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KEYWORDS	ABSTRACT
Semester System, Higher Education, Skills-Based Learning, Student Satisfaction, Mixed-Methods Research	This study explores the factors influencing student satisfaction in semester system at Gomal University & its affiliated colleges in Pakistan, employing a mixed-methods approach. Data were collected from 347 students over structured questionnaires and interviews, ensuring a thorough analysis of their perceptions. The quantitative findings reveal moderate satisfaction with curriculum content, classroom management & co-curricular activities but notable dissatisfaction with physical infrastructure and technological support. Thematic analysis of qualitative data highlights challenges such as time management, the need for practical and skills-based learning, fair treatment & improved teacher engagement. In this drive, recommendations include enhancing physical infrastructure, increasing access to updated technological tools, fostering skills-based curricula, and offering flexible course structures, and promoting a respectful and supportive academic environment. This study provides actionable insights for policymakers and educational institutions aiming to optimize the semester system and align it with students' academic & professional needs, reassuring them of validity of the findings.
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## INTRODUCTION

Education, a dynamic process that empowers students beyond the mere pursuit of grades or GPAs, is central to the acquisition of knowledge and skills. A crucial measure of this process is the student satisfaction, which indicates how well students' expectations, needs, and goals are met. This proposal specifically examines how various factors including teaching methodologies, course management and faculty quality, influence student satisfaction within the semester system. The potential impact

of this research is significant, as it underscores importance of understanding and enhancing student satisfaction (Sheninger & Murray, 2017). In higher education, the semester system stands out as an innovative and collaborative approach. Unlike the traditional yearly system, it divides academic year into two six-month terms, incorporating periodic assessments that inspire continuous learning and feedback. This unique system, with its emphasis on ongoing evaluation & engagement, provides a more enlightened educational experience. It is this system that will be examining in our research, aiming to understand how it enhances student engagement and satisfaction (Sabir, Ahmad, Ashraf & Ahmad, 2013).

According to Kotler (2011), student satisfaction occurs when experiences align with expectations, leading towards improved academic outcomes and personal fulfillment. The semester system offers diverse learning opportunities, such as presentations, mid-term examinations, group discussions, & assignment submissions, which foster consistent engagement with the curriculum (Abro, 2014). Key competencies—including subject knowledge, clarity of communication, teaching creativity, and interactive learning, have been correlated with the student satisfaction (Long, Ibrahim & Kowang, 2014). The satisfaction in higher education is vital for preparing students for professional careers, as skills like critical thinking, problem-solving, and effective communication are highly valued in the workforce (Shirai, Shimomura, Kawasaki, Adachi & Wakamatsu, 2013). In recent years, significance of quality assurance in higher education has gained widespread recognition. Many countries have implemented strategies focusing on top management commitment, continuous improvement, staff involvement, and communication to enhance the educational delivery (Mahmood, Ismail & Omar, 2020). These measures feature the need for systematic evaluations of academic framework, mainly the semester system.

While previous studies, such as those by Khan, Ishaq, and Shah (2023), have examined faculty and administrative perspectives, insights and experiences of students still need to be more adequately represented. Khan, Shah, and Ishaq (2024) conducted a study recommending regular professional development courses for faculty and teaching staff at affiliated colleges to implement the semester system effectively. Suggested training areas may include BS program objectives, teaching methods, assessment practices, research theses, and rules and regulations of the semester system. The study also offers valuable suggestions for future researchers to address the BS program within semester system comprehensively. This gap highlights the vital role of students in comprehensive research that incorporates their viewpoints, aiming to develop actionable recommendations for improving the semester system. The present study aims to bridge this gap by investigating the factors affecting student satisfaction with the semester system at the Gomal University and its affiliated colleges in Pakistan. The potential impact of this research upon enhancing the semester system is significant, promising a more satisfying and effective educational experience for students, and a brighter future for higher education.

