

Physical Facilities for Learning Outcomes: A Study of Sindh Madressatul Islam University

Badee U. Zaman Kehar^{1*}, Safdar Shah²

Abstract

The physical facilities are the significant features for ideal learning outcomes. The physical environment greatly influences students' psychological, sociological, and intellectual growth, and we cannot ignore them in the postmodern world. For this purpose, the research was undertaken on physical facilities and their impacts on students' learning outcomes at Sindh Madressatul Islam University, Karachi, Sindh, Pakistan. The study employed quantitative methodology, gathering information via surveys. There were 100 people in the sample. There were five departments with regular students enrolled. The results were obtained by applying a percentage formula to the data. The results showed that learning outcomes are greatly impacted by physical amenities. The vast majority of respondents concurred that a cozy and healthful environment is necessary for efficient learning, underscoring the need of well-maintained facilities in learning environments. The study emphasizes how spending on physical infrastructure can improve academic achievement, motivation, and student participation. Prioritizing excellent learning environments allows educational institutions to establish supportive places that foster student development, so reinforcing the crucial connection between the caliber of physical resources and academic achievement. In the end, this research encourages institutions to acknowledge the wider effects of physical surroundings on student accomplishment and overall development and promotes intentional upgrades in educational infrastructure to promote improved learning outcomes.

Keywords: Academic achievement, educational infrastructure, physical facilities, learning outcome, students

INTRODUCTION

Learning atmosphere along with physical facilities, is intimately related to the learning outcomes of the students (Kamaruddin, et al 2009) [1]. Multimedia classrooms and computer lab facilities are the demands of the 21st century where students engage themselves in information communication technology-based activities for growing up and updating knowledge according to the needs of this era. However, Students who are unable to perform with all their capabilities have a direct relation with the amenities and physical resources available in the classroom to make teaching-learning more effective. The main reason for poor academic performance or poor learning outcomes is dearth of physical facilities. Infrastructure and the teaching-learning resources such as furniture, stationary, classrooms

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with proper ventilation, such like these Physical facilities are crucial. The physical infrastructure includes proper rooms allocation, information technology equipment, and classroom infrastructure including pure drinking water, neat and clean toilets, and hostels facility. Earthman (2002) concluded in his research study that the availability or lack of such amenities can have significant impact on students' learning outcomes/grades [2]. All aforementioned facilities enhance students' satisfaction, and enrollment and motivate them to participate in academic and non-academic

activities. The learner's learning outcome can be influenced through indoor and outdoor sports halls, cosmetic buildings, and having recreational spaces on the campus where students grow socially and physically. Asiyai, (2012) suggested that campus facilities are one of the resources for instructors and learners to ameliorate their learning and teaching process to obtain an important learning atmosphere [3]. An eminent achievement of the pupils is the outcome of a strong and functional facilities system. Universities attract the students towards high performance when they have all the basic facilities that can internally satisfy the students. Bowers and Burkett said that the students from newer and sufficient university facilities perform better contrasted with those of in the older and insufficient facilities who are deteriorated in their studies outcomes. Physical resources promote learning objectives by fostering critical and creative thinking. Academic performance is improved and learning is encouraged in a well-decorated classroom. Reducing university dropout rates can be achieved by providing sufficient physical amenities. Their effect on the learning outcomes of students is investigated in this study conducted at Sindh Madressatul Islam University in Karachi.

OBJECTIVE

To identify the impact of physical facilities on students' learning outcomes.

