Poslovna izvrsnost – Business Excellence
Journal of Business Performance, Quality and Organizational Excellence

Vol. 20 (2026) No. 1, 87–104

Journal website: businessexcellence.net.efzg.hr

p-ISSN: 1846-3355
e-ISSN: 1848-9060

University of Zagreb
Faculty of
Economics & Business

PRELIMINARY COMMUNICATION

Student Satisfaction with Business Processes in Higher Education

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Submission: 2 April 2026 | Revision: 16 May 2026 | Acceptance: 29 May 2026
Published: 15 June 2026

DOI: https://doi.org/10.22598/pi-be/2026.1.42344

Abstract

Purpose: *This study examines student satisfaction with the perceived performance of key business processes in a higher education institution and identifies process-specific parameters that significantly influence satisfaction. Service quality is conceptualized as a process-based construct embedded in institutional performance and quality management systems.* ***Design/Methodology:*** *A quantitative research design was applied using a structured survey instrument with Likert items. Data were collected from 160 students at one Croatian higher education institution. Multiple linear regression analysis examined the effects of process-specific parameters on satisfaction across six institutional business processes: Teaching, Library, Student Administration, IT Support, Publishing Activity, and Scientific Research.* ***Findings:*** *The results reveal clear process-specific determinants of student satisfaction. Teaching satisfaction is significantly predicted by lecturer preparedness, clarity of teaching content, and study program quality. Library satisfaction is associated with library staff competence and responsiveness to users' needs, while Student Administration satisfaction is driven by communication quality and procedural knowledge. IT Support satisfaction is influenced by IT staff competence and classroom equipment. Publishing Activity satisfaction is primarily related to the availability of textbooks authored by academic staff. Satisfaction with Scientific Research is mainly associated with perceived institutional reputation, whereas academic staff research competence is not statistically significant.* ***Practical Implications:*** *Higher education institutions should*

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Available online 15 June 2026

ISSN 1846-3355

prioritize process-oriented quality management strategies focused on staff competence, communication effectiveness, infrastructure optimization, and alignment of support services with student needs. ***Originality/Value:*** *This study extends service quality research by operationalizing student satisfaction at the level of institutional business processes rather than isolated service dimensions.*

Keywords: student satisfaction; higher education; service quality; quality management; business processes; institutional support; student experience

JEL codes: I23, M10, C30

Funding statement: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data availability statement (DAS): The data that support the findings of this study are available from the corresponding author upon reasonable request.

Author contributions (CRediT statement): Conceptualization – S.Z.; Methodology – S.Z., M.B.; Data curation – S.Z., Z.P.; Supervision – S.Z., M.D.; Formal analysis – M.B.; Investigation – S.Z., Z.P.; Writing – original draft – S.Z.; Visualization – Z.P.; Writing – review & editing – S.Z., M.B., M.D., Z.P.

Conflict of interest: The authors declare no conflict of interest.

Ethics statement: The study involved anonymous survey data collected from students. Participation was voluntary, respondents were informed about the purpose of the research, and no personal identification data were collected. Informed consent was obtained from all participants before completing the questionnaire.

Sex and Gender Reporting (SAGER statement): Sex and gender were not collected or analyzed in this study. Therefore, sex- or gender-disaggregated findings are not available. This is acknowledged as a limitation for future research.

AI tools declaration: InstaText was used solely for language polishing of the manuscript. All scientific content, data analysis, interpretation, and conclusions are the responsibility of the authors.

Cite as:
Zambelli, S., Babić, M., Drljača, M., & Peranić, Z. (2026). Student satisfaction with business processes in higher education. *Poslovna izvrsnost – Business Excellence, 20*(1), 87–104.
https://doi.org/10.22598/pi-be/2026.1.42344

1. Introduction

Students assess quality through a series of daily academic, administrative, and support interactions that shape their study experience. This approach is grounded in the literature on service quality, which states that users form quality assessments based on their own experiences with the service. Parasuraman et al. (1988) and Cronin et al. (1992) note that perceptions of quality develop through the relationship between expectations and experienced service, while Cronin and Taylor (1992) emphasize the importance of actual service performance as the basis for measuring quality. In higher education, this approach is particularly important because students simultaneously participate in the educational process and evaluate various forms of institutional support. Abdullah (2005, 2006) highlights that the quality of higher education should be viewed through both academic and institutional dimensions of the student experience. In this study, student satisfaction is therefore operationalized as students' satisfaction with the perceived performance of six selected institutional business processes. Service quality is used as the theoretical foundation for understanding how students evaluate their experiences with higher education services. Quality assurance and quality management are treated as institutional frameworks through which higher education institutions monitor, control, and improve these experiences. Process quality, or more precisely students' perceived business process performance, represents the empirical focus of this research because the study examines how students evaluate specific institutional processes rather than service quality as a single general construct.