### LITERATURE REVIEW

Matlakala, Mgutshini, Greeff and Chetty (2019) described numerous problems in courses developed by Higher Education Commission (HEC), particularly at Bachelor of Science (BS) level in Pakistan. These courses need to meet the demands of the relevant programs. Nadeem (2023) noted that most

universities offer six courses each semester, which leads to student boredom and negatively impacts their concentration. [Nayar \(2024\)](#) suggested that the HEC should focus on improving the quality of BS-level content, taking into account the competencies, standards, and the levels of students and institutions to achieve desired educational goals. [Sardar, Maqsood, Jawad, Akhta and Latif \(2019\)](#) pointed out that students benefit from selecting one or, at most, two courses over a few months in a single semester. This allows for conceptual learning and higher-quality engagement. Subsequently, new subjects can be introduced in a sequence that better maintains quality, educational standards, teaching, and learning processes, ensuring student development and progress. By adopting mixed-methods approach, this research seeks to provide a holistic understanding of student experiences, offering insights that could inform improvements in both public & private educational institutions nationwide.

[Shakil \(2020\)](#) emphasized that students can concentrate more effectively on a limited number of subjects over one to three months and suggested offering a few new subjects within same semester. This approach is aimed not merely at fulfilling formal requirements but at enhancing the students' educational journeys and academic achievements. [Shoukat, Waheed, and Nawaz \(2021\)](#) explained that semester system is beneficial for improving education quality. In this system, teachers actively engage and adopt updated methods or techniques, including Information and Communication Technology (ICT) tools such as computers, multimedia, and projectors, to promote the standard of teaching, learning, and curriculum at BS level. [Vieten, Reher, and Gross \(2024\)](#) found that semester system is superior to annual system as it keeps students engaged with routine assignments, quizzes, and presentations. These tasks enable students to learn and perform better academically, providing opportunities to participate in departmental and unit/chapter-wise tests throughout the semester, which enhances learning. Pakistan recognizes higher education as a key driver for socio-economic advancement within global community. Over years, country has executed substantial reforms in its education system to address various stakeholder priorities ([Murtaza & Hui, 2021](#); [Khan, Ahmad & Imran, 2021](#)).

The Pakistani government supports both educators and students over various initiatives. Educators receive scholarships to improve their qualifications, while students benefit from scholarships, access to online libraries, loans, and laptop distribution programs ([Fazal, Khan & Majoka, 2014](#)). These initiatives, combined with value society places on education, the prestige associated with higher education, and job market needs, have encouraged many individuals to pursue higher education ([Hoodbhoy, 2009](#)). Education has become more accessible, with high school and college graduates aspiring to attend university ([Dilshad & Iqbal, 2010](#)). The evolving education system, increasing class sizes, and the younger demographic of university students present new challenges that require careful examination ([Ellahi & Zaka, 2015](#)). Graduates evaluated through the semester system often need essential knowledge, skills, and attitudes ([Khan et al., 2024](#)). This raises important questions regarding the system's ability to produce quality graduates. Investigating this issue is crucial for understanding problem and developing solutions. Some students enter universities after obtaining higher secondary certificates (HSSC), while others attend affiliated colleges to pursue BS degrees ([Molina et al., 2020](#)).

While the universities issue degrees, instruction often takes place in colleges. Typically, universities possess superior human and physical resources, while colleges often lack the necessary resources to effectively support many undergraduate programs, which significantly affects the quality of their graduates (Habib et al., 2021). Mehmood et al. (2014) explored student and teacher perceptions of semester system at AWKUM, Pakistan. Their study included students and teachers who completed a questionnaire survey. Data were analyzed using SPSS software, applying mean scores. The findings indicated that the semester system is an effective educational approach, with most faculty members supporting it for its numerous advantages. Behara et al. (2019) investigated student and teacher perceptions about the semester examination system at higher education level using a descriptive survey method. Given that semester system is considered a preferable alternative to annual system, it is crucial for administrators, policymakers, educators, and teachers to collaborate in addressing its drawbacks. This collaboration is not just a suggestion, but a necessity for enhancing the system's effectiveness. The implementation of the semester system has the potential to significantly improve quality and standards of our education system, making it the best alternative to the annual system (Neog, 2020).

