

# Satisfaction and Utilization of the Physical Facilities in a State University

Mary Hope S. Arquillo<sup>1</sup>, Glory Mie P. Liquez<sup>2</sup>, Jhuana Kate T. Mugar<sup>3</sup>, Alysza Mae C. Quillano<sup>4</sup>, Zyra V. Santillan<sup>5</sup>, Jemelyn R. Villanueva<sup>6</sup>  
<sup>1,2,3,4,5,6</sup> Carlos Hilado Memorial State University, Fortune Towne, Philippines

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## **Abstract**

*The study aims to determine the level of satisfaction and extent of utilization of the students on the physical facilities in a state university. This study employed a descriptive-correlational research design. The 333 participants were students at a state university and were chosen using the stratified sampling technique. This study used an adapted and modified questionnaire. Frequency, percentage, mean, and standard deviation were used for descriptive statistics, while for inferential statistics; T-test, ANOVA, and Pearson's R were applied. The findings showed that the students are moderately satisfied with the facilities provided by the university. The findings imply that the participants are utilizing the facilities frequently. Moreover, the findings implied that the students' sex, academic program, and year level would not have an impact on their satisfaction and utilization of the facilities. The results presented that the linear relationship was clear but low between the level of satisfaction and the extent of utilization.*

**Keywords:** Physical Facilities, Satisfaction, University, Utilization

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## **I. INTRODUCTION**

Student satisfaction is a focal point for higher learning institutions (Alsheyadi & Albalushi, 2020) [5]. Colleges and universities use student satisfaction data to understand better, improve, and change for continuous improvement, thereby creating more conducive settings for student development. Student satisfaction level has become a significant focus of researchers in the competitive learning environment owing to its strong impact on the success of educational institutes and prospective student registration over the past few decades (Weerasinghe & Fernando, 2018) [53]. Facilities and infrastructure significantly affect the ability of students in the learning process. Universities are expected to comply with the quality of facilities for comfortable, accessible, and complete, as it is one of the determining factors in the success of education (Herwan et al., 2018) [20].

Under the Manual of Regulation for Private Education (MORPHE) of the Commission on Higher Education (CHED) [12] Article VI Section 26, Every private higher education institution in the Philippines must have an appropriate and adequate school facility for its services. The administrative personnel, instructors, and students must have access to enough rooms, furnishing, and fixtures in the facilities to meet their basic demands. Additionally, they must be well-planned such that laboratories and classrooms open to a corridor. Consequently, Section 22 of the Commission on Higher Education Memorandum Order 19, series of 2017 [11], stipulated that the Bachelor of Science in Office Administration programs should provide adequate physical facilities for their courses in accordance with the requirements found in the Manual of Regulation of MORPHE as well as with Batas Pambansa Blg. 232, "The Education Act of 1982"; Republic Act (RA) 8981, "PRC Modernization Act of 2000"; Republic Act (RA) 6541, "The National Building Code of the Philippines" Presidential Decree 856, "The Code of Sanitation of the Philippines"; and the laws governing various professions and CHED issuances.

This study aims to determine the level of satisfaction and extent of utilization of the students with the physical facilities provided by the University. They will serve as a guide to improve the state of the school's physical, information, and technology infrastructure. Several studies relating to customer satisfaction and utilization can be found in e-learning sites (e-journals, Mendeley, Google Scholar, etc.) and the campus library. However, no study related directly to students' satisfaction and utilization of the physical plant and facilities offered by the state university. This study is in accordance with the University's accreditation standards.

## **II. REVIEW OF RELATED LITERATURE AND STUDIES**

This chapter contains the conceptual and related studies on the level of satisfaction and extent of utilization of the physical facilities in a state university.

### **2.1 Satisfaction with the Physical Facilities**

Students are one of the vital strategic entities of a university on which a university depends, so satisfying them is much more critical in a competitive environment to attract more students. Student satisfaction is a short-term feeling resulting from evaluating educational experiences, services, and facilities encountered by a student during his/her learning process (Weerasinghe & Fernando, 2017) [52].

Support system are the most crucial predictors upon student's satisfaction that was found in the study of MacGregor and Hill Lomas, that according to Maimunah, Kaka, and Finch, student's satisfaction can be predicted by three factors, those are the performance of trainers, support facilities and service quality experience. To sum up everything, it is important to the survival of those in higher institutions as it is determined by both academic and non-academic aspects of student's satisfaction as primary customers. (Mestrovic, 2017, as cited in Sibai et Al., 2021) [41].

Rivera (2017) [38] addressed that one way to improve student's abilities is education. If educated constantly, student's abilities will lead to success. The process of improving the abilities of students needs a place to place to learn. Facilities are an important part of education. It is shown by the process of learning that takes place inside and outside of the classroom and needs facilities such as cupboards, tables, chairs, writing tools and many more. Historically, to support the success of education, the schools have needed facilities so that students will feel comfortable when studying and improve their abilities. Meaning, the school should provide adequate facilities for students (Wolfe, 2018) [55]. Students' insight into the quality of services provided at the School of Business is very satisfying. The School of Business students are thrilled with the services accommodated based on the SERVQUAL dimension (Twum & Pephrah, 2020) [48].

