Examining the Relationship Between Faculty Satisfaction and Student Learning Outcomes in Pakistani Universities

Yousaf Nisar
MS Scholar in Management Sciences, Sarhad University of Science & IT, Peshawar, yousafswe@gmail.com
Dr. Lal Muhammad
,Assistant Professor, Sarhad University of Science & IT, Peshawar
Lal.ba@suit.edu.pk
Kashif Ali Mahesar
 PhD Scholar Department of Pakistan Studies, University of Karachi Karachi – Pakistan, mahesarkashifali@gmail.com
Corresponding Author: Lal.ba@suit.edu.pk

ABSTRACT

This study explores the relationship between faculty satisfaction and student learning outcomes in Pakistani universities using a mixed-methods approach. A sample of 400 faculty members and 1,200 students from 10 universities was surveyed, complemented by semi-structured interviews with 20 faculty members and 30 students. Quantitative analysis revealed that faculty satisfaction, particularly with professional development, significantly predicts student academic achievement, engagement, and critical thinking skills. Qualitative insights highlighted that supportive administrative practices and professional growth opportunities were crucial for enhancing faculty effectiveness and student experiences. The integration of quantitative and qualitative findings underscores the importance of addressing faculty needs to improve educational outcomes. Recommendations include enhancing administrative support, expanding professional development opportunities, and regularly assessing faculty needs to foster a more effective learning environment.

Keywords: Relationship, faculty satisfaction, student learning outcomes, Pakistani universities.

INTRODUCTION

The quality of higher education is increasingly recognized as a critical factor in national development, and faculty satisfaction is pivotal in determining educational outcomes (Ali & Iqbal, 2024). In Pakistani universities, where the educational landscape is evolving rapidly, understanding the relationship between faculty satisfaction and student learning outcomes is essential for improving both teaching effectiveness and student performance (Sharma et al., 2022). Faculty satisfaction, which encompasses aspects such as work environment, administrative support, and professional development, directly impacts teaching quality and, consequently, student learning outcomes (Faridi et al., 2023). This study aims to explore this complex relationship through a mixed-methods approach, combining quantitative data from surveys with qualitative insights from interviews. Faculty satisfaction is influenced by various factors including the work environment, administrative support, and opportunities for professional growth (Rauf et al., 2022). A supportive work environment, characterized by adequate resources, respectful interactions, and a positive organizational culture, is crucial for enhancing faculty morale and effectiveness (Khan & Ahmed, 2023). Administrative support, which includes timely assistance, effective communication, and recognition of faculty efforts, also plays a significant role in faculty satisfaction (Ali & Shah, 2024). Additionally, access to professional development opportunities enables faculty members to stay updated with new teaching methodologies and academic advancements, which can directly enhance their teaching quality (Hussain et al., 2024). In Pakistan, universities face numerous challenges that can affect faculty satisfaction, including

resource constraints, bureaucratic inefficiencies, and limited professional development opportunities (Javed et al., 2021). Addressing these issues is vital for improving faculty morale and effectiveness (Saleem & Tariq, 2024). This research seeks to provide a comprehensive analysis of how these dimensions of faculty satisfaction impact student learning outcomes, using data collected from a diverse sample of faculty members and students across various universities in Pakistan (Shah & Malik, 2024).

Globally, research has consistently shown that faculty satisfaction is closely linked to student outcomes. Studies have demonstrated that satisfied faculty members are more likely to engage in effective teaching practices, provide quality feedback, and create a stimulating learning environment, all of which contribute to better student performance (Sharma et al., 2022; Ahmed & Khan, 2023). The importance of this relationship is underscored by the fact that improving faculty satisfaction can lead to significant gains in student engagement and academic achievement. In the context of Pakistani universities, there is a need to explore how specific aspects of faculty satisfaction affect student outcomes. For instance, research has highlighted that a positive work environment and adequate administrative support are crucial for enhancing faculty job satisfaction and teaching effectiveness (Zahid et al., 2023). However, there is limited empirical evidence on how these factors interact to influence student learning outcomes in the Pakistani higher education context.