### RESEARCH METHODOLOGY

#### Research Design

This study employs an inclusive mixed-method approach, integrating quantitative and qualitative research methodologies to gather a rich dataset. A structured questionnaire, meticulously crafted to encompass close-ended and open-ended questions, was developed and subsequently distributed among the students at GU and its affiliated colleges. Initially, 250 hard-copy questionnaires were circulated; response rate was not just good, but robust, with 236 completed questionnaires returned. After scrutiny and removal of improperly filled responses, 206 valid questionnaires were retained, reflecting an impressive 82% response rate. In addition to this, a digital version of the questionnaire yielded an additional 141 responses, culminating in a total of 347 submissions utilized for the data analysis phase. In-depth interviews were conducted with students from Gomal University and its affiliated colleges to further enrich findings with personal insights and narratives. This qualitative layer adds the depth to the quantitative results, allowing for a more nuanced understanding of the student experiences.

#### Research Instrument

The questionnaire was developed based on a thorough review of existing literature and underwent a robust validation process by senior academics, ensuring its clarity and relevance. A pilot test with 50 respondents confirmed its reliability, with results exceeding the commonly accepted threshold of 0.70. This reassures the audience of the questionnaire's effectiveness. The questionnaire covered several key factors related to academic experience and academic factors were covered & students assessed the organization and manageability of course content. The feedback focused on instructor accessibility and support outside of class. Administrative and support services-related items were asked to evaluate efficiency of course registration process. Their study revealed that both teachers and students considered the semester system to be superior. Participants expressed satisfaction with the curriculum and evaluation processes. Students reflected on how the semester system affected

their ability to balance academic and personal commitments. The relevance of course content to students' career goals was assessed. The study delved into affordability of higher education, with students expressing positive sentiments such as semester tuition fee is within reach for all students." Their feedback on the distribution of course load throughout the semester, with comments like. it's manageable, provided clear picture of academic journey, ensuring they felt neither underwhelmed nor overburdened.

Students' satisfaction with frequency of assessments, as shown by statements like "It's appropriate," And their positive feedback on professors' approachability, with the remarks like "They are always open to discuss academic concerns," instilled a sense of confidence. Their questions about adequacy of physical resources further reinforced their comfort with academic environment. The availability of workshops was examined through statements such as "Workshops enhance personal growth," and students evaluated technology use by answering, "Does the institution employ digital techniques to enhance pedagogy?" The role of counseling support was considered with the statement, "Counselors provide support for the mental well-being," and perceptions of communication were gauged with "Students receive accurate information about deadlines." Statements like 'Students can evaluate the semester system and services' underscore the role of the student feedback in evaluating and improving the student experience. Interview questions based on accreditation standards included inquiries about the challenges faced in implementing the Semester System. A total of 25 interviews were thus conducted and thematically analyzed to uncover the key insights regarding the students' academic experiences.

### Population of Study

The research population consists of all students enrolled in BS & AD programs at Gomal University and its affiliated colleges. This demographic includes a diverse group, reflecting various academic disciplines and backgrounds. The sampling process included students from Gomal University and its affiliated colleges. In this linking, given the population's known and homogeneous nature, a probabilistic sampling technique was utilized. This involved a multistage sampling strategy: first, a selection of affiliated colleges was made, followed by the convenient data collection from students within different departments at these institutions to ensure a representative sample. Ultimately, a total sample size of 450 students was predetermined for data collection, ensuring a comprehensive analysis of data.

### Data Analysis Technique

For the quantitative analysis, SPSS software was employed, enabling robust statistical analysis and interpretation of results. Qualitative data from interviews was analyzed thematically, allowing for identification of key themes and trends that emerged from students' narratives. This dual approach eases well-rounded understanding of factors affecting student experiences at Gomal University & its affiliated colleges.