LITERATURE REVIEW

In order to improve their motivation and academic performance, students need more than just shelter from the weather; they also need enough room, chairs, labs, internet, and other resources (Akomolafe & Adesua, 2016) [4]. Well-designed learning spaces can promote a constructive approach, which helps students become more actively involved in their learning (Cleveland, 2016) [5]. Physical facilities are the essential elements that contribute to the student's learning outcome. Crampton, (2009) suggested the best way to improve learning achievement is to focus on the learning facilities [6]. Physical infrastructure helps in creating a conducive learning environment. Comfortable seating, adjustable desks, and proper lighting can reduce physical discomfort and fatigue, it helps to focus on learning. According to Usen, (2016), the unavailability and inadequate educational facilities can influence the learning outcomes of the students [7]. However, the educational facilities are whiteboard, chalk, duster, lighting, air conditioning, chairs, multimedia or projector, computers, scientific laboratory, library, pure drinking water, sports hall, recreational spaces, cafeteria, auditorium, neat and clean toilets, cosmetic classrooms, and all other instructional materials that influence on the learning outcomes of the learners. The students become more competitive and healthier when they have clean and fresh water. Ranasinghe and Leisher (2009) argued that technology tools help in designing a cooperative learning atmosphere. Here environment refers to physical and external facilities [8]. In other words, an important factor that contributes to academic success is material facilities in school system. Ogunode and Ibrahim (2024) found that the dropout ration of learners can be reduced and discouraged by providing well-equipped and well-maintained external environment on the campus [9]. A comfortable temperature helps students concentrate and prevent distractions. The learner's learning outcomes have a good potential to bear the good quality educators who will donate to the economy and social development of the country through their leadership skills (Ali et.al, 2009) [10]. Many researches have shown that the learning outcomes of the learner, and effective teaching and learning process almost depend on institutional facilities. According to Smoll and Smith (2002), students who are good at sports, inculcate respect for the rules and regulations, embolden teamwork and sportsmanship, assist in good competition, and provide a sense of achievement [11]. Poor lighting and color affect the health of the students, such as light and color have a great influence on learning and blood Pressure, indicating that off-task is dwindled by 24% and blood pressure dropped by 9% when students were in prescribed color and light settings as compared to a normal classroom. The students who had good infrastructure at the campus performed academically better than the poor infrastructure campus (Arshad, Qamar, & Gulzar, 2018) [12]. Barrett, et al (2020) stated that the Sustainable Development Goals, which are given by the United Nations for all countries of the world, demand upgrade and improve educational facilities at the campus such as the provision of safety, nonviolent practices, inclusive, and efficient learning environment [13]. Mulyasa, (2013) has highlighted some physical facilities in his study following like a classroom, sports area,

library, worship place, playground, and other sources [14]. The esthetic beauty of educational institutions can promote an impressive sense of association that, in turn, can produce eagerness for learning (Jarman, et al, 2004) [15].

RESEARCH DESIGN

This study was designed to identify the impact of physical facilities on students' learning outcomes at Sindh Madressatul Islam University, Karachi. The study employed a survey and quantitative research methodology. The term survey typically refers to a method of gathering information from a selected group of individuals. The study used a self-made Likert-based scale questionnaire with five response options to gather data from undergraduate students at Sindh Madressatul Islam University, Karachi. Two teachers reviewed and validated the questionnaire before its use. The researcher selected 100 students from five departments using convenience sampling, with 20 students from each department participating.

DATA ANALYSIS AND FINDINGS

This pie chart shown in Figure 1, indicates a slightly higher number of male students (46%) compared to female students (39%) from Sindh Madressatul Islam University who participated in this research study. Additionally, 15% of respondents declined to specify their gender.

This chart indicates that most of the respondents were in their late teens or early twenties, with 17–20-year-olds being the most common age group as shown in Figure 2.

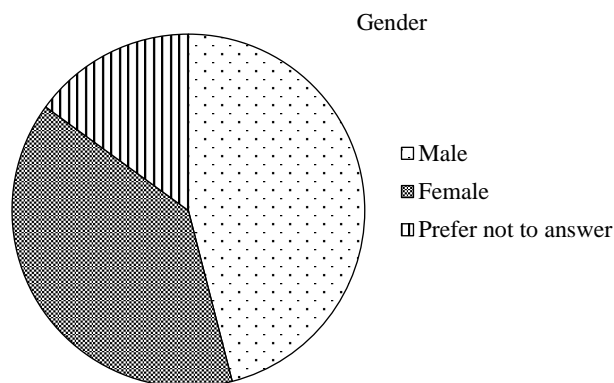


Figure 1. Gender distribution of research participants.

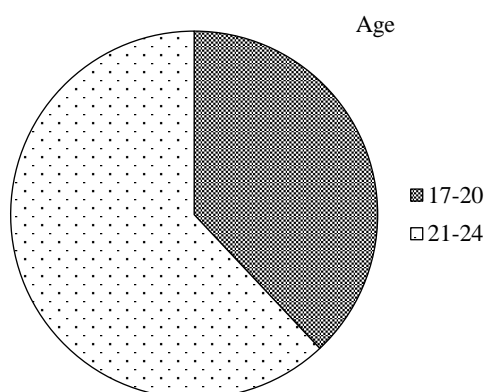


Figure 2. Respondents age.