Previous research shows that student satisfaction is shaped by a combination of teaching experience, quality of institutional support, availability of resources, administrative service quality, and daily communication with the institution (Douglas et al., 2008; Haverila et al., 2021; Wong and Chapman, 2023). However, the existing literature often focuses on overall service quality, general student satisfaction, or individual dimensions of the student experience, while it less frequently examines how different, clearly defined business processes within the institution relate to corresponding indicators of student satisfaction (Santini et al., 2017; Kustiawan et al., 2024; Toscano-Hernández et al., 2024). This research gap is significant because general satisfaction indicators signal the existence of a problem but often do not precisely indicate where in the institution the problem occurs or which factors contribute most to a positive or negative image. The process approach enables the connection of student assessments with specific areas that can be monitored, compared, and systematically improved by the administration, in line with the principles of quality management according to the European approach to quality assurance in higher education (European Association for Quality Assurance in Higher Education et al., 2015; International Organization for Standardization, 2015a, 2015b).

The aim is to provide an empirical basis for assessing students' satisfaction with the perceived performance of selected institutional business processes. The goal is to determine which process-specific factors are related to student satisfaction in six institutional business processes. An analytical framework is developed to enable a more detailed understanding of the individual institutional areas that shape students' perceptions of quality.

This research uses a quantitative approach; data were collected by questionnaire from a sample of 160 students, survey items were measured on a five-point Likert scale, and the relationship between process factors and student satisfaction was examined using multiple linear regression through six separate regression models. The central research question of this paper is: What process-specific factors are associated with student satisfaction with the perceived performance of selected institutional business processes in a higher education institution? The expected theoretical contribution of the paper is to broaden the discussion on student satisfaction by examining it through the lens of concrete institutional processes and to provide empirical insight into the importance of process-specific factors in the academic, administrative, and support activities of a higher education institution.

The paper is divided into six sections. First, the theoretical background on service quality, student satisfaction, and the process approach in higher education is presented. Next, the methodology is described, including the sample, instrument, and statistical data processing. After presenting the results of the regression models for each analyzed business process, interpretation and discussion follow.

2. Literature Review

Quality research in higher education is grounded in the theory of service quality. In this context, the theory evolves toward a more complex understanding of experience. Parasuraman et al. (1988) established the foundation for measuring service quality through user perceptions, while Cronin and Taylor (1992) shifted the focus toward service performance. This is important for higher education because students associate quality with their concrete experiences during their studies. Zeithaml et al. (1996) demonstrate that perceived quality can have broader consequences for user behavior; in higher education, student satisfaction is linked to trust, recommendations, and reputational effects. Over time, general quality models have been adapted to higher education, with Abdullah (2005) developing HEdPERF as an instrument for the academic environment, and Abdullah (2006) showing that measuring quality in higher education should include both academic and institutional aspects of the experience. This positions student satisfaction as a construct arising from the student's overall

relationship with the institution. Douglas et al. (2008), Gruber et al. (2010), and Haverila et al. (2021) further develop this understanding through models that connect teaching, organizational, and support elements of studying. Santini et al. (2017) meta-analytically confirm the link between service quality and student satisfaction, while Wong and Chapman (2023) emphasize that the interaction between the student and the institution is particularly important, as satisfaction develops through the relationship built over the course of study.

Recent empirical studies indicate that the correlation between service quality and student satisfaction appears across different higher education systems, but the importance of individual quality elements depends on institutional and cultural context. Amoako et al. (2023) and Bwachele et al. (2023) confirm that service quality significantly shapes student satisfaction in African higher education institutions, while Seitova et al. (2024) and Surya Bahadur et al. (2024) report similar patterns in Asian and South Asian educational contexts. Supriyanto et al. (2025) further link service quality with student satisfaction and loyalty, positioning satisfaction as both an indicator of current experience and a potential foundation for a student's long-term relationship with the institution. This suggests that student satisfaction has a stable theoretical basis, but its sources remain tied to the specific environment in which the study occurs. Kustiawan et al. (2024) show that key quality attributes in higher education are shaped by student expectations and institutional capacity, while research by Toscano-Hernández et al. (2024) indicates that institutions are increasingly adopting contextually tailored models. Clemons and Jance (2024) emphasize that different stakeholders may understand the quality of higher education differently, further confirming the need for measurement that links institutional indicators to student experience.