The students, faculty, and staff must be satisfied as they are the instant and primary consumer of any learning institution, such as school, training center or facility, etc. (Vu-Hoang, 2017) [51]. It is important for education to be satisfied with learning contents developed for effective learning with digital technology (E – learning), aiming to achieve educational goals or performance to be improved. Since content delivery is vital to e-learning, students find academic resources as their core concern.

The impact of educational resources on its satisfaction has been shown through several research studies over a long time and relevant entities such: relevant, timeliness, fulfillment, reliability, systematic structure, accuracy, usability, and up to date are included. Subsequently, Weerasinghe & Fernando (2018) [53] discovered the impact of facilities in an institution on student satisfaction. A lecturer's room, facilities at the library, computer, accommodation, facilities for employees, and entertainment are included in the facilities.

The University should repair and preserve the cleanliness of the buildings by providing adequate restrooms. The utility staff shall supervise the washing, repair, and servicing of machinery. There must be enough seats in the classrooms. A better drainage system is needed for volleyball and beach volleyball courts. The washrooms and toilets inside the canteen must be kept clean for buyers/clients (Soroten et al., 2019) [44].

Adesina (2017) [2], in their recognition of the need for a well-equipped school, noted that for effective teaching and learning situations, physical facilities and educational goals should be viewed as being closely interwoven and interdependent. Apart from protecting students from the sun, rain, heat, and cold, the school building represents a learning environment that has a tremendous impact on the learners.

Educational facilities are all forms of learning facilities. It includes classrooms, learning media and other necessary equipment that contributes to the educational process at school. On the other hand, all things which secondarily support the teaching-learning process such as the parcel of land, school buildings, roads, water, telephones, and furniture are called Infrastructures. The students' ability to learn can also be affected by the facilities and infrastructure (Herwan et al., 2018) [20]. Espinoza et al. (2017) [15] highlighted that the existing academic programs in terms of the program's content, quality of teaching, and facilities available at the institutions are the basis of perceived quality.

Good school facilities and infrastructure will attract and maintain teacher welfare, support the improvement of student outcomes, and have a positive economic impact on society. The process of achieving educational goals needs to be supported by good quality human and material resources, and facilities and infrastructure are material resources. For this reason, schools must improve the quality of education from all sides, including improving the quality of educational facilities and infrastructure because school facilities and infrastructure are one of the supporting factors in achieving the success of the teaching and learning process in school. Thus, facilities and infrastructure are significant as school attractions in people's eyes (Alkadri et al., 2017) [4].

The school plant, i.e., the school building, is the most important among the physical facilities. Besides, classrooms, school laboratories, libraries, information technology facilities, health facilities, washrooms,

playgrounds, and audio-visual aids motivate students to learn. In public secondary schools, physical facilities essential for effective teaching-learning and students' academic performance must be sufficiently provided (Souck & Nji, 2017) [45]. The available physical facilities are misused and need proper maintenance, while some are in miserable condition, which is an issue of concern for educators (Singer, 2017, as cited in Malik et al., 2020) [27].

Research conducted by Osman et al. (2017) [32] revealed that the significant exploratory variables that increase students' satisfaction at the universities are related to the use of resources, including the facilities provided by the University. The status of physical plants and facilities as evaluated by the students is of moderate level. Moreover, the data analysis showed no significant difference when the students were grouped by age, gender, religion, and civil status. Lastly, there is a significant difference when the students are grouped by educational background (Abellanosa et al., n.d.) [1]. Lance & Kachel (2018) [24] describe the benefits of high-quality school library programs, which are vital for the most vulnerable students, "including students of color, low-income students, and students with disabilities".

## **2.2 Utilization of the Physical Facilities**

Utilization is the duty of the school head to ensure that the school facilities are ready for use when due and that they are correctly used for the purpose for which it is meant. This is necessary to prevent any disruption of educational programs. In managing facilities and meeting the objectives, caution must be taken; that is, facilities must be utilized effectively and optimally. Maximum utilization occurs when facilities are put into practical use in line with the primary objectives –otherwise, it would be counter-productive. Maintenance of school facilities means safeguarding and regular repairs and supervision of school facilities. It implies maintaining the environment to ensure that it is clean, beautiful, and safe for the activities in the school (Badamasi & Mohammad, 2019) [6].

The availability of physical resources in any school system makes little or no impact except when they are being deployed and used for the functions that will contribute to the goals and objectives of the school. The utilization of available physical resources in the school measures the success rate of the school. Without the utilization of physical resources available in the school, it will not be easy to measure how well the school is faring in the routine activities. For example, the utilization of physical resources available in the school makes it possible for practical lessons to be delivered, thereby making the lesson more practical than theoretical (Lawal & Kaegon, 2021) [25].

