Student's Satisfaction and Academic Achievement Nexus Using Physical Facilities and Classroom Environment in Secondary Schools

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Abstract

This study explores the relationship between student satisfaction and academic achievement, focusing on the roles of physical facilities and classroom environments in secondary schools. Recognizing that a conducive learning environment is critical for student success, this research investigates how well-maintained facilities and supportive classroom atmospheres contribute to student satisfaction and academic performance. Utilizing a mixed-methods approach, data were collected through surveys and interviews with students, teachers, and school administrators from various secondary schools. Quantitative data were analyzed using statistical techniques, while qualitative insights were derived from thematic analysis. The findings indicate a strong positive correlation between the quality of physical facilities—such as classrooms, libraries, and sports facilities—and student satisfaction. The study reveals that classroom environments characterized by effective teaching practices, mutual respect, and a sense of safety significantly enhance students' academic outcomes. The research suggests that improving the physical infrastructure of schools and fostering a positive classroom climate can lead to higher levels of student satisfaction, which, in turn, positively impacts academic achievement. The study concludes with recommendations for policymakers, educators, and school administrators to prioritize investments in school infrastructure and cultivate a nurturing classroom environment. By doing so, educational institutions can create a holistic and supportive setting that promotes student well-being and academic excellence.

Keywords: Nexus, Academic achievement, Physical facilities, Learning environment

Introduction

Education is a fundamental basis of the economic, social, cultural, and political development of a country. Its role in improving the living conditions of individuals and communities is clearly for everyone; the society that is in transition from education to modern society needs qualified personnel. One of the essential tasks of education in every country is transmitting the community's cultural heritage, developing students' talent, and preparing them for active participation in the community (Hanaysha et al., 2023).

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The relationship between student satisfaction and academic achievement is a crucial area of educational research, particularly in secondary schools where students' academic and personal development undergo significant transitions (Herwan et al., 2018). As educational institutions aim to optimize student outcomes, understanding the factors influencing satisfaction and achievement is essential (Ikram & Kenayathulla, 2023; Adedoyin & Soykan, 2023). Among these factors, the quality of physical facilities and the classroom environment are significant contributors (Mohammed et al., 2023).

Physical facilities, including classrooms, laboratories, libraries, and recreational areas, provide the foundational infrastructure for effective teaching and learning (Osunbunmi & Fang, 2023). The condition and accessibility of these facilities can significantly affect students' comfort, engagement, and overall satisfaction with their educational experience (Nguyen et al., 2023; Ahmad et al., 2023; Hina et al., 2023). For instance, well-equipped science labs and spacious classrooms with adequate lighting and ventilation are more likely to foster a conducive learning environment that supports academic excellence (Njoroge, 2019).

Similarly, the classroom environment encompasses various elements, including teacher-student interactions, peer relationships, and the overall atmosphere of respect and inclusivity (Rafiola, Setyosari, et al., 2020; Ullah et al., 2020). A positive classroom environment encourages students to participate actively, feel safe, and engage in the learning process (Strelan et al., 2020; Zafar & Akhtar, 2023). It also helps reduce anxiety and improve focus, which is critical for academic success (Sugiyono, 2021).

This study explores the nexus between student satisfaction and academic achievement by examining the roles of physical facilities and classroom environments in secondary schools. By investigating how these elements contribute to student's educational experiences, the research seeks to understand the factors that drive academic performance comprehensively. There is a growing need to explore how they interact to affect student outcomes collectively. This investigation aims to fill this gap by examining the direct and indirect impacts of school facilities and classroom settings on student satisfaction and academic performance.

Research Objectives

- To find the relationship between the quality of physical facilities and student satisfaction in secondary schools.
- To find the classroom environment that affects students' academic performance in secondary schools.

To fulfill these objectives, the following research questions were developed.

Research Questions

The research questions are:

1. What is the relationship between the quality of physical facilities and student satisfaction in secondary schools?
2. How does the classroom environment affect students' academic performance in secondary schools?

The following research methodology was used to find the answer to these questions.

Research Methodology

The systematic procedure used for data collection to resolve the problem is called research methodology; its function is to provide the systematic structure of the research study.

Moreover, it is part of a study in which the researcher gives an account of the research methods used. It contains research design, population, sample, and instrument, followed by data collection and analysis (Ahmad et al., 2024, p. 305).

