pressure and year of study.

First, the confirmation of the central hypothesis — and, more pointedly, of the mediation model — supports the interpretation of academic satisfaction as a form of attachment to an educational-professional pathway. The result converges with Romanian research on organisational commitment, in which the affective components of attachment are the ones most strongly associated with the intention to remain (Mucea, 2026): satisfaction with the specialisation appears to function analogously, sustaining the intention of professional continuity in the field. The mediation analysis specifies the mechanism further: the association between teaching quality and the intention to work in the field was transmitted almost entirely (approximately 83%) through satisfaction. Within the limits of a cross-sectional design, this pattern suggests that good teaching does not translate directly into vocational commitment; rather, it does so insofar as it produces a satisfying relationship with the specialisation — a finding with direct implications for how universities should conceive the link between pedagogy and graduate retention in the field.

Second, the hierarchical regression qualifies the bivariate picture in an instructive way. Taken one at a time, self-esteem showed the strongest correlation with satisfaction ($\rho = .622$), seemingly placing internal psychological resources at the centre of the phenomenon. Once all factors were modelled jointly, however, the contextual composites — teaching quality ($\beta = .45$) and perceived employability ($\beta = .27$) — emerged as the dominant unique predictors, alongside decisional autonomy ($\beta = .19$), while self-esteem's unique coefficient became non-significant in the linear specification and only marginal in the ordinal one. The factor analysis offers the key to this result: perceived competence and perceived employability share substantial variance ($\rho = .682$, with cross-loading items), so much of what self-esteem contributes bivariately is absorbed by the employability construct. Substantively, this suggests that students' confidence in their own worth and abilities is not an autonomous wellspring of satisfaction so much as it is entangled with their assessment of whether the specialisation equips them for the labour market — an interpretation consistent with accounts that tie academic satisfaction to the formation of a viable professional identity (Park & Kim, 2023; Ghaleb, 2024) and with the literature on self-perceived employability (Duggal et al., 2024). The finding does not diminish the relevance of self-esteem documented by Alsalkhi (2018); it relocates it within a network of mutually reinforcing evaluations rather than treating it as an isolated cause.

The prominence of teaching quality in the joint model is convergent with the results of Wong and Chapman (2023) and Ikram and Kenayathulla (2023), who identify teaching and course content as consistent facets of student satisfaction; the fact that interest in course content was the component most closely linked to satisfaction underlines the importance of the perceived relevance of the curriculum beyond the formal organisation of teaching. At the same time, evaluations of teaching are mediated by students' expectations and prior experiences (Rațiu, 2025), and the educational experience must be considered across all its dimensions, including accessibility and support services



(Morândău et al., 2025). The significant unique contribution of perceived employability is convergent, in turn, with research on European skills-development programmes for young people (Reianu & Cozma, 2026), and suggests that institutional decisions concerning practical placements and employer partnerships can have a direct and measurable bearing on satisfaction — the more so as the employability items registered the most reserved evaluations in the whole instrument.

Third, the null and marginal results are informative in their own right. The absence of an association between decisional pressure and current satisfaction, despite the significant role of autonomy, offers a nuanced result relative to Self-Determination Theory (Deci & Ryan, 2000). One explanation is restriction of range: the mean level of pressure reported was low ($M = 2.17$), limiting the variability available for detecting an association. Another, consistent with the expectation-confirmation model (Oliver, 1980), is that pressure experienced at the moment of choice — a past event, several years earlier for advanced students — is reinterpreted retrospectively through the filter of subsequent academic experience, weakening its link with present satisfaction. Either way, the result strengthens the argument that the quality of the initial decision-making process — information, counselling, guidance — matters for subsequent satisfaction (Davis et al., 2023; Krech, 2025). Similarly, the marginal Kruskal–Wallis result for year of study ($p = .065$, $\epsilon^2 = .024$), combined with the significant association between year and the evolution of perception, points to a genuine but modest dynamic in students' relationship with their specialisation across the bachelor's cycle: the descriptive pattern of lower third-year satisfaction is consistent with a recalibration of expectations as students accumulate direct experience of the programme's demands, but in the present sample it does not amount to a statistically robust difference, and pairwise contrasts did not survive multiplicity correction. The convergence of the factors identified here with the predictors highlighted by recent computational approaches (Oubraime et al., 2026) and with patterns described in analyses of candidates' socio-educational profiles (Pașcan, 2026) supports the content validity of the multidimensional model tested.