To provide good quality services and resources, there must be good utilization. Ogu & Edam-Agbor (2018) [29] assumed that effective utilization of these resources and services by the library users only showed the results of the library use competencies. Library usage greatly benefits the users, specifically students and faculty members, to maintain good quality teaching, research, and learning, additionally the extracurricular activities.

When we say physical resources, it will come with the classrooms or lecture rooms, staff offices, health centers, library and laboratory and each has an important role for the availability and effective utilizations for schools and educational institution. Those resources support students' learning process and improve institutional effectiveness. Another important resource for the quality education of every student is instructional materials because it is an efficient strategy to bring about effective teaching and learning (Dambo & Kayii, 2022) [14].

Various factors influence students' utilization of the library either negatively or positively. One of the factors is the availability of library information resources and services. Libraries maintain collections that include not only printed materials such as manuscripts, books, newspapers, magazines, journals, government documents, abstracts, indexes, and grey literature such as projects but also art reproductions, films, sound and video recordings, maps, Photographs, microfiches, CD-ROMs computer software, online resources such as databases e-journals, e-books and other media (Temenge & Agipu, 2019) [46].

Furthermore, utilizing available physical resources in the school makes motivation, experimentation, investigation, creativity, and evaluation of school activities possible among all educational stakeholders. In addition to the above, the library is another physical resource that contributes to the success of the school when adequately utilized (Lawal & Kaegon, 2021) [25]. Although learning contents were mainly evaluated based on accuracy, gradually increasingly accurate information was only sometimes helpful. As the perception increased that the learners' utilization aspect should be considered, the contents of the learning began to be treated in terms of 'suitability' and 'relevance,' respectively (Song & Han, 2019) [43].

In the school system, facilities have an impact on students' academic performance (Akomolafe & Adesua, 2016) [3]. According to the United Nation (2017) [49], the goal of Goal 4 is to guarantee that all people have equal access to high-quality training and education as well as opportunities for lifelong learning. It stated that the goal looks at proficiency levels, the availability of qualified teachers, the provision of school facilities, and differences in educational results in addition to school enrollment. Similar to this, the Federal Republic of Nigeria stated in its sustainable development document (as cited in Kale, 2017) [18] that the attainment of

foundational and higher-order skills, greater and more equitable access to technical and vocational education, training, and higher education, lifelong learning, and the values and knowledge required to contribute to society and function well are the ways in which Goal 4 of the agenda should be realized.

It is an indisputable fact that introducing information and communication technology (ICT) into academic libraries in the 21st century has tremendously brought some drastic changes in the service delivery functions of libraries. According to Husain & Nazim (2015) [21], the vital activities of libraries comprise collection development, reference services management, document delivery service, access to organized collections held by the library, and assisting users in information search and retrieval. In a relatively short period, Information Communication Technology has increasingly become critical in our daily lives and the Nigerian educational system.

Students' achievements depend upon the physical school facility, its age, the design, and the condition of the school. School facilities play a significant role in teaching and shaping students' learning processes in and out of school. No doubt, school building as a tool for instituting an effective teaching and learning process constituted a sizeable investment of public funds over its development and maintenance by the administrators (Nwankwo et al., 2019) [28]. Students are now more frequently engaged in the meaningful use of computers (Sánchez & Alemán, 2011) [39].

Every physical resource in the school has specific purposes for which they are used. Physical resources designed for teaching and learning need to be used for their specific intention to avoid damage to these resources and school accidents of any kind. Similarly, other physical resources designed for non-educational purposes must be utilized for their intended purpose. It is, therefore, the responsibility of school administrators to inform all school stakeholders on the type of physical resources available in the school and how these resources will be used. This will help ensure the optimum utilization of available physical resources in the school and contribute to building a sustainable teaching and learning environment (Lawal & Kaegon, 2021) [25].

### **2.3 Satisfaction and Utilization of the Physical Facilities**

A more vital link has been shown between the school's physical facilities from building and space, health facilities, classroom facilities, learning resources, communication technology, and sports facilities point of view with school improvement. This indicates that the proper functioning of a school requires all essential physical facilities. They are ultimately helpful in an effective teaching-learning process and enhancement of the efficiency of the school (Malik et al., 2020) [27]. Resources have been classified into physical facilities and instructional resources (Kigwilu & Akala, 2017) [23].

Sheltered and sufficient water supply and sanitation in schools are pre-necessities for the privilege of fundamental student training (Wu et al., 2019) [56]. The problem of waterless schools in the country was raised in the Senate, as Senate Recto, cited by Casayuran & Aben (2017, as cited in Hadji Abas & Marasigan, 2020) [17], told DepEd and the Department of Health (DOH) to address the needs of thousands of waterless schools by installing water facilities and more toilets.