In Figure 3 respondents mostly answered strongly agree and agree from these answers it can be concluded that physical facilities are important factors contributing to my learning outcome.

In the Figure 4 respondents mostly answered strongly agree and agree it shows that it is difficult for students to prepare for exams without an internet connection.

Most of the respondents strongly agree and agree. It clearly shows that the lack of physical facilities creates a disturbance in learner's studies as shown in Figure 5.

In Figure 6 most applicants answered strongly agree, agree and some undecided that the availability of all resources at the campus helps students to develop critical and creative skills, which support students in achieving learning outcomes.

In Figure 7 answers were almost in strongly agree, and agree, few respondents answered disagree, strongly disagree, and undecided. It exposes that fulfillment of all physical facilities is helpful for learners to achieve high grades in the study.

Many students answered positively it shows that the students' learning outcomes can be influenced through indoor and outdoor sports halls, and recreational spaces in the campus where students grow socially, physically, and mentally as shown in Figure 8.

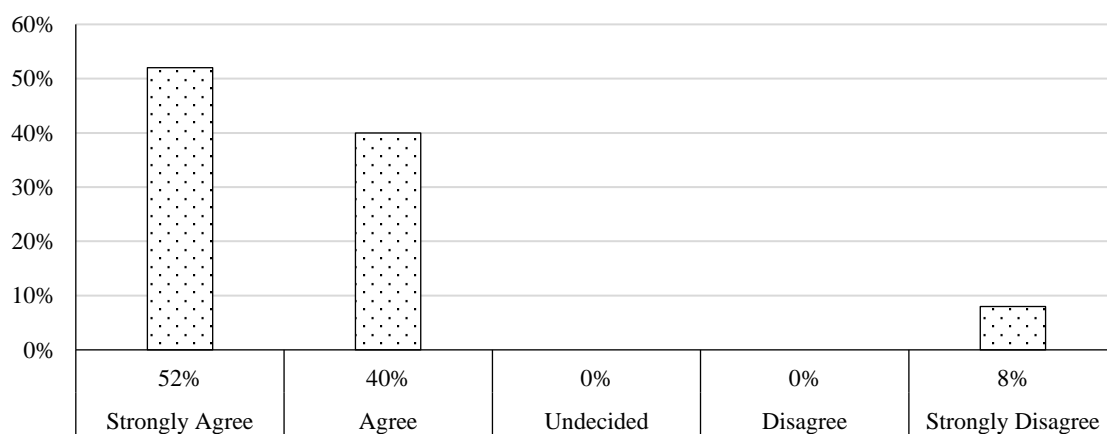


Figure 3. Physical facilities contribution to learning outcome.

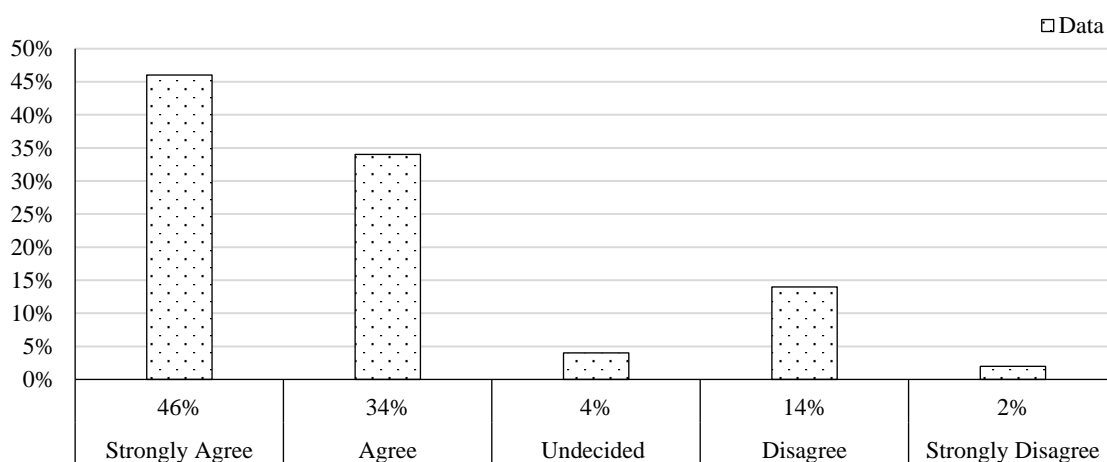


Figure 4. Respondents response to internet access is essential for exam preparation.