Research design includes the entire process used in conducting research (Rao et al., 2023; Sadaf et al., 2024). This descriptive study was conducted using a survey method. A multi-stage sampling procedure was utilized to select the samples. It combines cluster random sampling with simple random sampling. This descriptive study carefully created three sets of questionnaires for the headteacher, senior teachers, and students. Interviews from head teachers and observation sheets were also employed together with information from a sample population at different time points. The study focused on students, teachers, and head teachers in secondary schools located in the district Rahim Yar Khan of Bahawalpur division of South Punjab, Pakistan.

Data Analysis and Interpretations

The collected data were analyzed using descriptive and inferential statistical measures. A t-test was used to compare the achievements of male and female students. The significant effect of different factors on students' achievement was explored through multiple comparisons using ANOVA using SPSS 23.

Table 1: Comparisons of effect of physical facilities and learning environment and cumulative achievements

Physical Facilities, Learning resources.

Sr#	Items	SD	Mean
1	My school is safe, clean, and well-maintained	0.44	3.76
2	My school has clean drinking water facility.	0.63	3.12
3	My school toilets are clean.	0.62	3.14
4	My school has spacious classrooms to accommodate students	0.61	3.59
5	My school has a playground with adequate sport facilities.	0.29	3.82
6	My school has a science laboratory with sufficient chemical and equipment.	0.32	3.57
7	My school has computer lab and internet facility.	0.33	3.66
8	My school has a library with sufficient books.	0.31	3.54
9	My school has sufficient furniture for students and teachers.	0.2	3.93
10	My school has shortage of qualified teachers.	0	4
11	My school has an adequate teacher student ratio to establish close relation between teacher and student.	0.94	2.71

Dependent factor	Physical facilities and learning environment	df	Sum of Squares	Mean Square	F	Sig.
Marks obtain in class 9th	Headteacher	48	73900.813	1539.6	0.656	0.422
	Teacher	240	281971.333	1174.881	0.684	0.723
	Student	2560	3196064.203	1248.463	1.246	0.215

Table 1 highlights respondents' perspectives on how physical facilities and the learning environment influence educational quality. Adequate physical amenities, such as well-equipped classrooms, libraries, labs, and recreational areas, contribute to a conducive learning environment. Classrooms, labs, and libraries that are properly maintained and equipped provide students with the tools and resources they require for successful learning. A lack of infrastructure may limit access to information and hands-on learning opportunities. A pleasant and secure learning environment is vital to students' well-being. Clean, well-lit, and ventilated spaces provide a pleasant ambiance that fosters focus while reducing distractions. Technology is commonly employed in modern educational institutions to enhance the learning environment. Students' learning opportunities are broadened, and they are better equipped for a technologically oriented world when they have access to computers, the internet, and other digital tools. Students may be inspired and motivated by a well-designed learning environment. Physically pleasing settings contribute to a pleasant environment that encourages curiosity and the desire to learn.

Table 2: Comparisons of effect of class room environment and cumulative achievements.

Classroom Environment

Sr#	Items	SD	Mean
1	My teacher applies appropriate teaching methodologies according to the needs of students.	0.57	3.13
2	My teacher completes the prescribed syllabus within the given time of an academic year.	0	4
3	My teacher plans the lessons according to the prescribed syllabus and follow the scheme of study.	0.47	3.76
4	My teacher reaches the classes in time.	0.14	3.93
5	My teacher observes high level of attendance.	0.28	3.79
6	My teacher tells students how they can improve their performance.	0.28	3.85
7	My teacher uses innovative technologies (computer, internet, online library etc.) in daily teaching practice.	0	4
8	My teacher gives homework and assignments to the students.	0	4
9	My teacher provides individual help when a student has difficulties to understanding a topic.	0.28	3.6
10	My teacher conducts continuous assessment exams to evaluate students' progress and performance.	0.12	3.98

Dependent factor	Class room environment	df	Sum of Squares	Mean Square	F	Sig.
Marks obtain in class 9th	Headteacher	48	73900.81	1539.6	0.7	0.672
	Teacher	240	281971.3	1174.881	0.742	0.564
	Student	2560	3196064	1248.463	1.031	0.412