According to Bukoye (2019) [10], Instructional materials are essential tools for learning every subject in the school curriculum. They allow the students to interact with words, symbols, and ideas in ways that develop their abilities in reading, listening, solving, viewing, thinking, speaking, writing, and using media and technology.

Research by Mokaya (2013, as cited in Ramli et al., 2018) [36] found that improved academic achievement is associated with adequate space for classrooms, ample spacing in the libraries, properly equipped science laboratories, adequate water and sanitation facilities and active participation in co-curricular activities.

Adequate use of the facilities available for education is one of the many contributing aspects to the problem of students' academic performance in secondary schools. For instance, the value of having sufficient teaching materials in the classroom has an impact on how well kids learn. This is necessary to give high-quality education. Naturally, a lot of this depends on how well the pupils perform. Therefore, it is important to make use of the facilities offered to give the kids' education greater significance (Ohia, 2019) [30].

Furthermore, class layout or the classroom furniture arrangement will also influence students' achievement. It is necessary to make students feel comfortable during the learning activity. Previous research reported that female students feel more at ease when classroom arrangements are in clusters or rows. However, it argued that the arrangements in clusters and rows sometimes could lead to disruptive and off-task behavior among students (Ramli et al., 2018) [36].

Study findings reveal that ICT utilization level has a significant association with the life satisfaction of people (Baek et al., 2022) [7]. There needed to be better utilization of health screening services by the staff of UBTH. However, there was a high level of satisfaction among those who utilized the services (Isara et al., 2021) [22]. Public libraries rely on the support of the people they serve for survival and existence. Therefore, it is recommended that librarians need frequently assess patron utilization and satisfaction (Olayemi, 2020) [31].

Fabunmi (2017) [16], in support of this, asserted that school facilities, when provided, will aid teaching and learning programs and consequently improve students' academic performances. Indeed, the supply of some welfare/health facilities, such as electricity, piped born water, clinic, and toilet. The school toilet is necessary, especially for the students. Many students will use the restroom daily for a couple of hours, and after using it, there is further feedback, either positive or negative (Dagoc et al., 2020) [13]. Experience demonstrates that by having the availability of good physical facilities, students tend to have more interest in learning; this will lead to higher performance (Akomolafe & Adesua, 2016, as cited in Ramli et al., 2018) [36].

The study results have indicated that all facilities and services were only partially utilized by students, although most of those services are required or mandatory. Despite the fact that services and facilities are "utilized to some extent," students have a "very high level of satisfaction. Since the facilities and services were not fully utilized, students may miss some critical services needed for their holistic development. Moreover, variable sex indicated a significant influence in terms of utilization of services; therefore, regardless of sex, there is much to be desired in the effective implementation of the school's services to achieve an optimum level of student satisfaction (Vergara & Magallanes, 2020) [50].

### **III. METHODOLOGY**

This chapter illustrates and discusses the research design, the characteristics and population of the respondents, the sampling techniques, the instrument including its validity, the procedure, the treatment of the data, and the ethical consideration that will be used in this study.

#### **3.1 Research Design**

This study aimed to determine the satisfaction and utilization of physical facilities in a state university. Under this, the researchers used a descriptive-correlational survey. According to Siedlecki (2020) [41], a descriptive quantitative study was used to describe the subject's individuals, events, and conditions without manipulation. This methodology focuses more on what of the research subject rather than the why of the research subject (Bhat, 2018) [9].

A descriptive survey was effective because this research study addresses what question. The researchers are interested in the level of satisfaction and extent of utilization of the physical facilities of a state university. Bold (2001, as cited in Williams, 2007) [54] noted that a correlational study aims to establish whether two or more variables are related. Creswell (2002, as cited in Williams, 2007) [54] defined correlation as a statistical test to establish patterns for two variables. In this study, the researchers will determine the significant relationship between satisfaction and the utilization of students in the University's physical facilities. Findings from correlational research can be used to determine prevalence and relationships among variables and to forecast events from current data and knowledge.

#### **3.2 Participants**

The participants of this study were the officially enrolled students of a state university during the 1st semester of the Academic Year 2022-2023. The researchers secured the enrolment data of the students for the Academic Year 2022-2023 from the Office of the Registrar. The respondents were chosen from the total population and were divided proportionally by academic programs using stratified random sampling. The total number of officially enrolled students at Carlos Hilado Memorial State University- Fortune Towne for the academic year 2022-2023 is 1,984. The 333-sample size was taken from the total number of officially enrolled students using Yamane's formula. Table 1 presents the distribution of respondents to academic programs.