In the literature on quality management, higher education is increasingly associated with institutional processes, standards, and strategies that enable systematic quality monitoring. The European Association for Quality Assurance in Higher Education et al. (2015) highlight the importance of internal quality assurance systems and student feedback, while the International Organization for Standardization (2015a, 2015b) identifies the process approach and customer centricity as fundamental elements of a quality management system. The International Organization for Standardization (2018) further adapts this framework to educational organizations, emphasizing the needs of learners and other stakeholders, thus directly linking quality management to the educational experience. In the Croatian and broader European context, Dužević et al. (2019) connect higher education quality with innovation in teaching and learning, while Dužević (2020) opens an important discussion on the relationship between student satisfaction and achievement, showing that student perception should be linked to the educational value of studies. Leskaj et al. (2024) show that university strategies can improve student services, so the quality of the student experience can be seen as a result of management decisions and daily organizational processes. However, it is necessary to examine satisfaction through specific areas of institutional work, especially when determining which elements of academic, administrative, and support processes provide the greatest value for students.

3. Methodology

A quantitative cross-sectional study was conducted to examine the relationship between process-specific characteristics and student satisfaction with selected business processes at a higher education institution. Data were collected using a structured survey questionnaire (see Appendix), with responses measured on a five-point Likert scale, where higher values indicated more favorable student assessments. The use of parametric procedures for data collected via Likert scales is acceptable in applied social research when the scales assess attitudes and perceptions and when results are interpreted according to the characteristics of the measurement instrument (Norman, 2010). Regression analysis was performed only on closed Likert-scale variables; open-ended comments were not included in the regression models. Six

institutional business processes were analysed: Teaching, Library, Student Administration, IT Support, Publishing Activity, and Scientific Research. For each process, one dependent variable measured overall satisfaction, and the corresponding independent variables measured the characteristics of that process. Therefore, six separate multiple linear regression models were applied, as each process had its own dependent variable and set of content-related predictors. Before regression analysis, the data were checked for value range, missing values, reliability of predictor blocks, and multicollinearity.

Ethical principles were upheld in the survey. Participation was voluntary, and respondents were informed about the purpose of the research and the use of collected data before completing the questionnaire. The survey was conducted anonymously, without collecting personal identification data that would allow direct identification of respondents. Participants were informed that the data would be used exclusively for scientific research purposes and analyzed in aggregate, ensuring the confidentiality of responses. Participants could withdraw at any time.

3.1. Sample and Instrument

The analytical sample comprised 160 students from one higher education institution. As shown in Table 1, full-time students represented the dominant respondent group.

Table 1
Sample Structure by Student Status

Student status	n	%
Full-time students	127	79.4
Part-time students	33	20.6
Total	160	100

Note. Authors' calculation using SPSS.

The course distribution is presented in Table 2.

Table 2
Sample Structure by Course

Course	n	%
Quality Management	94	58.8
Quality Assurance	39	24.4
Integrated Quality Management Systems	27	16.9
Total	160	100

Note. Authors' calculation using SPSS.

The survey instrument included closed-ended Likert-type items and open-ended comment items. The closed-ended items were used for statistical modeling, while open-ended responses were excluded from the analysis.

Table 3
Regression Model Structure

Model	Business process	Dependent variable	Independent variables
1	Teaching	Overall satisfaction with Teaching	T1, T2, T3, T4, T5, T6
2	Library	Overall satisfaction with Library	L1, L2, L3, L4, L5
3	Student Administration	Overall satisfaction with Student Administration	SA1, SA2, SA3, SA4
4	IT Support	Overall satisfaction with IT Support	IT1, IT2, IT3, IT4
5	Publishing Activity	Overall satisfaction with Publishing Activity	P1, P2
6	Scientific Research	Overall satisfaction with Scientific Research	SR1, SR2

Note. Variable codes refer to process-specific Likert-type predictors used in the six regression models.

The instrument was organized around six institutional business processes, with one dependent variable measuring overall satisfaction for each process and a corresponding set of process-specific predictors. The operational structure of the six regression models is shown in Table 3. This structure enabled process-level modelling of student satisfaction, as each regression model linked the overall evaluation of a specific business process.

3.2. Data Analysis

Reliability was checked at the level of predictor blocks using Cronbach's alpha (see Table 4). All predictor blocks demonstrated acceptable internal consistency, with Cronbach's alpha values above .70, which is generally considered acceptable in applied social science research (Bonett & Wright, 2015; DeVellis & Thorpe, 2022; Hair et al., 2019). Multicollinearity was assessed using variance inflation factors. All VIF values were below 2, indicating that multicollinearity was not problematic, as the obtained values were well below commonly used cautionary thresholds for regression analysis (Field, 2018; Hair et al., 2019; O'Brien, 2007; Tabachnick & Fidell, 2019).