Table 2 highlights the respondents' views on the classroom environment as a crucial element influencing educational quality. A friendly, well-equipped, and encouraging classroom atmosphere improves student involvement, motivation, and academic success. A positive and well-designed school atmosphere can boost learning outcomes and contribute to children's overall development. Positive and engaging interactions between teachers and students provide a conducive learning

environment. Teachers who communicate well, provide feedback, and encourage queries foster a welcoming environment that promotes active learning. The physical layout of desks, chairs, and learning materials can influence the flow of instruction. A well-organized and well-designed classroom encourages movement, visibility, and engagement, resulting in a more effective teaching and learning experience. A successful education needs appropriate and modern resources, such as textbooks, technology, and instructional materials. A lack of resources can restrict the variety of teaching strategies available and impede students' access to information. Effective classroom management ensures that students are focused and disciplined in their studies. Clear expectations, clear regulations, and fair sanctions all contribute to a positive learning environment with few interruptions. Teachers that utilize inclusive approaches accommodate different learning styles and fulfill the needs of students with diverse backgrounds and abilities. Technology integration in the classroom may improve the learning experience. Computers, interactive whiteboards, and instructional software may all give additional resources and opportunities for interactive and collaborative learning. The general ambiance of the classroom, including student relationships, respect, and a sense of community, all contribute to a positive or negative learning experience. A culture of support and collaboration fosters a passion of learning. Assessment approaches that are fair and transparent contribute to a positive learning experience. Students should understand how they are being evaluated, get constructive feedback, and have opportunities for progress. A classroom setting that encourages flexibility and adaptability in teaching methods may suit a wide range of learning types. Teachers that change their tactics to match the needs of their students help to create a more dynamic and successful learning environment.

PART II
Qualitative Data Analysis
Qualitative data analysis seeks to give a thorough insight of human behavior, motives, and perspectives. Unlike quantitative data, which focuses on numerical measurements and statistical analysis, qualitative data explores the underlying meanings and settings of human experiences. This component of a dissertation will most likely include examining qualitative data gathered through in-depth interviews with individuals. Thematic analysis is a typical approach for analyzing qualitative data. It entails detecting and evaluating patterns or themes in the data, which might reveal insights into the participants' underlying meanings and views.

Figure 1: What is the effect of school infrastructure and learning resources on student academic achievement?

Effect of School Infrastructure & Learning Resourses on Students Achievement
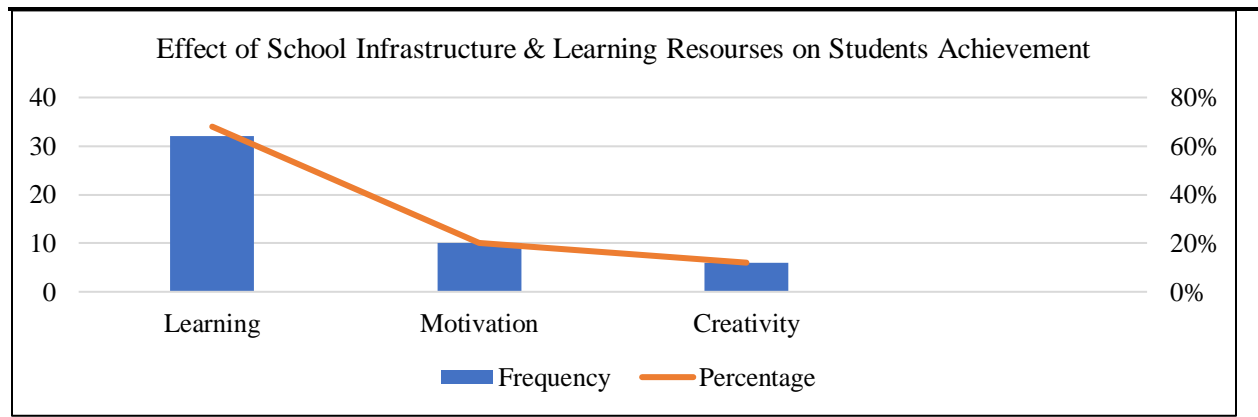
When figure 1 is examined, it is seen that factors of effects of school's infrastructure and learning resources on students' academic achievement are stated to be in the dimensions of learning by 32 (68%) participants, motivation by 10 (20%) participants and creativity by 6 (12%) participants. Views of some participants are given below.

Learning is a complicated process that includes not just students and instructors, but also their families. The factors influencing educational attainment can be roughly classified as school-related and household-related. According to the respondents, there are significant gaps in resources critical to education, such as active libraries, laboratory chemicals, and clean water facilities. The laboratory chemicals have not been changed in five years, rendering the lab inert during that time. When chemicals and equipment are insufficient, teachers do demonstrations. Additionally, respondents claimed that materials in the chemical and computer laboratories are stored as if they were junk, demonstrating a disregard for these critical resources. The chemical lab's condition is described as "speaking louder than words," suggesting that it is plainly insufficient. Principals at rural secondary schools, notably in Rahim Yar Khan district, have noted the lack of critical amenities such as I.T labs, tablets, laboratories, water and health services, a well-equipped library, room size, temperature, and ventilation. These limitations in teaching and learning materials, access to clean water, and other services have had a substantial impact on educational quality, contributing to the current issues. There is a need for changes, such as providing enough and high-quality teaching and learning materials, encouraging instructors with higher compensation and incentives, assuring suitable physical facilities, and integrating stakeholders in the reform process.