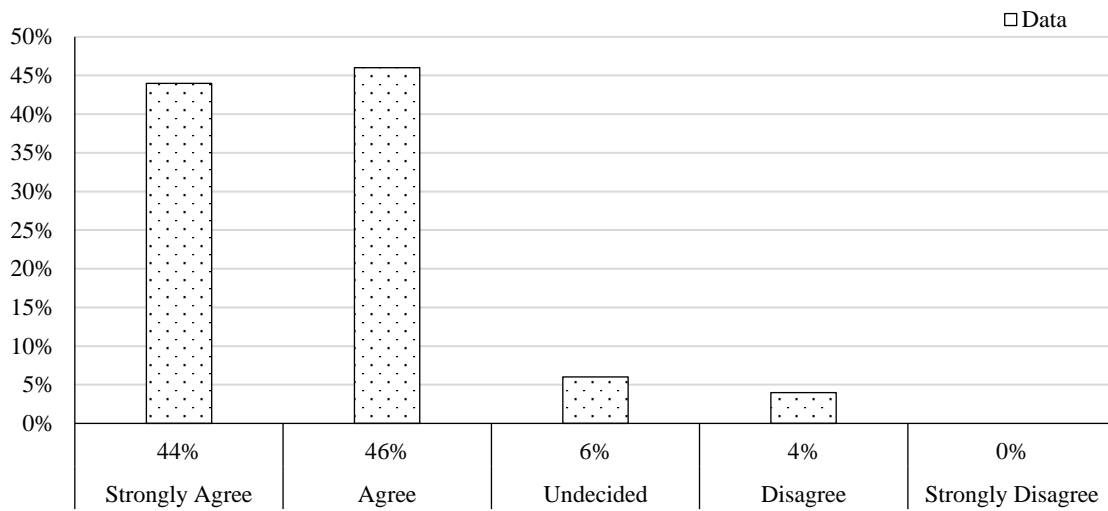


Figure 5. Lack of physical facilities creates a disturbance in learner's studies.

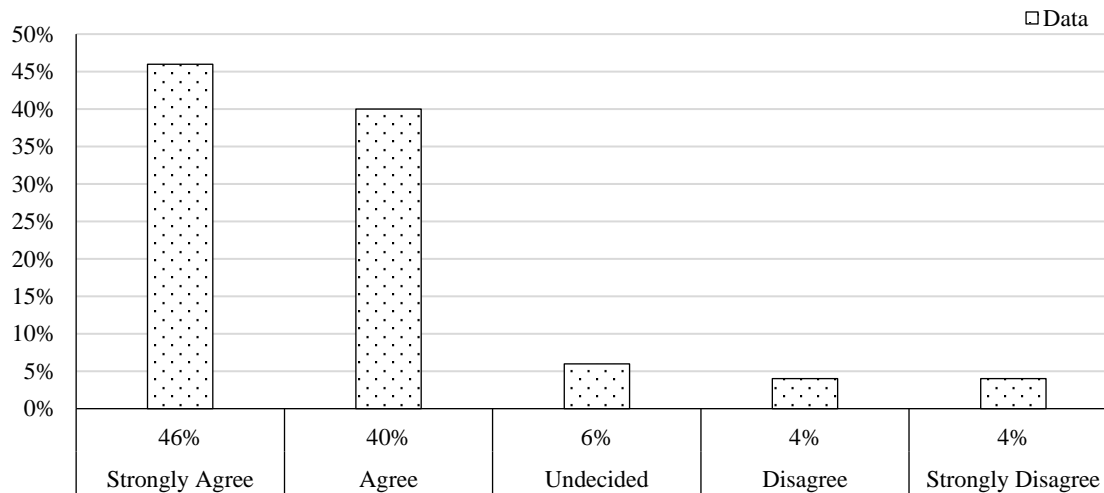


Figure 6. Campus resource availability fosters students' critical and creative skills, aiding in learning outcomes.