CONCLUSION

This study measured the satisfaction of students at the “1 Decembrie 1918” University of Alba Iulia with their chosen specialisation and analysed it in relation to internal and contextual factors, extending the original bivariate strategy with reliability and dimensionality analyses, a hierarchical regression model, an ordinal robustness check and a bootstrapped mediation analysis. The conclusions can be organised around the six research objectives. Students' satisfaction is, on average, high (O1). Perceived autonomy of choice is positively associated with satisfaction, and retains a unique effect in the joint model, whereas perceived decisional pressure shows no association (O2). Differences in overall satisfaction across years of study are marginal and small, though the evolution of the perception of the specialisation differs significantly by year (O3). Academic self-esteem is strongly associated with satisfaction at the bivariate level, but its unique contribution is largely absorbed by perceived employability in the joint model (O4). Perceived employability is significantly associated with satisfaction and is one of its two strongest unique predictors (O5), the other being perceived teaching quality, whose association is the strongest in the study and which, moreover, appears to shape professional intentions through satisfaction itself (O6).

Overall, the results support a picture of satisfaction with the academic specialisation as a multidimensional construct in which contextual features of the educational experience — the quality and perceived relevance of teaching, and the perception of viable professional prospects — carry the greatest unique weight, complemented by the autonomy of the initial decision. Practically, three institutional levers follow. First, career-guidance processes should protect and cultivate students' sense of ownership over the choice of specialisation, since autonomy — not the absence of pressure



— is what predicts satisfaction. Second, sustained investment in the perceived relevance and organisation of teaching promises the largest returns, both for satisfaction itself and, through it, for graduates' intention to work in the field. Third, strengthening the employability dimension — practical placements, demonstrable competences, links with employers — targets precisely the facet of the student experience that respondents evaluated most reservedly. Within the acknowledged limits of a single-institution, cross-sectional study, these findings offer a defensible evidence base for institutional policy and a tested model for replication elsewhere.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The findings must be read against several limitations. First, the achieved sample of 148 respondents fell considerably short of the quota-sampling plan, producing a strongly unbalanced representation of specialisations — some represented by a single respondent — and of sex (over 80% women), which limits the statistical power of subgroup comparisons and the generalisability of the null results for specialisation and sex; the sizeable proportion of mature, employed students further distinguishes the sample from a traditional undergraduate population. Second, the cross-sectional design precludes causal inference: the regression and mediation models establish patterns of association consistent with the theoretical mechanism, not the mechanism itself, and the items on initial enthusiasm and perception evolution rely on retrospective self-reports vulnerable to memory distortion. Third, online distribution with voluntary participation may have introduced self-selection bias towards more engaged students. Fourth, measurement limitations apply: the dependent variable is a single ordinal item — mitigated, but not removed, by its very strong correlations with willingness to re-choose and to recommend the specialisation and by the ordinal robustness check — and the self-esteem scale's reliability ($\alpha = .698$, $\omega = .718$) sits at the lower boundary of acceptability. Fifth, the overlap between self-perceived competence and employability revealed by the factor analysis means that the unique estimates for these constructs should be interpreted with corresponding caution, and unmeasured variables (academic performance, socio-economic background, peer relations) may confound the reported associations.

These limitations translate into concrete directions for future research. A longitudinal panel following cohorts from admission through graduation would allow individual satisfaction trajectories to be modelled directly, replacing retrospective items and permitting stronger tests of the mediation mechanism. A multi-institutional design with stratified sampling would establish whether the predominance of contextual over internal predictors replicates across university types and disciplinary fields. On the measurement side, replacing single items with validated multi-item scales for satisfaction and self-esteem — and modelling competence and employability as correlated latent factors within a structural equation framework — would resolve the attribution ambiguity identified here. Finally, given that employability perceptions were both the most reserved and among the strongest unique predictors, an intervention study evaluating the effect of enhanced practical placements on satisfaction would carry direct policy value.