Figure 2: What is the effect of classroom environment on students' academic achievement
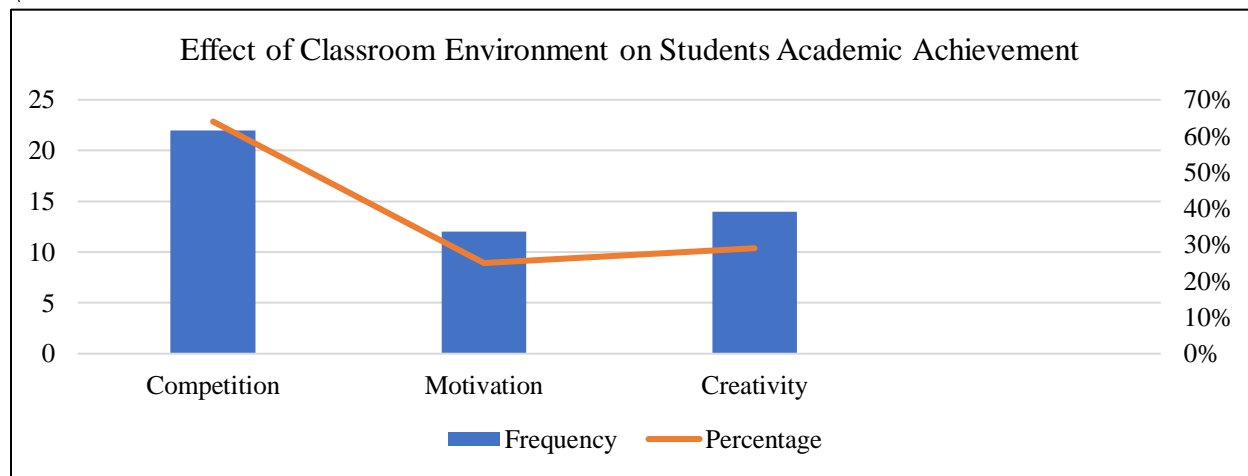

When figure 2 is examined, it is seen that factors of revealing the effect of classroom environment on students' achievement are stated to be in the dimensions of competition by 22(46%) participants, motivation by 12 (25%) participants, and creativity effects by 14 (29%) participants. Views of some participants are given below.

The answer emphasizes the significance of a pleasant classroom environment, stating that a welcoming, inclusive, and exciting setting increases students' involvement with the learning content and motivates them to learn. They also highlight the importance of a supportive and courteous connection between instructors and students in fostering a positive learning environment, which may lead to higher engagement and academic success. According to the

respondent, a healthy classroom culture that encourages hard work, persistence, and academic advancement helps motivate students to achieve success. Overall, the answer emphasizes the importance of the classroom atmosphere in determining students' academic accomplishment, claiming that a pleasant and supportive environment may not only increase engagement and motivation, but also inspire creativity and result in higher academic achievements.

Observation

Figure 3: Classroom Environment

Classroom Enviornment
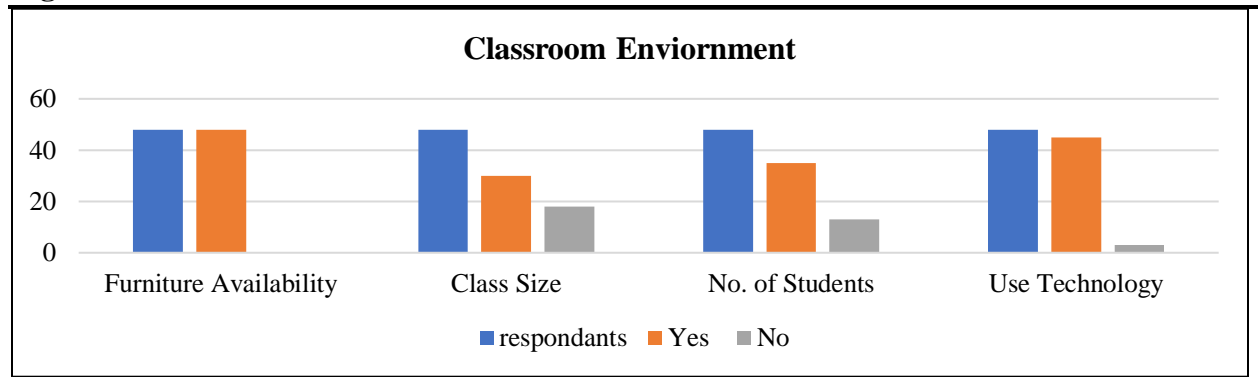
The findings depicted in figure 3, which likely shows the availability of facilities and conditions in schools. The majority of schools have furniture available for students. This indicates that students have the necessary seating arrangements for learning, which is essential for their comfort and concentration. Most schools, especially urban schools, were spacious but overcrowded. This suggests that while the physical space is adequate, there are too many students for the available space, which could impact the learning environment and overall student experience. There is a shortage of teachers in most schools. This indicates a potential challenge in providing quality education, as a sufficient number of teachers are needed to effectively teach and support students. Teachers predominantly use traditional methods of teaching. This suggests that there may be limited use of innovative or modern teaching approaches, which could impact the effectiveness of teaching and student engagement. Furthermore, teachers are not utilizing innovative technologies such as computers, the internet, or online libraries in their daily teaching practices. These findings suggest a need for improvements in teacher recruitment and training, as well as the incorporation of innovative technologies in teaching practices.