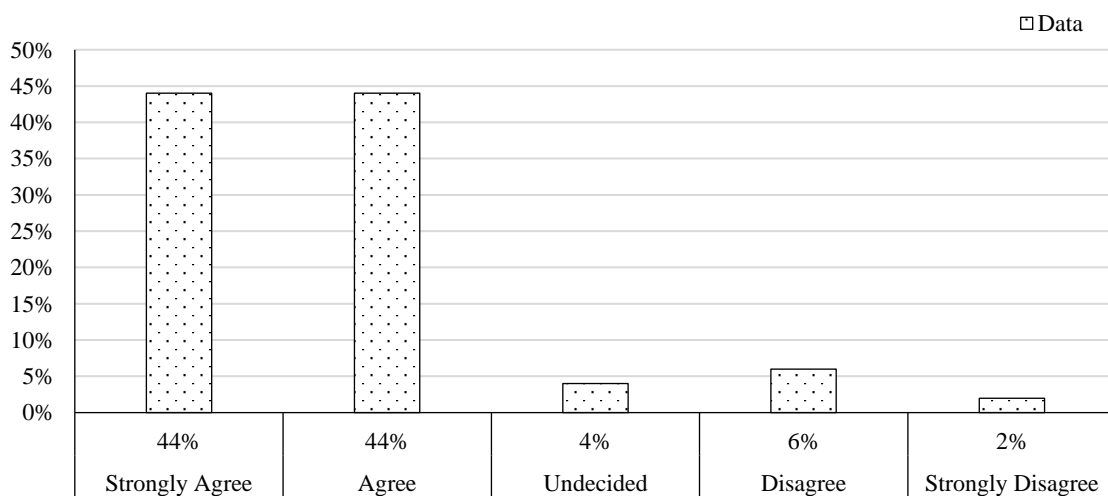


Figure 7. Adequate physical facilities support higher academic achievement.

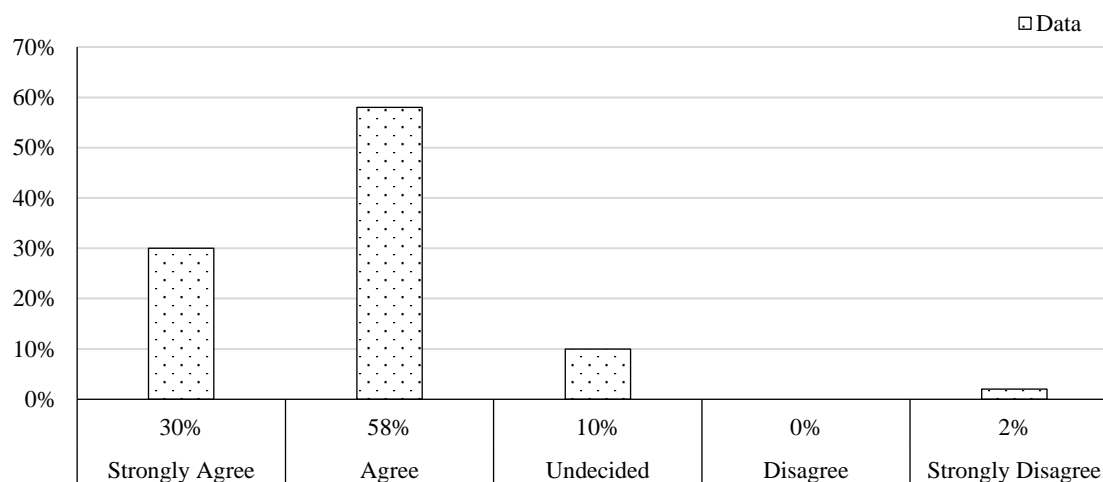


Figure 8. Sports halls and recreational spaces on campus enhancing students' social, physical, and mental growth.