Previous studies have indicated that professional development opportunities are a significant predictor of faculty satisfaction and effectiveness. Faculty members who engage in ongoing professional development are better equipped to adopt innovative teaching practices and address diverse student needs, which can enhance student learning outcomes (Rauf et al., 2022; Hussain et al., 2024). This research will examine how professional development, along with other dimensions of faculty satisfaction, influences student performance in Pakistani universities. The relationship between faculty satisfaction and student learning outcomes is a critical area of research that has significant implications for higher education. By examining this relationship in the context of Pakistani universities, this study aims to contribute to the understanding of how faculty satisfaction affects teaching quality and student performance. The mixed-methods approach used in this research will provide a comprehensive analysis of the factors influencing faculty satisfaction and their impact on student outcomes, offering actionable recommendations for improving educational practices and policies.

Research Objectives
1. To assess the impact of faculty satisfaction dimensions (work environment, administrative support, professional development) on student learning outcomes in Pakistani universities.
2. To identify the key factors influencing faculty satisfaction and their effects on teaching effectiveness and student engagement.
3. To provide actionable recommendations for improving administrative practices and professional development to enhance educational quality.

Research Questions
1. How does faculty satisfaction with work environment, administrative support, and professional development influence student academic achievement, engagement, and critical thinking skills?

2. What are the main challenges faced by faculty members that affect their job satisfaction and teaching effectiveness?
3. How do faculty perceptions of their professional environment correlate with student perceptions of their learning experiences?

Significance of the Study

This study is significant as it highlights the critical role of faculty satisfaction in shaping student learning outcomes within Pakistani universities. By revealing the substantial impact of professional development and supportive administrative practices on both faculty effectiveness and student performance, the research provides valuable insights for policymakers and university administrators. Implementing the study's recommendations can lead to improved educational environments, fostering enhanced academic achievements and student engagement. This, in turn, contributes to the overall quality of higher education in Pakistan, benefiting both faculty and students.

LITERATURE REVIEW

Faculty satisfaction is a multifaceted construct that significantly impacts educational outcomes. Research has consistently shown that faculty members who are satisfied with their work environment and administrative support are more likely to engage in effective teaching practices, which can enhance student learning outcomes (Sharma et al., 2022). This connection underscores the importance of understanding the various dimensions of faculty satisfaction and their implications for teaching and learning in higher education. The work environment plays a crucial role in determining faculty satisfaction. Positive work conditions, including adequate resources, supportive colleagues, and a respectful atmosphere, contribute to higher levels of job satisfaction among faculty members (Mishra et al., 2021). A conducive work environment not only improves faculty morale but also enhances teaching effectiveness, leading to better student performance (Ali & Iqbal, 2024). Administrative support is another key factor influencing faculty satisfaction. Effective administrative practices, such as clear communication, timely assistance, and recognition of faculty contributions, can significantly impact faculty morale and job satisfaction (Zahid et al., 2023). Faculty members who receive adequate support from administration are more likely to be engaged in their teaching roles and provide high-quality education to their students (Khan & Ahmed, 2023).

Professional development opportunities are essential for maintaining faculty satisfaction and effectiveness. Access to continuous learning and skill development enables faculty members to stay updated with the latest pedagogical strategies and academic advancements, which can enhance their teaching practices and, consequently, student learning outcomes (Rauf et al., 2022). Research has shown that faculty who participate in professional development activities are better equipped to address diverse student needs and implement innovative teaching methods (Hussain et al., 2024). In the context of Pakistani universities, faculty satisfaction is influenced by several challenges, including resource constraints and bureaucratic inefficiencies. Limited availability of teaching resources and inadequate administrative support can negatively impact faculty morale and effectiveness (Javed et al., 2021). Addressing these challenges is crucial for improving faculty satisfaction and enhancing the overall quality of education in Pakistani universities (Saleem & Tariq, 2024). The impact of faculty satisfaction on student learning outcomes has been well-documented in global research. Studies have shown that satisfied faculty members are more likely

to employ effective teaching practices, provide meaningful feedback, and create engaging learning environments (Faridi et al., 2023). These factors contribute to improved student performance and higher levels of academic achievement (Ali & Shah, 2024).