REFERENCES

- Alsalkhi, M. (2018). Satisfaction of academic specialization among students of the Department of Educational Sciences and its relation to self-esteem. *International Journal of Instruction*, 11(4), 107–122.
- Bara, M. A. (2013). Educational and career counseling to people with disabilities. *Polish Journal of Management Studies*, 7(1), 133–139.
- Bara, M. A. (2023). Investigating the impact of the COVID-19 pandemic on the on-line education process at the higher education level. *PANGEEA*, 23(23), 105–122.
- Coopersmith, S. (1967). *The antecedents of self-esteem*. W. H. Freeman.
- Davis, M., Desy, J., Kassam, A., & McLaughlin, K. (2023). The Choice! The challenges of trying to improve medical students' satisfaction with their specialty choices. *Canadian Medical Education Journal*, 14(5), 49–55. <https://doi.org/10.36834/cmej.73643>
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Duggal, H. K., Lim, W. M., Khatri, P., Thomas, A., & Shiva, A. (2024). The state of the art on self-perceived employability. *Global Business and Organizational Excellence*, 43(4), 88–110. <https://doi.org/10.1002/joe.22245>
- Ghaleb, B. D. S. (2024). The relationship between career selection and career satisfaction. *Journal of Business Management and Economic Development*, 2(3), 1045–1056. <https://doi.org/10.59653/jbmed.v2i03.851>
- Ikram, M., & Kenayathulla, H. B. (2023). Education quality and student satisfaction nexus using instructional material, support, classroom facilities, equipment and growth: Higher education perspective of Pakistan. *Frontiers in Education*, 8, 1140971. <https://doi.org/10.3389/feduc.2023.1140971>
- Krech, D. (2025). School and career guidance in pre-university education in Romania: Case studies for eighth-grade students. *PANGEEA*, 25(2), 101–106. <https://doi.org/10.29302/Pangeea25.24>
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnysky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20–52. <https://doi.org/10.1006/jvbe.2001.1842>
- Morândău, F., Zamfirescu-Mareș, D., & Dănuț, R.-E. (2025). Inclusion, barriers, and needs of students with disabilities in the academic context. *PANGEEA*, 25(2), 164–170. <https://doi.org/10.29302/Pangeea25.30>
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469. <https://doi.org/10.2307/3150499>
- Oubraime, M., M'hamdi, A., & Sabour, A. (2026). Predicting student satisfaction in career choices using machine learning: A case study. *Discover Education*, 5(1). <https://doi.org/10.1007/s44217-026-01337-9>
- Park, S., & Kim, K. (2023). Factors that enhance the perceived quality and student satisfaction of specialized postgraduate programs: The role of identity. *The TQM Journal*, 35(4), 1007–1029. <https://doi.org/10.1108/TQM-06-2021-0189>
- Pașcan, C. D. (2026). The socio-educational profile of cadets in Romanian military institutions after passing the physical selection threshold. *Research and Science Today*, (1), 1–11. <https://doi.org/10.38173/RST.2026.1.19>
- Rațiu, M.-I. (2025). Generational stereotypes and age-related biases toward senior faculty: The role of students' educational experience. *PANGEEA*, 25(2), 258–264. <https://doi.org/10.29302/Pangeea25.39>
- Reianu, D.-G., & Cozma, Ș.-E. (2026). European youth policies: A qualitative investigation of Erasmus+ mobilities and European Solidarity Corps. *Research and Science Today*, (1), 1–16. <https://doi.org/10.38173/RST.2026.1.18>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.
- Shim, S., & Morgan, G. A. (1990). Predicting students' attitudes and satisfactions: Implications for strategic planning in higher education. *Clothing and Textiles Research Journal*, 8(3), 29–38. <https://doi.org/10.1177/0887302X9000800306>
- Somers, M. J. (1995). Organizational commitment, turnover and absenteeism: An examination of direct and interaction effects. *Journal of Organizational Behavior*, 16(1), 49–58. <https://doi.org/10.1002/job.4030160107>
- Somers, M. J. (2009). The combined influence of affective, continuance and normative commitment on employee withdrawal. *Journal of Vocational Behavior*, 74(1), 75–81. <https://doi.org/10.1016/j.jvb.2008.10.006>
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46(2), 259–293. <https://doi.org/10.1111/j.1744-6570.1993.tb00874.x>
- Wong, W. H., & Chapman, E. (2023). Student satisfaction and interaction in higher education. *Higher Education*, 85(5), 957–978. <https://doi.org/10.1007/s10734-022-00874-0>