**Table 1**  
Distribution of Respondents as to Academic Program

Academic Programs	Population	Sample Size
BSBA	502	86
BSE	211	35
BSIS	254	43
BSOA	269	45
BSA	154	24
BSMA	594	100
Total	1,984	333

In identifying respondents, stratified random sampling was used. The data is classified into multiple subgroups (strata) based on academic program. The advantages are that it ensures representation of all parts of the population. Stratified random sampling provides better population coverage since the researchers have more control over the subgroups and ensure they are included (Rahman et al., 2022) [35].

In this type of sampling, the population is first divided into subgroups called strata based on similarities, and then from each group or strata, the members are selected randomly. Here, the purpose is to address the issue of less homogeneity of the population and to make a genuinely representative sample (Bhardwaj, 2019) [8].

### 3.3 Research Instrument

In this study, the researcher based its instrument on a previous study. They modified it under the present set-up and structures a state university has. The instrument was composed of three (3) parts. Part I determined the demographic profile of the respondents as to their academic program, sex, and year level.

Part II determined the level of satisfaction towards the physical facilities and ICT infrastructure, respectively. The questionnaire was answered using the 5-point Likert scale as follows:

Numerical Rating	Verbal Description	Verbal Interpretation
5	Always been pleased/contented with the physical facilities offered by the university.	Very Highly Satisfied
4	Often pleased/contented with the physical facilities offered by the university	Highly Satisfied
3	Sometimes pleased/contented with the physical facilities offered by the university.	Moderately Satisfied
2	Rarely pleased/contented with the physical facilities offered by the university	Dissatisfied
1	Very displeased/very discontented with the physical facilities offered by the university	Very Dissatisfied

Part III determined the extent of utilization of the physical facilities and ICT infrastructure. The questionnaire was answered using the 5-point Likert scale as follows:

Numerical Rating	Verbal Description	Verbal Interpretation
5	Utilizes the physical facilities provided by the university always	Very Highly Satisfied
4	Utilizes the physical facilities provided by the university often	Highly Satisfied
3	Utilizes the physical facilities provided by the university sometimes	Moderately Satisfied
2	Utilizes the physical facilities provided by the university sometimes	Dissatisfied
1	Did not utilize the physical facilities provided by the university	Very Dissatisfied

Furthermore, the adopted and modified questionnaire was subjected to content validity. The researchers considered nine (9) experts to test the instrument's validity. The researchers used the Content Validation Ratio (CVR) devised by Lawshe to determine if the items contained in an instrument compromise as an adequate sample of the content it is supposed to represent. The survey questionnaire originally had 74 items, but the researchers were only left with 68 after calculating the content validity index. The CVR for a panel size of 9 is 0.778.

Moreover, the questionnaire was also subjected to a reliability test. The researchers got thirty (30) non-actual respondents to test the questionnaire as a pilot test. Furthermore, the researchers computed the reliability index using Cronbach's Alpha to test if multiple-question Likert scale surveys were reliable. The survey questionnaire contained 68 items, with an item variance sum of 61.02 and a total score variance of 1055.44. In accordance with its range, Cronbach's alpha result of 0.96 is considered excellent.

### 3.4 Data Collection Procedure

After establishing the validity test, 1) the researchers omitted unnecessary questions and conducted a reliability test; 2) After that, survey questionnaires were reproduced for the students; 3) Before performing the survey, the researchers sent a request letter for permission to survey the University; 4) After the permission was granted, the researchers began to distribute the questionnaires to the respondents via manual survey or face-to-

face; 5) The researchers explained the goal and any possible implications of the findings along with the section advisers; 6) The confidentiality of the findings was emphasized, and both the advisers and the participants received this assurance; 7) When finished, the researchers collected all the data from respected respondents and were sent for statistical analysis.

### 3.5 Data Analysis

The gathered data was analyzed using statistical tools.

For objective 1, which was to determine the respondent's demographic profile, frequency count and percentage distribution were used.

For objective 2, which was to determine the level of satisfaction towards the physical facilities when grouped according to an academic program, sex, and year level, the mean score was used.

The following was used to interpret the mean scores:

Mean Score	Description	Interpretation
4.50-5.00	Very Highly Satisfied	Always been pleased/contented with the physical facilities offered by the university
3.50-4.49	Highly Satisfied	Often pleased/contented with the physical facilities offered by the university
2.50-3.49	Moderately Satisfied	Sometimes pleased/contented with the physical facilities offered by the university
1.50-2.49	Dissatisfied	Rarely pleased/contented with the physical facilities offered by the university
1.00-1.49	Very Dissatisfied	Very unpleased/very discontented pleased/contented with the physical facilities offered by the university

For Part 3, which was to determine the extent of utilization of the physical facilities when grouped according to the academic program, sex, and year level, the mean score was used.