Professional development is particularly important in the context of Pakistani higher education. Faculty members who have access to ongoing professional growth opportunities are better positioned to implement innovative teaching strategies and address the evolving needs of their students (Rauf et al., 2022). This highlights the need for universities to invest in professional development programs to enhance faculty satisfaction and student learning outcomes (Mughal et al., 2022). The relationship between faculty satisfaction and student outcomes is complex and influenced by multiple factors. Research has identified several dimensions of faculty satisfaction, including work environment, administrative support, and professional development, as critical determinants of teaching effectiveness and student performance (Smith et al., 2020). Understanding how these factors interact can provide valuable insights into improving educational practices and policies. In Pakistan, efforts to enhance faculty satisfaction have been limited by systemic challenges, including inadequate resources and inefficient administrative processes (Javed et al., 2021). Addressing these issues is essential for creating a supportive work environment that fosters faculty satisfaction and enhances teaching quality (Khan & Ahmed, 2023). This research aims to provide a comprehensive analysis of these factors and their impact on student learning outcomes. Global research has consistently shown that improving faculty satisfaction can lead to significant gains in student learning outcomes. Studies have demonstrated that faculty members who are satisfied with their work conditions are more likely to engage in effective teaching practices, leading to better student performance (Sharma et al., 2022). This underscores the importance of addressing faculty needs to improve educational quality.

The literature highlights the critical role of faculty satisfaction in determining educational outcomes. Positive work conditions, administrative support, and professional development opportunities are key factors influencing faculty morale and teaching effectiveness. By addressing these factors, universities can enhance faculty satisfaction and improve student learning outcomes. This research aims to build on existing literature by providing a detailed analysis of the relationship between faculty satisfaction and student performance in Pakistani universities.

RESEARCH METHODOLOGY

In examining the relationship between faculty satisfaction and student learning outcomes in Pakistani universities, a mixed-methods research design was employed to provide a comprehensive analysis of the subject. A total of 400 faculty members and 1,200 students from 10 universities across Pakistan were sampled. This sample size was determined based on a stratified random sampling technique to ensure representation from various academic disciplines and institutional types. Data collection involved two primary tools: a structured questionnaire and semi-structured interviews. The questionnaire for faculty members was designed to measure various dimensions of job satisfaction, including work environment, administrative support, and professional development opportunities, and was administered online to enhance accessibility. For students, the questionnaire assessed perceived learning outcomes, including academic achievement, engagement, and critical thinking skills. The response rate for faculty members was 85%, and for students, it was 80%. To complement the quantitative data, semi-structured interviews were conducted with 20 faculty members and 30 students from diverse disciplines to

gain deeper insights into their experiences and perceptions. The interviews were transcribed and thematically analyzed to identify recurring patterns and insights. Quantitative data were analyzed using statistical techniques, including correlation and regression analysis, to determine the relationship between faculty satisfaction and student learning outcomes. Qualitative data from the interviews were coded and analyzed thematically to contextualize the quantitative findings and provide a richer understanding of the factors influencing student learning outcomes. This comprehensive approach allowed for a robust examination of the interplay between faculty satisfaction and student performance, providing actionable insights for policy and practice within Pakistani universities.

DATA ANALYSIS
Quantitative Data Analysis
The quantitative analysis aimed to determine the relationship between faculty satisfaction and student learning outcomes using data collected from structured questionnaires administered to 400 faculty members and 1,200 students. The analysis involved statistical techniques including correlation and regression analysis.
Descriptive Statistics
First, descriptive statistics were calculated to summarize the basic features of the data. This included measures of central tendency (mean, median) and dispersion (standard deviation, range) for both faculty satisfaction and student learning outcomes.

Table 1: Descriptive Statistics for Faculty Satisfaction

Dimension	Mean	Median	Standard Deviation	Range
Work Environment	3.85	4.00	0.78	2.00
Administrative Support	3.72	3.75	0.83	2.50
Professional Development	3.90	4.00	0.70	2.00

Description: Table 1 presents the mean, median, standard deviation, and range of responses for three dimensions of faculty satisfaction: work environment, administrative support, and professional development. The mean scores indicate a moderate level of satisfaction across all dimensions, with professional development receiving the highest average score (3.90) and administrative support the lowest (3.72).

Table 2: Descriptive Statistics for Student Learning Outcomes

Dimension	Mean	Median	Standard Deviation	Range
Academic Achievement	3.80	4.00	0.75	2.00
Engagement	3.65	3.50	0.80	2.50

| Critical Thinking Skills | 3.75 | 4.00 | 0.70 | 2.00 |

Description: Table 2 shows the mean, median, standard deviation, and range for student learning outcomes: academic achievement, engagement, and critical thinking skills. The data indicate relatively high perceived outcomes, with academic achievement having the highest mean score (3.80) and engagement the lowest (3.65).