Figure 4: Physical Facilities and Learning Resources

Physical facilities and learning resources

respondants ■ Yes ■ No
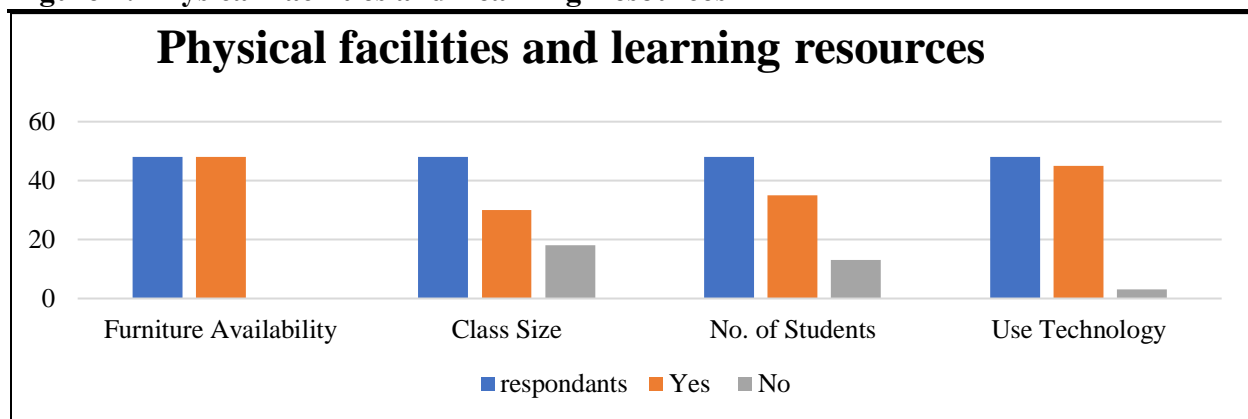
When figure 4 is examined, it shows the availability and functionality of various school facilities. Most schools need an active science lab and library facility, indicating a lack of resources or infrastructure that could hinder students' access to hands-on science learning and library resources. While most schools have a computer lab, the computers need to function, pointing to potential issues with maintenance or access to functional computers, which could impact students' ability to engage with technology for learning purposes. However, playgrounds are available in most schools, which is positive as they provide space for physical activity and recreation, essential for students' overall health and well-being. These findings suggest challenges in the availability and functionality of crucial school facilities, particularly in science labs, libraries, and computer labs.

Findings

Findings of the study are as follows:

Physical Facilities, Learning Resources

The findings show that most respondents agreed that their school is safe, clean, and well-maintained. 76% of respondents agreed, 4% disapproved, and 20% remained indifferent. The mean score of 3.76 is on the agree side of the scale, indicating a significant inclination for agreement among the responders. This mean number indicates that, on average, respondents were firmly inclined to agree with the statement on the status of their school. The standard deviation of 0.44 suggests that the responses are close to the mean. This implies that most respondents' opinions were concentrated around the mean value, with minimal variety in their replies. Based on these results, most respondents agreed that their school is safe, clean, and well-maintained.

According to the available data, most respondents disagreed with the assertion that their school has a clean drinking water facility. Expressly, 35% of respondents agreed, 64% disagreed, and 1% remained neutral. The mean score of 3.12 indicates a predisposition for disagreement since it is closer to the disagree end of the scale. The standard deviation of 0.63 indicates that the responses are close to the mean, implying that the respondents' opinions are consistent. Based on these findings, it was determined that most respondents did not believe their school had a clean drinking water facility.