Table 4
Reliability and Multicollinearity Screening

Process	k predictors	N	Cronbach's α	VIF range		Decision
Teaching	6	160	0.78	1.275	1.698	Retained
Library	5	160	0.79	1.356	1.600	Retained
Student Administration	4	160	0.75	1.364	1.514	Retained
IT Support	4	160	0.77	1.490	1.646	Retained
Publishing Activity	2	160	0.71	1.433	1.433	Retained
Scientific Research	2	160	0.73	1.504	1.504	Retained

Note. Authors' calculation using SPSS. Cronbach's α was used to assess internal consistency. VIF = variance inflation factor. All VIF values were below 2, indicating that multicollinearity was not problematic.

4. Results

The descriptive statistics in Table 5 summarize students' satisfaction with the perceived performance of the six institutional business processes. The pattern suggests that students evaluated the processes within a relatively moderate range, which supports the use of subsequent regression analysis because the dependent variables show sufficient differentiation for process-level modelling.

Table 5
Descriptive Statistics for Student Satisfaction with Business Process

Process	Code	Mean	SD
Teaching	T	3.300	1.154
Library	L	2.981	1.241
Student Administration	SA	2.981	1.189
IT Support	IT	3.019	1.226
Publishing Activity	P	3.025	1.058
Scientific Research	SR	3.100	0.841

Note. N = 160. Mean and SD refer to student satisfaction with the perceived performance of each business process. Variables were measured on a five-point Likert scale, where higher values indicate greater satisfaction with perceived process performance. Authors' calculation using SPSS.

The descriptive results indicate that students do not evaluate all institutional processes in the same way, which justifies examining whether different process-specific characteristics explain satisfaction across the six areas. The regression results are therefore reported in Table 6, which presents the core inferential results. All six models are statistically significant at the model level, which confirms that the selected process-specific predictors jointly explain a meaningful share of variance in student satisfaction within each business process. The strongest explanatory pattern appears in Teaching, Student Administration and IT Support, indicating that satisfaction is more strongly structured in processes with frequent and direct student contact. At the predictor level, the results reveal a differentiated pattern: Teaching satisfaction is associated mainly with instructional clarity, lecturer preparedness and program quality; Library satisfaction depends on library staff competence and responsiveness to users' needs; Student Administration satisfaction is linked to communication and procedural knowledge; IT Support satisfaction is shaped by classroom equipment and IT staff competence; Publishing Activity satisfaction is driven by textbook availability; and Scientific Research satisfaction is primarily associated with institutional reputation.

Table 6
Regression for Models

Model	Predictor	Code	B	Beta	t	p	R^2	Adj. R^2	F	Model p
1. Teaching	Constant	—	0.807	—	2.366	.019	0.294	0.267	10.644	< .001
	Content clearly explained	T1	0.186	0.198	2.444	.016*	—	—	—	—
	Lecturer preparedness	T2	0.290	0.270	3.335	< .001**	—	—	—	—
	Lecturer competence	T3	0.081	0.083	1.008	.315	—	—	—	—
	Lecturer motivates students	T4	0.068	0.069	0.885	.377	—	—	—	—
	Theory-practice connection	T5	0.096	0.103	1.281	.202	—	—	—	—
	Study program quality	T6	0.195	0.185	2.445	.016*	—	—	—	—
2. Library	Constant	—	0.924	—	2.421	.017	0.190	0.163	7.201	< .001
	Library staff competence	L1	0.200	0.179	2.080	.039*	—	—	—	—
	Assistance in literature search	L2	0.030	0.026	0.298	.766	—	—	—	—
	Library responds to user needs	L3	0.311	0.269	3.285	< .001**	—	—	—	—
	Access to databases	L4	0.071	0.068	0.853	.395	—	—	—	—
	Comfortable workspace	L5	0.061	0.054	0.635	.526	—	—	—	—

Continued

3. Student Administration	Constant	—	0.877	—	2.851	.005	0.263	0.244	13.828	< .001
	Communication with students	SA1	0.241	0.251	2.891	.004**	—	—	—	—
	Timely handling of requests	SA2	0.109	0.104	1.258	.210	—	—	—	—
	Individual attention	SA3	0.071	0.070	0.815	.416	—	—	—	—
	Knowledge of procedures	SA4	0.235	0.235	2.950	.005**	—	—	—	—
4. IT Support	Constant	—	1.060	—	3.161	.002	0.228	0.208	11.458	< .001
	IT laboratories adequately equipped	IT1	0.042	0.039	0.487	.627	—	—	—	—
	Classrooms adequately equipped	IT2	0.234	0.210	2.416	.017*	—	—	—	—
	IT staff competence	IT3	0.318	0.299	3.513	< .001***	—	—	—	—
	Responsiveness in problem solving	IT4	0.108	0.093	1.075	.284	—	—	—	—
5. Publishing Activity	Constant	—	1.921	—	6.986	< .001	0.113	0.102	9.984	< .001
	Textbook publication by academic staff	P1	0.259	0.285	3.081	.002**	—	—	—	—
	Available learning materials	P2	0.071	0.077	0.832	.406	—	—	—	—
6. Scientific Research	Constant	—	2.244	—	10.476	< .001	0.134	0.123	12.161	< .001
	Institutional reputation	SR1	0.279	0.378	4.154	< .001***	—	—	—	—
	Academic research staff competence	SR2	0.016	0.021	0.233	.816	—	—	—	—

Note. N = 160. Model *p* refers to the overall significance of the regression model based on the F-test. Each model was estimated using multiple linear regression, with student satisfaction with the perceived performance of the selected business process as the dependent variable. *p < .05. **p < .01. ***p < .001.