### RESULTS OF STUDY

The research includes sample of 347 students, comprising 152 males and 195 females. Most students (275) are enrolled in BS program, while 72 are pursuing an AD. In terms of age, 17 students are 16-17

years old, 29 are 18-19, 129 are 20-21, and 172 are 22 years or older. The students are at various stages of their studies: 12 are in their first semester, 28 are in their second, 64 are in their third, five are in their fourth, 44 are in fifth, 23 are in sixth, 159 are in their seventh, and 12 are in their final, eighth semester. This summary highlights the demographic diversity and academic progress of students in the study.

**Table 1** Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	SD
Curriculum and Course Content	347	1.40	5.00	3.52	0.72
Learning Experience	347	1.00	5.00	3.51	1.01
Support and Resources	347	1.00	5.00	3.23	0.87
Course Implementation & Classroom Mgt	347	1.20	5.00	3.63	0.81
Personal and Social Factors	347	1.00	5.00	3.35	0.85
Assessment and Evaluation	347	1.00	5.00	3.48	0.92
Physical Infrastructure Support	347	1.00	5.00	2.85	0.95
Co-Curriculum Activities	347	1.00	5.00	3.56	0.99
Technology Information	347	1.00	5.00	3.20	1.09

This analysis is of significant importance as it aims to clarify overall perceptions of students enrolled in Bachelor of Science (BS) & Associate Degree (AD) programs at Government Affiliated Colleges and Gomal University in D.I. Khan. The focus is on various aspects of professional development and learning environment, providing valuable insights for educators, administrators, and policymakers. For the variable "Curriculum and Course Content," mean score was 3.52, with a standard deviation of 0.72. This moderately positive mean score indicates that most students find the curriculum and course content satisfactory and reasonably aligned with their expectations. However, the standard deviation suggests some variability in responses, indicating that while many students perceive the curriculum to be well-structured, others may feel it lacks certain elements, such as course relevance or depth of content. This presents an opportunity for educators to further enhance the curriculum to meet the diverse needs of students. Thus, regarding "Learning Experience," the mean score was 3.51, accompanied by a higher standard deviation of 1.01. This result reflects a generally positive but the mixed perception. Thus, some students find their learning experiences engaging and fulfilling, while others may feel that these diverse experiences could be more interactive or better tailored to their academic needs.

The wide range of responses points to possible inconsistencies in the delivery of learning methods, suggesting that the experiences may vary across different departments or instructors. This highlights the importance of making learning experiences more interactive to enhance student engagement. In the category of "Support and Resources," the mean score was 3.23, with a standard deviation of 0.87. This score indicates that students generally find the availability and adequacy of academic resources to be lacking. While some students may consider the resources such as library materials, guidance, and academic counseling to be adequate, others might feel that there needs to be more support in these areas. This moderate level of satisfaction points to a need for the improved or more consistent academic support, as students appear to have varying levels of access to and benefits

from these resources. The course implementation and classroom management received a high mean score of 3.63 (standard deviation of 0.81), indicating that students generally view these aspects positively. They feel courses are well-executed & that effective classroom management contributes to a good learning environment. While most students share similar views, slight variability suggests some differences in experience, possibly related to classroom size or teaching styles. Thus, personal as well as social support garnered a mean score of 3.35 (standard deviation of 0.85), indicating the moderate satisfaction.

Many students feel supported socially, particularly in interactions with peers and faculty. However, the variability suggests that some students struggle to make the connections or receive adequate support, highlighting a need for initiatives to create a more inclusive environment. Assessment and Evaluation scored 3.48 (standard deviation of 0.92), suggesting a generally positive perception of these practices. Most students view the assessment methods as fair, but some express concerns about inconsistencies in feedback quality, which affects perceptions of fairness. Physical Infrastructure Support had the lowest mean score at 2.85 (standard deviation of 0.95), indicating dissatisfaction with facilities. This suggests students feel the available resources, such as classrooms and labs, do not meet their needs adequately. Curricular Activities received the mean score of 3.56 (SD of 0.99), reflecting the positive perception of the available activities. While many students appreciate the offerings, some feel these could be diversified or made more accessible. Finally, the technology information scored 3.20 (standard deviation of 1.09), indicating moderate satisfaction with tech resources. Many students feel that technology support is lacking, possibly due to limited access to updated tools & variability in experiences indicates differing levels of comfort with digital resources among students.