According to the research, most respondents disagreed with the claim that their school bathrooms are clean. Specifically, 29% of respondents said their school toilets were clean, while 71% disagreed. The mean value of 3.14 implies a predisposition for disagreement since it falls closer to the disagree side of the scale. The standard deviation of 0.62 indicates that the replies are near the

mean, implying that the respondents' opinions follow a steady pattern. Based on these findings, it was determined that most respondents did not believe their school toilets were clean.

According to the statistics, most respondents agreed that their school had large classrooms to accommodate pupils. Expressly, 66% of respondents agreed, and 34% disagreed. The mean score of 3.59 indicates a preference for agreement since it is on the agree side of the scale. The standard deviation of 0.61 suggests that the replies are near the mean, implying some consistency in the views stated. Based on these findings, it was determined that most respondents believed that their school had adequate classroom space to accommodate pupils.

According to the available data, most respondents agreed that their school has a playground with suitable sports facilities. Expressly, 76% of respondents agreed, with 24% disagreeing. The mean score of 3.82 indicates a preference for agreement since it is on the agree side of the scale. The standard deviation of 0.29 suggests that the replies are near the mean, implying a good level of agreement among respondents. Based on these findings, it was determined that most respondents believed their school had a playground with suitable sports facilities.

According to the statistics presented, most respondents disagreed with the assertion that their school offers scientific laboratories with enough chemicals and equipment. 42% of respondents agreed with the assertion, while 58% disapproved. The mean score of 3.57 indicates a predisposition to disagree since it is on the disagree side of the scale. The standard deviation of 0.32 indicates that the replies are near the mean, implying that the respondents' opinions follow a steady pattern. Based on these findings, it was determined that the majority of schools lack scientific laboratories with enough chemicals and equipment, according to the respondents' opinions.

According to the statistics presented, most respondents agreed with the assertion that their school had a computer lab and internet access. Expressly, 54% of respondents agreed, and 45% disagreed. The mean score of 3.66 indicates a preference for agreement since it is on the agree side of the scale. The standard deviation of 0.33 reflects stability in replies around the mean, implying significant agreement among respondents. Based on these findings, it was determined that most respondents believed the school had a computer lab and internet access.

According to the available data, most respondents disagreed with the assertion that their school has a library with enough books. Expressly, 39% of respondents agreed, and 61% disagreed. The mean score of 3.54 indicates a predisposition for disagreement since it is closer to the disagree end of the scale. The standard deviation of 0.31 suggests that the replies are consistent around the mean, suggesting a solid trend in the respondents' attitudes. According to these findings, most respondents disagreed that the school has a library with enough volumes.

According to the research, most respondents believed their school had enough furnishings for kids and instructors. Expressly, 91% of respondents agreed, and 9% disagreed. The mean score of 3.93 indicates excellent agreement because it is considerably on the agree side of the scale. The low standard deviation of 0.20 implies a high level of agreement among respondents, with results clustering close to the mean. Based on these findings, it was determined that most respondents believed the school had enough furnishings for kids and instructors.

According to the research, most respondents believed their school needed more skilled instructors. Specifically, 71% agreed, and 29% disagreed. The mean value of 3.14 indicates a preference for agreement since it is closer to the agreed side of the scale. Furthermore, the standard deviation of 0.62 suggests consistency in replies around the mean, suggesting a solid trend in the viewpoints given by respondents. Based on these findings, it was determined that most respondents believed their schools had a scarcity of qualified instructors.

According to the statistics presented, most respondents disagreed with the assertion that their school had an acceptable teacher-student ratio to foster intimate relationships between instructors and pupils. Expressly, 29% of respondents agreed, 61% disagreed, and 10% were indifferent. The mean value of 2.71 indicates a predisposition for disagreement since it is closer to the disagree end of the scale. The standard deviation of 0.94 suggests stability in replies around the mean, suggesting a solid trend in the viewpoints stated by respondents. Based on these findings, it was determined that most respondents believe their schools do not have an acceptable teacher-student ratio to foster a close relationship between instructors and pupils.

Classroom Environment

According to the data presented, most respondents disagreed with the assertion that their teachers employ a range of ideas and approaches to ensure that all children have equal learning chances. Expressly, 28% of respondents agreed, 71% disagreed, and 1% were indifferent. The mean score of 3.13 indicates a predisposition for disagreement since it is closer to the disagree end of the scale. Furthermore, the standard deviation of 0.67 suggests stability in replies around the mean, suggesting a solid trend in the viewpoints stated by respondents. Based on these findings, it was determined that most respondents believed that teachers did not employ a range of tactics and approaches to guarantee that all children had equal opportunity to study.