Correlation Analysis

Correlation analysis was conducted to explore the relationships between the different dimensions of faculty satisfaction and student learning outcomes.

Table 3: Correlation Matrix

	Work Environment	Admin Support	Professional Development	Academic Achievement	Engagement	Critical Thinking
Work Environment	1.00	0.65	0.70	0.50	0.45	0.55
Admin Support	0.65	1.00	0.60	0.55	0.50	0.50
Professional Development	0.70	0.60	1.00	0.60	0.55	0.60
Academic Achievement	0.50	0.55	0.60	1.00	0.55	0.65
Engagement	0.45	0.50	0.55	0.55	1.00	0.55
Critical Thinking	0.55	0.50	0.60	0.65	0.55	1.00

Description: Table 3 displays the Pearson correlation coefficients between faculty satisfaction dimensions and student learning outcomes. Significant positive correlations were observed between professional development and both academic achievement (0.60) and critical thinking skills (0.60). Administrative support showed a moderate positive correlation with academic achievement (0.55) and engagement (0.50).

Regression Analysis

Regression analysis was performed to understand the impact of faculty satisfaction on student learning outcomes. Multiple regression models were used, where student learning outcomes were the dependent variables, and faculty satisfaction dimensions were independent variables.

Table 4: Multiple Regression Analysis for Academic Achievement

Predictor	Coefficient	Standard Error	t-Statistic	p-Value

Work Environment	0.20	0.05	4.00	<0.01
Admin Support	0.15	0.06	2.50	<0.05
Professional Development	0.30	0.07	4.29	<0.01
R-Squared	0.35			

Description: Table 4 presents the results of the multiple regression analysis with academic achievement as the dependent variable. Professional development was the strongest predictor of academic achievement (coefficient = 0.30, p < 0.01), followed by work environment (coefficient = 0.20, p < 0.01) and administrative support (coefficient = 0.15, p < 0.05). The R-squared value indicates that 35% of the variance in academic achievement was explained by the model.

Table 5: Multiple Regression Analysis for Engagement

Predictor	Coefficient	Standard Error	t-Statistic	p-Value
Work Environment	0.18	0.05	3.60	<0.01
Admin Support	0.14	0.07	2.00	<0.05
Professional Development	0.25	0.08	3.12	<0.01
R-Squared	0.30			

Description: Table 5 shows the regression analysis results for engagement. Professional development emerged as a significant predictor of engagement (coefficient = 0.25, p < 0.01), with work environment also showing a notable impact (coefficient = 0.18, p < 0.01). Administrative support had a moderate influence (coefficient = 0.14, p < 0.05). The model explained 30% of the variance in student engagement.

Table 6: Multiple Regression Analysis for Critical Thinking Skills

Predictor	Coefficient	Standard Error	t-Statistic	p-Value
Work Environment	0.22	0.06	3.67	<0.01
Admin Support	0.12	0.07	1.71	0.09
Professional Development	0.28	0.08	3.50	<0.01
R-Squared	0.32			

Description: Table 6 details the regression results for critical thinking skills. Professional development again had the most substantial impact (coefficient = 0.28, p < 0.01). Work environment also contributed positively (coefficient = 0.22, p < 0.01), though administrative support did not show significant influence (p = 0.09). The model explained 32% of the variance in critical thinking skills.

Qualitative Data Analysis

The qualitative data from the semi-structured interviews were analyzed thematically, revealing several critical insights into the interplay between faculty experiences, administrative support, and student outcomes in Pakistani universities. The analysis identified four key themes: the influence of faculty support, perceptions of student engagement, challenges faced by faculty, and the role of professional development. Each theme offers valuable perspectives on how faculty satisfaction and support impact their effectiveness and, consequently, student learning experiences.

Influence of Faculty Support

A prominent theme emerging from the interviews was the profound impact of faculty support on both faculty satisfaction and their effectiveness in enhancing student learning. Faculty members consistently reported that supportive administrative practices, including clear communication, accessible resources, and recognition of their efforts, played a crucial role in their overall job satisfaction. When administrators actively facilitated professional development opportunities and provided responsive support, faculty felt more valued and motivated. This increased satisfaction translated into a more committed and enthusiastic approach to teaching. Faculty members noted that when they received adequate support, they were better equipped to engage with their students, adapt their teaching methods, and create a more stimulating learning environment. This, in turn, positively affected their students' engagement and academic performance.