The following was used to interpret the mean scores:

Mean Score	Description	Interpretation
4.50-5.00	Very Highly Utilized	Utilizes the physical facilities provided by the university always
3.50-4.49	Highly Utilized	Utilizes the physical facilities provided by the university often
2.50-3.49	Moderately Utilized	Utilizes the physical facilities provided by the university sometimes
1.50-2.49	Less Likely Utilized	Utilizes the physical facilities provided by the university seldom
1.00-1.49	Least Utilized	Did not utilize the physical facilities provided by the university

Objective 4 was to determine if there is a significant difference in the level of satisfaction of students with the physical plant and facilities when grouped according to an academic program, sex, and year level. In sex, a t-test was used, while ANOVA was used in academic programs and year levels.

Objective 5 was to determine if there is a significant difference in students' satisfaction level with the physical plant and facilities when grouped according to an academic program, sex, and year level. In sex, a t-test was used, while ANOVA was used in academic programs and year levels.

For objective 6, which was to determine if there is a significant relationship between the extent of satisfaction with and utilization of the physical plant and facilities, Pearson's R test was used.

### 3.6 Data Trustworthiness

The researchers used the methods suggested by Lawshe (1975) [26] supported by Sandelowski (1986) [40], Pratt et al. (2020) [34], and Hammarberg et al. (2016) [19] to establish the trustworthiness of this study. The researchers observed validity, reliability, credibility, transparency, and consistency. Data collection was conducted over a significant period of time, and strict data analysis and validation were observed. The approach and process were explicitly stated and described. The information supplied by the informants served as the foundation for all assertions.

### 3.7 Ethical Considerations

The researchers gave the participants information about the study, who the respondents would be, and their purposes in the study. Furthermore, asking for consent will be observed, and they will retain the right to

withdraw their cooperation at any moment, even while answering the questionnaire or after it. The researchers ensured that every respondent was protected from harm and kept safe while participating in the study. Moreover, the researchers ensured that no one in the participants was forced to answer the questionnaire. The researchers were sincere and trustworthy when collecting and assessing data. The researchers observed the respondents' anonymity, confidentiality, and privacy as they answered the questionnaire. They can add their name to the questionnaire, leave questions blank, or interfere with it in any other way. The participants remained anonymous in default. The participants were allowed to review their answers and correct their mistakes if possible. The researchers ensured that the data and information would be utilized for academic purposes only. The researchers complied with the Philippine Data Privacy Act of 2012 or RA 10173, which protects individual personal information in information and communication systems in the government and the private sector, creating this purpose a national privacy commission, and for other purposes.

#### **IV. RESULTS AND DISCUSSIONS**

This chapter deals with the presentation, analysis, and interpretation of data. It presents the findings of the study through the use of statistical tools. The discussion includes the following topics: Satisfaction and Utilization of the Physical Facilities in a State University.

##### **4.1 Profile of the Respondents**

Table 4.1 Profile of the Respondents

Variable Grouping	Frequency	Percentage
<b>Sex</b>		
Female	213	64.0
Male	102	36.0
Total	333	100.0
<b>Academic Program</b>		
BSA	27	8.10
BSMA	100	30.0
BSBA	84	25.20
BSE	37	11.10
BSIS	40	12.0
BSOA	45	13.50
Total	333	100.0
<b>Year Level</b>		
First Year	82	24.60
Second Year	78	23.40
Third Year	89	26.70
Fourth Year	84	25.20
Total	333	100.0

The first objective of this study dealt with the demographic profile of the respondents in a state university in terms of sex, academic program, and year level. Given this objective, the data were analyzed using the frequency count and percentage distribution.

Table 4.1 shows the statistical data of the respondents accumulated in a state university with a total of 333 participants. Regarding sex, female respondents dominated the participants with a frequency of 213 or 64%, followed by male respondents having a frequency of 120 or 36%.

In terms of academic programs, the Bachelor of Science and Management Accounting received the most respondents among the academic programs included in the table, with 100 participants, or 30% of the entire population. This indicates that this academic program on campus has a large student population. Subsequently, the Bachelor of Science in Accountancy program got the lowest data, with 27 or 8.10% of the population.

Regarding year level, the table showed that 26.70% of the population, or 82 respondents came from third-year students. This indicates that this academic year, third-year students have the largest population. In the Second Year, they received minor responses to the survey (23.40% or 78 students), ranking it the lowest as to year level.