### Results of Qualitative Analysis (Thematic Analysis)

Many students, as evidenced by recent survey where specific percentage of respondents expressed this concern, believe the semester system needs to allow adequate time to cover extensive material, leading to a rushed pace that hampers deep understanding. Suggestions for improvement include reducing course loads, extending semester lengths, and lengthening breaks between midterms and finals to facilitate the better preparation and review. Students are deeply invested in their future careers and they emphasize the importance of practical, hands-on experiences that align with their fields of study. They seek more skills-based learning opportunities, such as internships and real-world scenarios, to better prepare for careers. A curriculum that includes technical, communication, and problem-solving skills would not only enhance their engagement and relevance in education but support their professional growth. Students are prominently concerned about unfair treatment and discrimination. Many report experiences of bias in grading and instances of mistreatment from faculty. Thus, their advocacy for a respectful and equitable academic environment, where they are judged on their performance rather than personal characteristics, is a call for the responsibility and accountability.

They recognize that respectful treatment is essential for a positive learning experience and hope for a change in this regard. Students have expressed a strong need for teachers who actively engage with them & make effort to maintain their attention. They value teaching methods that go beyond

rote lecturing, favoring approaches that inspire interaction, questions, and collaborative learning. There are specific calls for the hiring of instructors who are up-to-date with spreads in their fields, especially in areas like research. Some students feel that current staff tends to focus on past work rather than exploring new trends and ideas, which they find limiting. Overall, students believe that teaching quality and engaging classroom atmosphere are critical for meaningful learning. Teachers who are committed, attentive, and open to new ideas can significantly enhance students' academic experiences. Many students highlight need for resources that support their academic and personal well-being, like counseling services, stress management workshops, and mental health programs. They also request physical amenities like fans, water filters, and comfortable seating to enhance the learning environment.

To improve course structure, students advocate for assessments spread throughout the semester to encourage continuous learning and reduce last-minute cramming. They emphasize the importance of clear grading criteria and timely feedback to stay motivated. Moreover, students seek flexibility in the course selection to tailor their studies to their interests and career goals, promoting a more personalized educational experience. Students express a strong desire for opportunities beyond the classroom, such as the annual trips, industry visits, and extracurricular activities, to enhance their learning and gain practical experience. These activities are beneficial for personal and professional development, allowing students to apply classroom knowledge and build skills like teamwork and problem-solving. While some students prefer the semester system for its structured and interactive approach, others advocate for a return to annual system for deeper subject coverage. Additionally, many request that the semester fees be made more affordable due to rising living costs. Overall, addressing these academic, administrative, and personal needs and challenges could lead to a more effective and fulfilling experience in the semester system as students seek a balanced and hands-on educational approach.

### DISCUSSION & CONCLUSION

This mixed-method study explored perspectives of students at Gomal University and its affiliated colleges regarding semester system. Key variables assessed included time management, practical learning, fair treatment, teacher engagement, student support, course structure, and extracurricular opportunities. An open-ended question was included to gather suggestions for improving student satisfaction, such as specific suggestions. Findings revealed that most students find the curriculum satisfactory, though some feel it lacks relevance, aligning with [Nayar \(2024\)](#). It's important to note that opinions on the learning experiences vary; while some students feel fulfilled, others seek more interactivity, similar to [Shoukat et al. \(2021\)](#). This diversity of experiences underlines the need for a flexible and student-centered approach to education. The students consider academic resources moderately inadequate, highlighting a need for improved support ([Habib, Khalil, Khan, and Zahid, 2021](#)). Teachers were particularly content with the feedback and evaluation aspects of the system. However, most students noted the significant issue: delays in receiving their results. Although the semester system is now in place in nearly all undergraduate colleges in Assam, questions about its effectiveness persist.