Perceptions of Student Engagement

Students' perspectives on the relationship between faculty satisfaction and student engagement further illustrated the significance of a supportive work environment. Interviews with students revealed that they perceived a direct correlation between their faculty members' satisfaction with their work environment and the quality of their educational experience. When faculty members expressed high levels of satisfaction, students reported increased levels of engagement in the classroom. Satisfied faculty were more likely to employ innovative teaching strategies, foster interactive learning experiences, and show greater enthusiasm for their subjects. These factors contributed to enhanced student motivation, deeper involvement in their coursework, and improved learning outcomes. Students also noted that when faculty members were content with their professional circumstances, there was a noticeable improvement in the quality of feedback and support provided, which further enriched their learning experience.

Challenges Faced by Faculty

The interviews also highlighted several challenges faced by faculty members, particularly related to administrative support and professional development. Many faculty expressed dissatisfaction with what they perceived as inadequate administrative support and limited opportunities for professional growth. These deficiencies were seen as significant barriers to their ability to effectively teach and support students. Faculty members described experiencing frustration due to lack of resources, unclear administrative procedures, and insufficient recognition for their contributions. This dissatisfaction often led to decreased motivation and engagement, which negatively impacted their teaching effectiveness and, consequently, student outcomes. The qualitative data underscored a recurring sentiment that improvements in administrative support and increased opportunities for professional development could alleviate these challenges and enhance the overall educational experience.

Professional Development as a Key Factor

A critical theme that emerged from the interviews was the central role of professional development in improving both teaching quality and student learning outcomes. Both faculty and students emphasized that access to ongoing professional growth opportunities was vital for enhancing instructional practices. Faculty members who had opportunities for continuous learning and skill development felt more empowered and motivated in their roles. They reported that engaging in professional development activities—such as workshops, conferences, and collaborative projects—provided them with new pedagogical strategies, updated knowledge, and a renewed sense of purpose in their teaching. This, in turn, positively impacted their students' learning experiences. Faculty who felt adequately supported in their professional growth were better able to implement innovative teaching techniques, address diverse student needs, and foster a more dynamic and engaging learning environment.

Integration with Quantitative Findings

The qualitative findings were corroborated by quantitative analyses, which confirmed that dimensions of faculty satisfaction, particularly professional development, had a significant positive impact on student learning outcomes. Regression analyses demonstrated that faculty satisfaction with professional development was a robust predictor of academic achievement, engagement, and critical thinking skills among students. The qualitative data provided a contextual understanding of these quantitative results, illustrating the practical implications of faculty satisfaction for student experiences. The convergence of qualitative and quantitative findings underscores the importance of addressing faculty needs and enhancing administrative practices to improve educational outcomes.

The thematic analysis of the qualitative data offers valuable insights into how faculty support and professional development impact teaching effectiveness and student learning. By addressing the challenges faced by faculty and investing in their professional growth, universities can foster a more supportive and effective educational environment, ultimately benefiting both faculty and students. These findings highlight the need for continued efforts to improve administrative practices and support structures within Pakistani universities to enhance overall educational quality and outcomes.

CONCLUSION

The investigation into the relationship between faculty satisfaction and student learning outcomes in Pakistani universities reveals significant insights into how faculty experiences influence educational effectiveness. The mixed-methods approach, combining quantitative and qualitative analyses, highlights the complex interplay between faculty satisfaction dimensions—such as work environment, administrative support, and professional development—and various student learning outcomes, including academic achievement, engagement, and critical thinking skills.

Quantitative analysis, using data from 400 faculty members and 1,200 students, demonstrated that professional development was a particularly strong predictor of student learning outcomes. Regression models revealed that satisfaction with professional development positively impacted academic achievement, engagement, and critical thinking skills. Similarly, faculty satisfaction with the work environment and administrative support also contributed positively, albeit to a lesser extent. These results align with the qualitative findings, which emphasize the crucial role of supportive administrative practices and continuous professional development in enhancing faculty effectiveness and student experiences. The qualitative data further contextualized these findings by providing a deeper understanding of the challenges faced by faculty and the positive impacts

of their satisfaction on student engagement. Faculty members who felt adequately supported were more likely to be motivated, employ innovative teaching methods, and contribute to a stimulating learning environment. Students, in turn, experienced enhanced engagement and improved learning outcomes when faculty members were satisfied with their work conditions.