Because the interpretation of regression coefficients depends on the adequacy of model assumptions, the next step evaluates residual normality, independence, homoscedasticity and influential observations. Table 7 reports the regression diagnostics. The diagnostics support the stability of the regression results because none of the models shows evidence of assumption violations that would require model exclusion or substantial correction.

Table 7
Regression Diagnostics

Model	Shapiro-Wilk p	Durbin-Watson	Breusch-Pagan p	Max Cook's D	Decision
Teaching	.952	2.023	.845	0.054	Acceptable
Library	.119	1.656	.694	0.042	Acceptable
Student Administration	.670	1.978	.513	0.054	Acceptable
IT Support	.332	1.829	.943	0.048	Acceptable
Publishing Activity	.243	2.100	.152	0.080	Acceptable
Scientific Research	.202	1.770	.272	0.051	Acceptable

*Note. A*uthors' calculations were performed in SPSS. Shapiro–Wilk p values refer to the normality test of regression residuals, where p > .05 indicates that the assumption of residual normality is not rejected. Durbin–Watson statistics were used to assess the independence of residuals; values close to 2 indicate no serious autocorrelation problem. Breusch–Pagan p values were used to assess heteroscedasticity, where p > .05 indicates no statistically significant evidence of heteroscedasticity. Cook's distance was used to identify potentially influential observations; values below 1 indicate that no influential cases were detected. The interpretation of regression diagnostics follows common recommendations for regression analysis and multivariate statistics (Cohen et al., 2003; Field, 2018; Hair et al., 2019; Tabachnick & Fidell, 2019).

Given that the study relies on self-reported survey data collected through a single instrument, an additional screening procedure was conducted to assess whether common method bias could threaten the interpretation of the results. The outcome is presented in Table 8. The result indicates that the observed relationships are unlikely to be driven by a single dominant measurement factor, which provides additional support for treating the regression findings as process-specific associations rather than as an artefact of the survey format.

Table 8
Common Method Bias Assessment

Test	Number of Likert variables	First unrotated factor variance	Threshold	Decision
Harman's single-factor test	29	11.66%	50%	No dominant common method factor

Note. Harman's single-factor test was conducted using an unrotated exploratory factor analysis of 29 Likert-scale variables. The first unrotated factor explained 11.66% of the total variance, which is below the commonly used 50% threshold. This indicates that no dominant common method factor was present. The test was used as a diagnostic screening procedure for common method bias (Hair et al., 2019; Podsakoff et al., 2003).

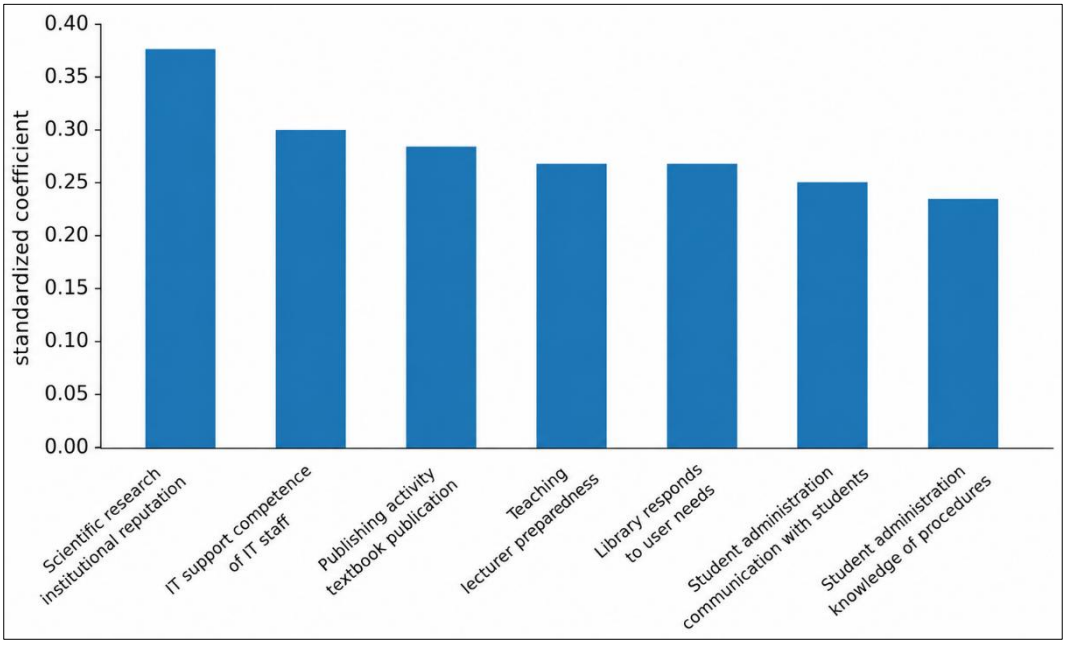
The results show that different business processes are associated with different predictors of student satisfaction, indicating that students evaluate institutional quality based on process-specific experiences rather than a single uniform institutional pattern.