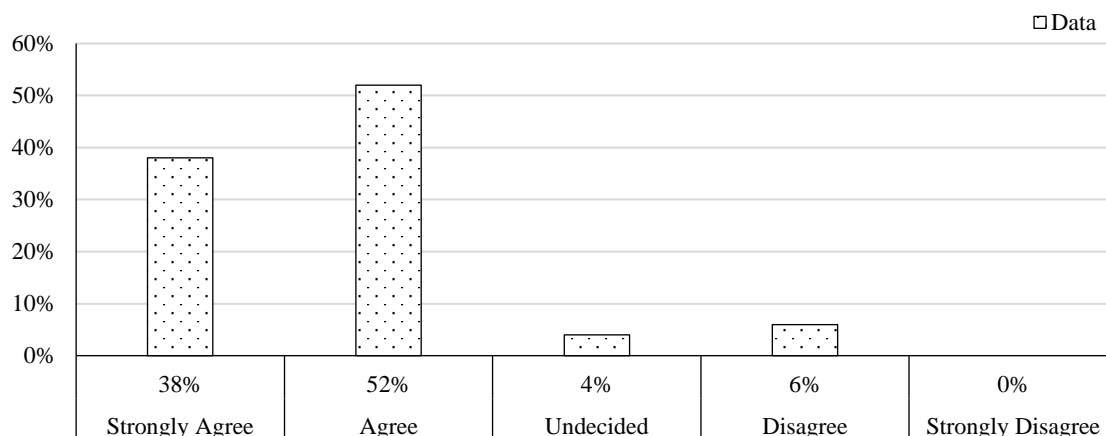


Figure 9. Effective facilities contribution to better performance of the learners.

As seen in Figure 9, the majority of respondents concurred that improved student performance is a direct result of strong facilities.

Although the majority of respondents selected every option, there was little strong consensus. As illustrated in Figure 10, this implies that inadequate physical amenities lead to poorer learner performance.

In Figure 11 the majority of the candidates replied in favor of this statement. It introduces that multimedia classrooms and digital-based libraries help students grow and update their knowledge.

Figure 12 shows mostly responders respond in strongly agree and agree, so, it's proved that physical facilities play a vital role in the smooth functioning of the University and help learners to become critical and creative.

The results show that the lack of physical facilities are barrier in learning process and learning outcomes. Findings indicate that the physical environment is influencing the learning skills of the learners. Student performance is hampered by incomplete or improperly used facilities. While sports and recreation immediately affect accomplishment by fostering social skills, confidence, fitness, and emotional development, digital learning improves engagement and results.

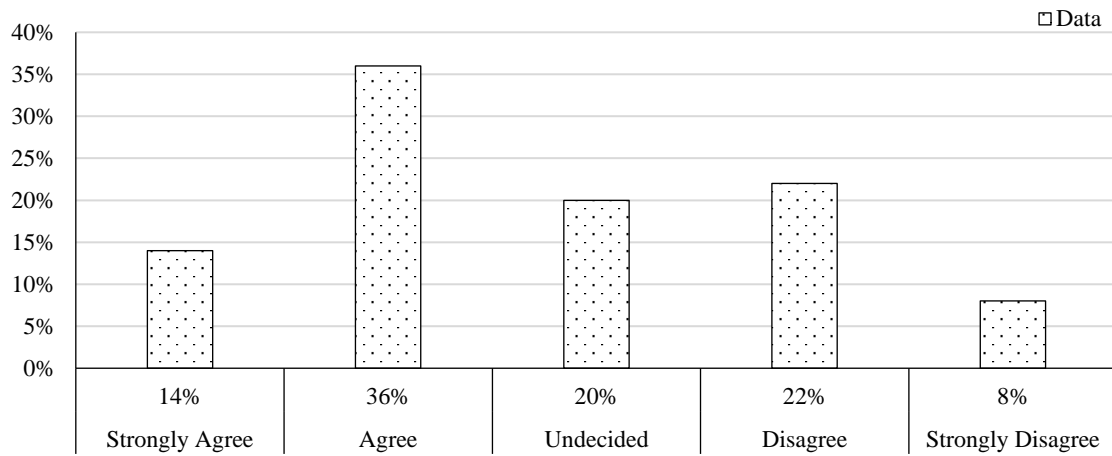


Figure 10. Incomplete physical facilities contribution to the learners' lower performance.