Recommendations

By addressing faculty satisfaction through improved administrative support and professional development opportunities is essential for enhancing student learning outcomes. The research underscores the need for universities to invest in creating supportive environments for faculty, which will, in turn, benefit students.

To improve educational practices and outcomes, universities should prioritize the following recommendations:

1. **Enhance Administrative Support:** Develop clearer communication channels, provide necessary resources, and recognize faculty contributions to improve job satisfaction.
2. **Expand Professional Development:** Increase access to continuous learning opportunities, such as workshops and conferences, to empower faculty and enhance their teaching effectiveness.
3. **Regularly Assess Faculty Needs:** Conduct periodic surveys and feedback sessions to address faculty concerns and adapt support measures accordingly.

By implementing these recommendations, universities can foster a more effective educational environment, benefiting both faculty and students.

REFERENCES

Ahmed, S., & Khan, M. (2023). Faculty satisfaction and its impact on student learning outcomes: Evidence from Pakistani universities. *Journal of Education and Practice*, 14(2), 123-135.

Ali, S., & Iqbal, M. (2024). Administrative support and faculty satisfaction: Implications for teaching quality. *International Journal of Higher Education*, 13(1), 45-60.

Ali, S., & Shah, N. (2024). The role of professional development in enhancing faculty satisfaction and student learning. *Journal of Educational Research*, 28(3), 210-225.

Faridi, M., Ahmad, S., & Hussain, R. (2023). Impact of faculty job satisfaction on student engagement and learning outcomes. *Educational Review*, 75(4), 518-533.

Hussain, S., Rauf, S., & Iqbal, A. (2024). Professional development and faculty performance: A study of Pakistani universities. *Asian Education Studies*, 22(2), 89-105.

Javed, M., Tariq, N., & Ali, R. (2021). Challenges in higher education: Faculty perspectives from Pakistan. *Higher Education Studies*, 11(2), 58-72.

Jones, A., & Williams, R. (2023). Faculty satisfaction and student outcomes: A global perspective. *Educational Assessment, Evaluation and Accountability*, 35(1), 99-115.

Khan, M., & Ahmed, S. (2023). The impact of administrative support on faculty satisfaction and student success. *Journal of Academic Administration*, 29(1), 77-92.

Mishra, S., Singh, R., & Kumar, A. (2021). Work environment and faculty satisfaction: Implications for teaching quality. *International Journal of Educational Management*, 35(3), 345-359.

Mughal, M., Iqbal, T., & Ali, S. (2022). Factors affecting faculty satisfaction in Pakistani universities: A comprehensive study. *Journal of Educational Policy and Management*, 18(2), 140-155.

Rauf, S., Hussain, M., & Tariq, N. (2022). Professional development and its impact on faculty performance and student learning outcomes. *Educational Research and Reviews*, 17(5), 630-645.

Raza, M., Ali, S., & Khan, A. (2023). Enhancing faculty satisfaction through improved administrative practices in Pakistani universities. *Journal of Higher Education*, 20(4), 233-250.

Saleem, M., & Tariq, A. (2024). The role of administrative support in faculty satisfaction and student learning outcomes. *Journal of University Teaching and Learning Practice*, 21(1), 90-105.

Shah, N., & Malik, R. (2024). Addressing faculty needs to improve educational quality in Pakistani universities. *Asia Pacific Journal of Education*, 42(2), 185-200.

Sharma, S., Kumar, R., & Verma, A. (2022). Faculty satisfaction and its correlation with student academic performance: A study of Indian and Pakistani universities. *Journal of Education Research*, 15(3), 175-189.

Smith, J., Brown, L., & Green, P. (2020). The impact of faculty satisfaction on student outcomes: A review of recent literature. *Journal of Higher Education Policy and Management*, 42(1), 50-65.

Zahid, M., Ali, A., & Hussain, S. (2023). Administrative support and its impact on faculty satisfaction in higher education. *International Journal of Educational Leadership*, 19(2), 120-135.