5. Discussion

The models indicate that students associate their satisfaction with individual business processes with different characteristics of these processes, but they also show that not all included variables are explained equally (Figure 1). In the Teaching model, satisfaction is primarily explained by lecturer preparedness and systematic delivery (β = 0.270; p < .001), clearly explained material (β = 0.198; p = .016), and the quality of study programs (β = 0.185; p = .016). Lecturer competence, student motivation, and the connection between theory and practice are not statistically significant predictors. This does not mean they are unimportant for the teaching process, but rather that in this model, they did not make a separate contribution to satisfaction when clarity, preparedness, and program quality were included simultaneously. This finding shows that students evaluate teaching primarily based on performance they can directly observe and understand.

Figure 1

Significant Predictors of Student Satisfaction



Note. Authors' calculation using SPSS.

In the Student Administration model, significant predictors are communication with students (β = 0.251; p = .004) and knowledge of procedures (β = 0.235; p = .005), while timely resolution of requests and individual attention are not statistically significant. This suggests that students primarily associate administrative quality with reliable information and security in the process, rather than with speed or a personal approach. In the IT Support model, satisfaction is mainly explained by the competence of IT staff (β = 0.299; p < .001) and classroom equipment (β = 0.210; p = .017), while the equipment of computer laboratories and the speed of problem solving are not significant predictors. Students value technical support most through the everyday functionality of the classroom and the expertise of those who resolve technical difficulties. In the Library model, significant predictors are responsiveness to users' needs (β = 0.269; p < .001) and staff competence (β = 0.179; p = .039), while literature search assistance, access to databases, and comfort of space are not statistically significant. Students do not evaluate a library primarily by individual resources or physical conditions, but by

whether the library recognizes their academic needs and provides professional support. In the Publishing Activity model, the only significant predictor is the publication of textbooks required for exam preparation (β = 0.285; p = .002), while the availability of other literature is not significant. Students evaluate this process directly, based on materials that help them study and prepare for exams. In the Scientific Research, the only significant predictor is the reputation of the institution in the academic community (β = 0.378; p < .001). Students do not evaluate the Scientific Research process primarily through their assessment of academic staff research competence, but through the broader academic recognition of the institution. Insignificant variables in all models should not be interpreted as unimportant, but as an indication that, in the presence of stronger and more visible characteristics to students, they do not make a separate contribution to satisfaction. This finding narrows the scope for general recommendations and highlights elements with a proven statistical connection to student assessment. Regression diagnostics confirm the acceptability of the model, and Harman's test, in which the first unrotated factor explains 11.66% of the variance, does not indicate a dominant common method factor. Therefore, the results can be interpreted as differences related to individual processes, not as a consequence of a general pattern in survey responses.

5.1. Theoretical Implications

Approaches that assess the quality of higher education through general service quality or overall student experience are complementary. Compared to classical models of service quality, which emphasize user perception and service performance (Parasuraman et al., 1988; Cronin and Taylor, 1992), this research shows that student assessment in higher education is not formed according to a single pattern but through various forms of contact with the institution. This interpretation builds on studies highlighting student satisfaction as stemming from the overall relationship with academic, organizational, and support elements of studying (Abdullah, 2005, 2006; Douglas et al., 2008; Gruber et al., 2010; Haverila et al., 2021). However, the results further explain that certain quality elements gain significance only within specific areas of institutional work, so communication, competence, clarity, availability of resources, and reputation cannot be considered equally important indicators in all processes. This broadens the debate on student satisfaction, as it is not only interpreted as a general reaction to service quality but as an assessment shaped by specific institutional experiences. This approach aligns with recent research emphasizing that sources of student satisfaction vary depending on context, student expectations, and how the institution organizes its academic and support activities (Santini et al., 2017; Wong & Chapman, 2023; Kustiawan et al., 2024; Toscano-Hernández et al., 2024). The paper also connects the literature on quality assurance with the quality management approach, showing that student assessments can serve as indicators of the effectiveness of specific areas of institutional work, consistent with the emphasis on process approach, user feedback, and continuous improvement in quality assurance systems (European Association for Quality Assurance in Higher Education, 2015; International Organization for Standardization, 2015a, 2015b, 2018). The theoretical value of the paper is that it places student satisfaction within a clearer institutional framework and demonstrates that future models of quality in higher education should differentiate between the academic, administrative, and support functions of the institution, rather than viewing them as a single, insufficiently defined dimension of the student experience.