According to the statistics presented, most respondents agreed with the assertion that their professors finish the necessary course within the time frame of an academic year. 83% of respondents agreed, 5% disagreed, and 12% were indifferent. The mean score of 3.76 indicates excellent agreement because it is considerably on the agree side of the scale. Furthermore, the standard deviation of 0.87 suggests stability in replies around the mean, suggesting a solid trend in the viewpoints stated by respondents. Based on these findings, it was determined that most respondents felt that their professors should finish the stipulated syllabus within the time frame of an academic year.

According to the statistics, most respondents stated that their professors arrange classes based on the required curriculum and adhere to the study schedule. 83% of respondents agreed, 5% disagreed, and 12% were indifferent. The mean score of 3.76 suggests a preference for agreement since it is firmly on the agree side of the scale. Additionally, the standard deviation of 0.87 indicates a significant trend in the thoughts provided by respondents. Based on these findings, it was concluded that, in general, teachers arrange classes according to the stipulated syllabus and study plan.

According to the data, most respondents agreed that their professors arrived on time for class. 64% of respondents agreed, 35% disagreed, and 0.28% were indifferent. The estimated mean of 3.13 suggests a tendency toward agreement, with a standard deviation of 0.83 indicating a significant trend in the respondents' beliefs. Based on these findings, most respondents feel professors generally arrive on time for lessons.

According to the statistics presented, most respondents agreed that their professors maintain a high level of attendance. 65% of respondents agreed, 21% disagreed, and 14% were indifferent. The estimated mean of 3.79 indicates high agreement, with a standard deviation of 0.84. Based on these findings, it was determined that most instructors maintain high attendance levels during the teaching-learning process. The high mean value and relatively low standard deviation imply a continuous trend among respondents, and the results suggest that teachers work hard to maintain high attendance levels during the teaching-learning process.

According to the research, most respondents agreed that their professors tell them how to improve their performance. Expressly, 80% of respondents agreed, 19% disagreed, and 1% were indifferent. The estimated mean of 3.85 indicates high agreement, with a standard deviation of 0.84. Based on these findings, it is determined that most teachers instruct pupils on how to enhance their performance. The high mean value and relatively low standard deviation indicate a steady and robust trend among respondents, implying that professors regularly provide feedback to pupils on how to improve their academic performance.

According to the data presented, most respondents disagreed with the assertion that their professors employ new technology (such as computers, the internet, and online libraries) in their regular teaching practices. Expressly, 28% of respondents agreed with the statement, 71% disagreed, and 1% were indifferent. The estimated mean of 3.13 suggests a trend toward disagreement, with a standard deviation of 0.87. These findings indicate that, according to respondents, instructors only sometimes employed new technology in their daily teaching activities. The mean value falls on the disagreement side of the scale, as does the relatively high standard deviation. According to the respondents, modern technologies are not widely employed in regular teaching activities.

According to the research, most respondents said their teachers distribute homework and tasks to pupils. 65% of respondents agreed, 21% disagreed, and 14% were indifferent. The estimated mean of 3.79 indicates high agreement, with a standard deviation of 0.84. These findings indicate that most respondents believed teachers distribute homework and assignments to students throughout the teaching-learning process. The high mean value and low standard deviation suggest a steady trend among responders. The findings suggest that teachers distribute homework and assignments as part of the learning process.

According to the presented data, most respondents agreed that their professors provide personalized aid when a student has trouble learning a topic. 64% of respondents agreed, 22% disagreed, and 15% were neutral. The estimated mean of 3.60 indicates high agreement, with a standard deviation of 0.84. These findings indicate that most respondents agreed that their professors give personalized assistance when a student has difficulty learning a topic. The high mean value and low standard deviation suggest a steady trend among responders. The findings show that professors are sympathetic and offer personalized assistance to students who fail to comprehend specific topics.

According to the statistics, most respondents stated that their professors use continuous evaluation examinations to evaluate students' development and performance. 62% of respondents agreed, 24% disagreed, and 14% were indifferent. The estimated mean of 2.94 suggests a tendency toward agreement, with a standard deviation of 0.78. These findings indicate that most respondents agreed that their professors use continuous assessment examinations to evaluate students' development and performance. However, the standard deviation shows that the responses are relatively steady around the mean, reflecting a persistent trend in the view that professors perform continual assessment examinations to evaluate pupils.