## 4.2 Level of Satisfaction with Physical Facilities

Table 4.2. Level of Satisfaction with Physical Facilities

Physical Facilities	Mean	Interpretation	SD
<b>1. Classroom</b>			
1.1 Availability of Classroom	4.15	Highly Satisfied	.80
1.2 Availability of Classroom's materials	4.13	Highly Satisfied	.77
1.3 Availability of Classroom Equipment	4.08	Highly Satisfied	.81
1.4 Availability of Classroom Supplies	3.57	Highly Satisfied	1.02
1.5 Functionality of Classroom's Equipment	3.90	Highly Satisfied	.81
1.6 Proper Ventilation	3.89	Highly Satisfied	.89
1.7 Spacious and Appropriateness of the Classroom	4.04	Highly Satisfied	.87
Mean	3.96	Highly Satisfied	.66
<b>2. Library</b>			
2.1 Adequacy of the Space	4.06	Highly Satisfied	.87
2.2 Availability of Resources	4.23	Highly Satisfied	.84
2.3 Accessibility of Resources	4.16	Highly Satisfied	.84
2.4 Functionality of the Equipment	4.17	Highly Satisfied	.82
2.5 Proper Lightings	4.22	Highly Satisfied	.80
2.6 Proper Ventilation	4.15	Highly Satisfied	.81
Mean	4.16	Highly Satisfied	.73
<b>3. Multi-Function Halls (AVR &amp; Gym)</b>			
3.1 Availability of Furniture	3.84	Highly Satisfied	.85
3.2 Ambiance of the Facilities	3.90	Highly Satisfied	.86
3.3 Cleanliness	4.02	Highly Satisfied	.87
3.4 Proper Ventilation	3.93	Highly Satisfied	.88
3.5 Space Adequacy	3.77	Highly Satisfied	.99
3.6 Functionality of Sound Equipment	3.90	Highly Satisfied	.89
Mean	3.90	Highly Satisfied	.79
<b>4. Restroom</b>			
4.1 Availability of Water Supplies	2.82	Moderately Satisfied	1.17
4.2 Accessibility of Restrooms	3.30	Moderately Satisfied	1.03
4.3 Availability of Sanitary Supplies	2.58	Moderately Satisfied	1.19
4.4 Cleanliness and Proper Sanitation	3.09	Moderately Satisfied	1.09
4.5 Functionality of Toilet and Sinks	3.01	Moderately Satisfied	1.12
4.6 Quality and Security of Restroom Stalls	3.11	Moderately Satisfied	1.12
4.7 Ventilation and Lightings Fixtures	3.28	Moderately Satisfied	1.10
Mean	3.03	Moderately Satisfied	.97

*Legend: (4.50-5.00) Very Highly Satisfied, (3.50-4.49) Highly Satisfied, (2.50-3.49) Moderately Satisfied, (1.50-2.49) Dissatisfied, (1.00-1.49) Very Dissatisfied.*

This study's second objective dealt with the satisfaction level with the physical facilities and ICT infrastructure in a state university. Given this objective, the data were analyzed using the mean score.

Table 4.2 shows that the level of satisfaction of the participants with physical facilities is highly satisfied ( $M= 3.76$ ,  $SD= .66$ ), which means that they are often pleased/contented with the facilities provided by the university. This implies that the school could provide all the necessary facilities, such as a classroom, a library, multi-function halls, and a restroom. According to Thakuria (2007) [47], the availability of facilities relevant to users' needs is one factor contributing to user satisfaction.

Correspondingly, in the classroom indicator, the classroom attained a mean of 3.96,  $SD .66$ , interpreted as highly satisfied. The availability of classrooms got the highest mean ( $M= 4.15$ ,  $SD= .80$ ). In contrast, the availability of classroom supplies got the lowest mean ( $M= 3.57$ ,  $SD= 1.02$ ), both interpreted as highly satisfied which means they are often pleased/contented with the classroom facilities. This implies that the facility provided a suitable learning environment for the students.

Moreover, the library attained the highest mean score of 4.16,  $SD .73$ , interpreted as highly satisfied in the library indicator. The availability of resources (Mean = 4.23,  $SD = .84$ ) got the highest mean. At the same time, the adequacy of space got the lowest mean ( $M= 4.06$ ,  $SD= .87$ ), both interpreted as highly satisfied, which means the students are often pleased/contented with the library facilities and thus attained the highest rating. This implies that the facility accommodated the students' needs when considering the resources provided.

Furthermore, in the multi-function halls indicator, the multi-function halls attained a mean score of 3.90,  $SD .79$ , interpreted as highly satisfied. The cleanliness ( $M= 4.02$ ,  $SD= .87$ ) got the highest. Meanwhile, the space adequacy ( $M= 3.77$ ,  $SD= .99$ ) got the lowest mean, both interpreted as highly satisfied, which means the

students are often pleased/contented with the facilities of the multi-function hall. This implies that the facility provided a clean and pleasant environment to the students and sufficient space to accommodate them.

Lastly, the restroom indicator attained the lowest mean score of 3.03, SD .97 among the indicators, interpreted as Moderately Satisfied. Specifically, the accessibility of restrooms (Mean = 3.30, SD = 1.03) got the highest mean while the availability of sanitary supplies (Mean = 2.58, SD = 1.19) attained the lowest mean score, both interpreted as moderately satisfied, which means the students are sometimes pleased/contented with the restroom facilities. The result implies that the facility still fulfills its primary purpose of providing an available restroom and meets basic expectations. So, good restroom stalls are significant (Rittner-Heir & Robbin, 2000) [37].