Overall, students view course implementation and classroom management positively, although experiences differ based on classroom size and teaching style. Students generally feel moderately supported on personal & social levels, but experiences vary significantly. While many feel socially connected, some struggle to build relationships and receive adequate faculty support. There is a clear need for initiatives that foster a more inclusive environment. Regarding assessment practices, students view evaluation methods as fair, but inconsistencies in feedback quality and transparency have been noted. This variability may affect perceptions of fairness, as outlined by [Behara et al. \(2019\)](#). Students' express dissatisfaction with physical infrastructure, stating that classrooms and labs need to meet their needs adequately. [Bakhsh et al. \(2021\)](#) favored that student at public sector universities in Khyber Pakhtunkhwa generally view the semester system positively. However, they encounter challenges like difficulty in completing course and favoritism in assessments. [Li \(2023\)](#) also highlighted the critical need for creativity and entrepreneurship in university curricula and mentorship programs.

Despite the good infrastructure, concerns about faculty capabilities and assessment methods persist ([GOP, 2017](#); [Sandybayev et al., 2020](#)). [Uzun and Ertok \(2020\)](#) noted student dissatisfaction with summative assessments and called for improved teacher creativity. Faculty at Gomal University need a solid understanding of program regulations ([Lamsal, 2018](#); [Matlakala et al., 2019](#)). [Majeed \(2024\)](#) also reported varying satisfaction levels with the semester system, which is acknowledged to develop skills but often faces issues such as a rushed pace and biases in assessments. The financial constraints further affect educational quality, and faculty competency remains crucial. While a few may be satisfied, most believe substantial improvements are necessary. Conversely, the students appreciate the variety of co-curricular activities which contribute to their development. However, some feel these opportunities could be further diversified and made more accessible, consistent with findings by [Marais \(2011\)](#). Finally, students report lower satisfaction with technological resources, indicating that support is only moderately adequate, likely due to limited access to updated tools. Students are generally content with curriculum and co-curricular activities; they identify physical infrastructure as well as technology support as areas needing improvement for a more supportive learning environment.

### Implications of Study

This study provides a comprehensive update to the existing literature on the several critical factors influencing educational outcomes, particularly focusing on time management and course load. It highlights the urgent need for practical, skills-based learning approaches that prepare students for real-world challenges. The study underscores the significance of treating students with fairness and respect, a factor that is essential for cultivating a supportive learning environment and should not be overlooked. It emphasizes necessity for enhanced teacher engagement & teaching quality, which directly impacts students' academic experiences. The study also investigates the interconnectedness of student support services, available resources, the structure and flexibility of courses, and the variety of extracurricular and enrichment opportunities offered. By exploring these complex and interconnected factors, the research aims to provide valuable insights that could lead to meaningful improvements in education practices. The study serves as valuable resource for Gomal University's

top management, specifically in refining the university's BS program. Through its findings, the study identifies key weaknesses within current BS program, providing the management with a focused strategy to address these issues. By targeting these areas for improvement, GU can enhance overall quality as well as effectiveness of its BS program, ultimately benefiting its students and the broader academic community.

### Suggestions for Future Researchers

This study is conducted on the students of Gomal University and its affiliated colleges; however, future researchers may target the other public and private universities of Pakistan as well as around the globe and they may take other variables as well towards more in-depth understanding. In this linking, this study is the mixed method; however, future research may take quantitative as well as qualitative methods.

### Recommendations

The study recommends that teachers participate in the regular training to improve their teaching, research, and assessment skills. It highlights the importance of establishing continuous professional development center dedicated to enhancing the capabilities of university instructors and those at affiliated colleges. Close collaboration between universities and their affiliated colleges is essential to align courses, academic calendars, and assessment practices. Urgent updates to the infrastructure and policies of colleges are needed to ensure consistency and respond to the evolving demands of the education. In this drive, these updates are not just necessary, but urgent, to ensure that our educational institutions are equipped to meet the needs of the future. Improvements in teaching quality and facilities are crucial, along with staff training focused on curriculum development to create a supportive learning environment. To keep students informed and engaged, there should be a strong emphasis on technology integration, innovative learning experiences, social factors, and enhanced co-curricular activities, and refined time management as well as course implementation strategies for teachers.

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