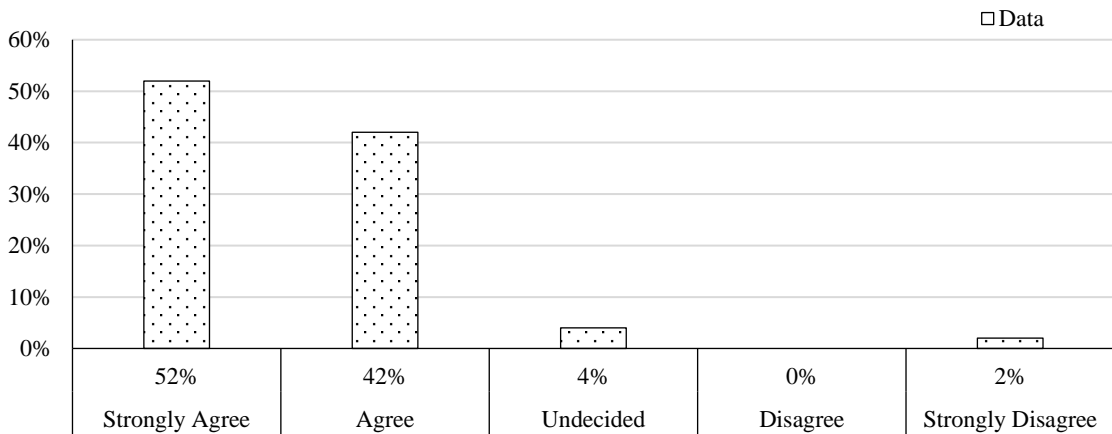


Figure 11. Multimedia classrooms and digital libraries help students expand and update their knowledge.

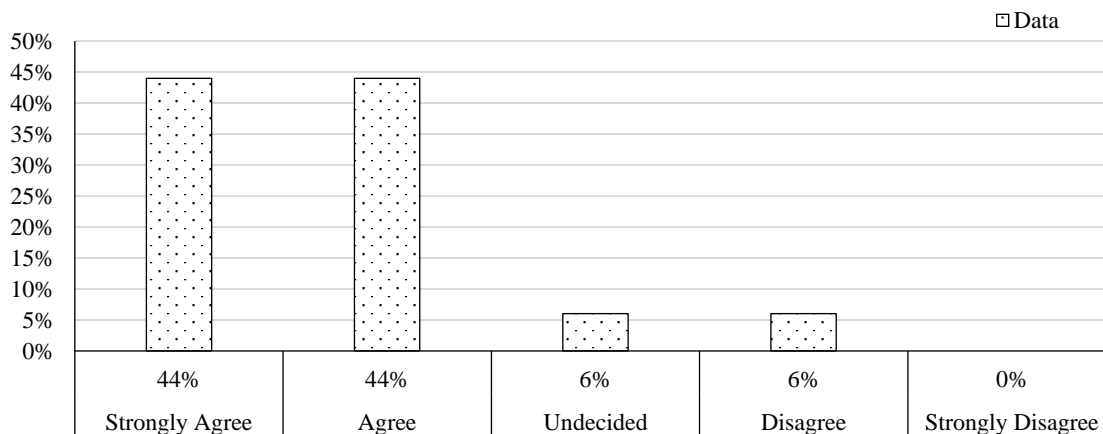


Figure 12. Role of Physical facilities in the smooth functioning of the University.

CONCLUSION

The study aims to find out and examine the impact of physical facilities on students' learning outcomes. Based on the data analyzed and student's responses it is concluded that there is a significant

relationship between physical facilities and students' academic performance. Most of the students pointed out through responses that physical infrastructure with connection to internet devices is a major factor in their performance. The reliability of the research instrument was 0.726 which suggests that the findings are valid. It has been observed that the majority of the respondents responded in strongly agree and agree sections, these responses indicate that infrastructure facilities play a vital role in learner's learning outcomes and skills. There is a strong correlation of a healthy environment on the learning performance of the learners. The university administration needs to provide all the necessary physical facilities that affect students' learning outcomes and skills. The university management should ensure that all campus facilities are in good condition so that students can benefit from the available resources for their learning outcomes. Universities need to invest in and improve the physical infrastructure of the campuses to facilitate the teaching and learning process.

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