5.2. Practical Implications

The key message is that the quality management system should focus on the specific areas that truly shape the student experience. Instead of relying on general or occasional improvement measures, the institution should establish a clear cycle of monitoring, implementation, and performance verification for each key area of work. In teaching, this means more systematic preparation of teaching content, clearer learning outcomes, understandable evaluation

criteria, and alignment of course content with study program goals. For administrative and support services, the focus should be on information availability, consistent responses, shorter response times, and clear digital communication channels. The library and IT support should function as active learning support services, not merely as spatial or technical resources. This includes assistance with using literature and databases, regular equipment maintenance, prompt reporting of difficulties, and timely resolution of issues that may disrupt teaching. Publishing Activity can have greater practical value if teaching materials are planned in advance, published on time, and made available in digital form. Scientific research should also be integrated into teaching through examples from projects, the inclusion of research topics in courses, and opportunities for student participation in smaller research activities. These measures do not require major organizational changes, but they do require clear accountability, regular monitoring, and a willingness to use student feedback as a practical tool to improve the institution's work.

5.3. Limitations and Future Research

The results should be interpreted within the methodological framework. The research was conducted on a sample of 160 students from a higher education institution in Croatia, so the findings primarily reflect the observed institutional context and cannot be generalized to other institutions, study programs, or educational areas without further verification. Because the data were collected at a single point in time, the analysis provides insight into the correlation between the observed characteristics and satisfaction but does not show long-term changes or the effects of possible interventions. Another limitation concerns the uneven scope of measurement across individual areas, as some are covered by more items while others are measured by a narrower set of indicators. In the future, it would be useful to include more institutions, larger and more diverse samples, and a longitudinal approach that could track whether satisfaction changes after specific improvements. Attention should be given to more detailed measurement of the availability of digital teaching materials, the timeliness of literature publication, student participation in research activities, and the ways in which scientific work is integrated into teaching. It would also be valuable to supplement the quantitative findings with interviews or analysis of open comments, as this approach would enable a deeper understanding of why students perceive certain areas of the institution's work as useful, unclear, or insufficiently developed.

6. Conclusion

Quality is better managed in an institution when student feedback forms the basis for concrete decision-making, rather than serving only as a formal indicator of satisfaction. The results show that the institution should regularly identify areas where students most quickly experience the effects of effective or ineffective organizational activity. This approach allows the administration to connect development decisions to the actual study experience and to focus improvements toward content, services, and forms of support that provide real educational value. The study demonstrates that student satisfaction with perceived business process performance can serve as a practical tool for institutional learning and continuous quality improvement. Higher education institutions seeking to improve quality should establish a system in which data are collected not just for record-keeping, but for timely problem identification, more responsible planning, and a clearer connection among teaching, organizational, and development activities. Although the results apply to one institutional context, the proposed analytical approach can serve as a basis for comparable research in other institutions and for designing better internal mechanisms to monitor the student experience.

The article is relevant to UN Sustainable Development Goals:

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Appendix

Survey Instrument, Constructs, and Variable Coding

Construct	Code	Question / Item in English
Demographic Information	ID	Respondent identification number
	ST_STATUS	What is your student status?
	COURSE	Which course are you enrolled in?
Awareness of ISO 9001:2015	ISOA1	Are you familiar with the ISO 9001:2015 standard?
Sources of Knowledge about ISO 9001:2015	ISOK	In what way did you obtain knowledge about the ISO 9001:2015 standard?
	ISOK1	— Through lectures
	ISOK2	— From literature
	ISOK3	— At the workplace
Awareness of Other Quality Standards	OQSA1	Are you familiar with other quality standards that your educational institution has?
Other Quality Standards	OQS1	Please state which other quality standards your educational institution has.
Perceived Quality Improvement	PQI1	Do you feel improvements through the introduction of quality standards in your educational institution?
Perceived Improvement Segments	PIS	In which segments do you feel improvements?
	PIS1	— Teaching
	PIS2	— Publishing activity
	PIS3	— Scientific research
	PIS4	— IT support
	PIS5	— Library
	PIS6	— Student administration, that is, general, legal, and technical affairs
Business Process Importance	PBI	Evaluate the business processes that, in your opinion, are important for the outcome of your education.
	PBI1	— Teaching [1-5]
	PBI2	— Scientific research [1-5]
	PBI3	— Library [1-5]
	PBI4	— Publishing activity [1-5]
	PBI5	— IT support [1-5]
	PBI6	— Student administration, that is, general, legal, and technical affairs [1-5]
Business Process Success	BPS	Evaluate the business process according to the criterion of success, that is, the extent to which it has met your expectations.
	T	— Teaching [1-5]
	SR	— Scientific research [1-5]
	L	— Library [1-5]