Conclusion

Based on the findings of the study, the following conclusions were made:

The study highlighted the school environment's significant impact on providing quality education. It emphasized that a suitable learning environment is essential for enhancing the quality of education provided to students. The study emphasized the importance of adequate physical facilities, including well-equipped classrooms, libraries, labs, and recreational areas. These facilities provide students with the necessary tools and resources for effective learning. Properly

maintained and equipped classrooms, labs, and libraries can facilitate hands-on learning activities and provide students with access to knowledge. Conversely, a lack of infrastructure can hinder students' ability to engage in practical learning experiences. The study also highlighted that the Clean, well-lit, and well-maintained learning environment was noted to create a positive impression and contribute to the overall well-being of students and staff.

The conclusion drawn from the study indicates that a conducive classroom environment positively affects students' learning outcomes. The lack of such an environment, characterized by non-supportive teacher attitudes, a lack of pedagogical skills, and disruptive student behavior, creates hindrances to effective teaching and better student learning; when the classroom environment is not conducive to learning, it can negatively impact both the teaching process and the student's ability to learn effectively.

The study suggests that while most secondary schools have playgrounds, various challenges hinder effectively utilizing these spaces for co-curricular activities. These challenges include limited funds, passive coordination among stakeholders, administrative loopholes, inadequate sports equipment, lack of interest from school heads, and changing trends among students and teachers. As a result of these challenges, the study indicates a reduction in the availability and quality of co-curricular activities in government secondary schools. This reduction is seen as harmful to students' creativity and talent development, potentially leading to negative impacts on their overall growth and development.

The study identifies several critical challenges stakeholders face in the education sector, particularly fund allocation, teacher shortages, and insufficient teaching materials. These issues can significantly impact the quality of education provided to students. A shortage of qualified teachers can lead to a lack of expertise in classrooms, potentially affecting the delivery of high-quality education. Teaching materials can help learning, as access to up-to-date and relevant resources is crucial for effective teaching and learning. High teacher-student ratios are another concern, as they can impact the quality of instruction and individualized attention students receive.

Recommendations

It was proposed that the government should hire additional teachers and reward those already in the profession to increase the provision of excellent education. It should also provide enough teaching and learning materials, create a positive school climate, include all stakeholders in decision-making, and provide suitable physical facilities.

The research also revealed that most schools needed more teaching resources and facilities, such as science and computer laboratories, libraries, safe drinking water, adequate sanitation, and fencing. The Ministry of Education should supply sufficient textbooks, establish science and computer laboratories and libraries, and give clean drinking water and adequate sanitation in schools. It was proposed that secondary schools should revive co-curricular activities. This might include obtaining increased funds for sports equipment and facilities, enhancing cooperation among school administrators and staff, and instilling a fresh interest in co-curricular activities in students and instructors. This allows secondary school principals to establish a more enriched and supportive atmosphere that fosters holistic student development.

It was stated that to improve the delivery of excellent education; schools should prioritize the provision of physical classroom environments and innovative ICT-related teaching facilities. Short-term ICT refresher training courses may be offered to teachers to ensure correct use of advanced instructional technology in the classroom. The study concluded that by incorporating technology into the classroom, educational institutions may create a more dynamic and effective

learning environment that prepares students for success in the digital era. Technology prepares pupils for a society dependent on digital tools and abilities. Interactive learning tools, instructional applications, and multimedia materials may pique students' attention and encourage them to engage in learning actively.

It was stated that to improve the delivery of excellent education, students and instructors should get advice and counseling. These services can improve the learning environment by teaching practical time management skills and addressing physical development difficulties, particularly for girls. Students and instructors with good time management abilities can balance their academic and personal duties more successfully. Streamlining school administrative procedures can help ensure the institution's objectives are adequately prioritized and pursued. This might include improving systems linked to resource allocation, curriculum development, personnel management, and general school administration.

The recommendation is to restructure the education governance system to improve policy supervision and execution. The institution's leaders must delegate power and leadership responsibilities to their subordinates and include other members of the school community in decision-making and school development processes. The Ministry of Education should provide professional development programs for head teachers. These initiatives would encourage fresh insights, ideas, and abilities, eventually raising employee morale and enabling them to operate more successfully and professionally.

It was proposed that the Ministry of Education evolve its function to one of oversight and policy execution. Instead of overseeing educational issues, the ministry would ensure that the Council of Education's policies and directives are efficiently implemented throughout the country. This decentralized strategy may result in more specialized and practical solutions at the local level, ultimately improving the school system.

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