Continued

	P	— Publishing activity [1-5]
	IT	— IT support [1-5]
	SA	— Student administration, that is, general, legal, and technical affairs [1-5]
Teaching Process Parameters	T1	The presented material is clearly explained to me. [1-5]
	T2	The lecturer is prepared and systematic in delivering the teaching content. [1-5]
	T3	The lecturer has adequate teaching competence. [1-5]
	T4	The lecturer motivates me to acquire knowledge. [1-5]
	T5	The lecturer successfully connects theory with practice. [1-5]
	T6	The educational institution has satisfactory teaching programs. [1-5]
Teaching Process Comments	T_OC	Criticism and suggestions for improving the Teaching process are welcome.
Scientific Research Process Parameters	SR1	The educational institution has a reputation in the academic community. [1-5]
	SR2	Academic staff have adequate research-related knowledge, competencies, and skills. [1-5]
Scientific Research Process Comments	SR_OC	Criticism and suggestions for improving the Scientific Research process are welcome.
Library Process Parameters	L1	Library staff are competent in providing services to users. [1-5]
	L2	Library staff help me in searching for the necessary literature. [1-5]
	L3	The library follows the needs and requirements of users. [1-5]
	L4	World databases are available to me. [1-5]
	L5	The library space is pleasant for work. [1-5]
Library Process Comments	L_OC	Criticism and suggestions for improving the Library process are welcome.
Publishing Activity Parameters	P1	Academic staff publish the textbooks needed for exam preparation. [1-5]
	P2	Literature for acquiring professional knowledge is provided to me, such as scripts, articles, and conference proceedings. [1-5]
Publishing Activity Comments	P_OC	Criticism and suggestions for improving the Publishing Activity process are welcome.

Continued

IT Support Parameters	IT1	Computer laboratories have adequate equipment for conducting lectures, exercises, and seminars. [1-5]
	IT2	Classrooms are adequately equipped for conducting lectures, exercises, and seminars. [1-5]
	IT3	IT staff have the necessary skills and competencies. [1-5]
	IT4	IT staff are prompt in resolving problems. [1-5]
IT Support Comments	IT_OC	Criticism and suggestions for improving the IT Support process are welcome.
Student Administration Parameters	SA1	Administrative staff communicate well with students. [1-5]
	SA2	Administrative staff resolve students' requests, inquiries, and complaints in a timely manner. [1-5]
	SA3	Administrative staff show individual attention toward the student. [1-5]
	SA4	Administrative staff know the system and procedures at the higher education institution. [1-5]
Student Administration Comments	SA_OC	Criticism and suggestions for improving the Student Administration process, that is, general, legal, and technical affairs, are welcome.
Benefits of Introducing a Quality Management System	BEN	What, in your opinion, are the advantages of introducing a quality system in an educational institution?
	BEN1	— Greater responsibility of lecturers for lecture quality [1-5]
	BEN2	— Greater responsibility of lecturers toward students [1-5]
	BEN3	— Professionally educated students qualified for the labor market [1-5]
	BEN4	— Better quality of teaching programs [1-5]
	BEN5	— Greater reputation in the academic community [1-5]
	BEN6	— More pleasant working environment [1-5]
	BEN7	— Greater satisfaction with studying [1-5]
Student Surveys and Quality Feedback	SSQ1	Are student surveys on lecturers' teaching quality conducted?
	SSQ2	In your opinion, does this influence the improvement of the quality of studying?
Open Comments	OC1	Criticism and suggestions for improving the overall situation at your educational institution are welcome.

Note. The questionnaire included demographic, contextual, process-related, and open-ended items. Binary variables were coded as 1 = Yes and 0 = No, while multiple-response items were coded as 1 = selected and 0 = not selected. Likert-scale items were measured on a five-point scale, with higher values indicating higher perceived importance, agreement, satisfaction, or process success. The variables T, SR, L, P, IT, and SA were used as dependent variables in six regression models, while the corresponding process-specific parameters T1–T6, SR1–SR2, L1–L5, P1–P2, IT1–IT4, and SA1–SA4 were used as independent variables. Variables related to awareness of quality standards, perceived improvements, process importance, benefits of the quality management system, and open-ended comments were used for descriptive or contextual analysis.