### 4.3 Level of Satisfaction with ICT Infrastructure

Table 4.3. Satisfaction with ICT Infrastructure

ICT Infrastructure	Mean	Interpretation	SD
1. Availability of Computers	4.13	Highly Satisfied	.83
2. Functionality of Computers	4.10	Highly Satisfied	.86
3. Accessibility of Internet Connection or Wi-Fi	3.89	Highly Satisfied	.88
4. Completeness of Equipment and Machines	4.07	Highly Satisfied	.81
5. Accessibility of Equipment and Machines	4.05	Highly Satisfied	.82
6. The functionality of the Equipment and Machines	4.05	Highly Satisfied	.82
7. Sufficiency of CCTV	3.91	Highly Satisfied	.84
8. Proper Ventilation	4.03	Highly Satisfied	.84
9. Functionality of Lightings	4.06	Highly Satisfied	.87
10. Adequate Space	4.06	Highly Satisfied	.85
11. Sustainability of Power Supply	3.91	Highly Satisfied	.99
Mean	4.02	Highly Satisfied	.74

Legend: (4.50-5.00) Very Highly Satisfied, (3.50-4.49) Highly Satisfied, (2.50-3.49) Moderately Satisfied, (1.50-2.49) Dissatisfied, (1.00-1.49) Very Dissatisfied.

Table 4.3 shows that the participants' satisfaction level with ICT Infrastructure is highly satisfied (M= 4.02, SD= .74), interpreted as highly satisfied, meaning they are often pleased/contented with the ICT facilities provided by the university. This implies that the school could provide all the necessary ICT Infrastructures for students.

The availability of computers got the highest mean (M= 4.13, SD= .83). At the same time, the accessibility of internet connection or Wi-Fi got the lowest mean (M= 3.89, SD= .88), both interpreted as highly satisfied which means they are often pleased/contented with the classroom facilities. This implies that the school provided a well-equipped ICT infrastructure to students for quality education.

The study supports the claim of Papastergiou et al. (2011) [33] that ICT integration towards learning contributed to a significant positive effect on students' ICT self-efficacy and manifested proficiency in using these ICTs in the learning process.

### 4.4 The Extent of Utilization of Physical Facilities

Table 4.4. The Extent of Utilization of Physical Facilities

Physical Facilities	Mean	Interpretation	SD
1. Classroom			
1.1 classroom	4.16	Highly Utilized	.65
1.2 smart tv	4.05	Highly Utilized	.96
1.3 chalks, writing pen, etc.	3.33	Moderately Utilized	1.09
1.4 blackboard	3.47	Highly Utilized	1.15
1.5 lightings	4.27	Highly Utilized	.89
1.6 fans	4.51	Very Highly Utilized	.74
1.7 tables and chairs	4.59	Very Highly Utilized	.74
Mean	4.12	Highly Utilized	.68
Library			
2.1 Library Rooms			
2.1.1 Circulation Section	3.51	Highly Utilized	1.01
2.1.2 Learning Common	3.73	Highly Utilized	1.03
2.1.3 E-library	3.61	Highly Utilized	1.18
2.1.4 Discussion Rooms	3.49	Highly Utilized	1.17
2.1.5 Reading Areas	3.95	Highly Utilized	1.05
2.2 Resources like books, periodicals, and electronic databases	3.36	Moderately Utilized	1.19
2.3 information and communication technology			
2.3.1 computers	3.54	Highly Utilized	1.24
2.3.2 tablets	3.69	Highly Utilized	1.04
2.3.3 WiFi	3.79	Highly Utilized	1.19

Mean	3.67	Highly Utilized	.88
Multi-Function Hall			
3.1 furniture provided	3.85	Highly Utilized	1.03
3.2 halls for Activities	3.53	Highly Utilized	1.03
3.3 sound equipment	3.27	Moderately Utilized	1.16
3.4 air-conditioning units	3.33	Moderately Utilized	1.18
3.5 power supply	3.62	Highly Utilized	1.19
Mean	3.52	Highly Utilized	.93
Restroom			
4.1 comfort room	4.06	Highly Utilized	1.06
4.2 sanitary supplies	3.06	Moderately Utilized	1.31
4.3 faucets	3.79	Highly Utilized	1.08
4.4 sinks	3.86	Highly Utilized	1.06
4.5 water	3.87	Highly Utilized	1.12
Mean	3.72	Highly Utilized	.94

*Legend: (4.50-5.00) Very Highly Utilized, (3.50-4.49) Highly Utilized, (2.50-3.49) Moderately Utilized, (1.50-2.49) Less Likely Utilized (1.00-1.49) Least Utilized.*

The third objective of this study dealt with determining the extent of student's utilization of the physical facilities and ICT infrastructure in a state university. Given this objective, the data were analyzed using the mean score.

Table 4.4 shows that the extent of utilization of the participants with physical facilities is highly utilized ( $M= 3.76$ ,  $SD= .66$ ), which means that they utilize the facilities provided by the university often. This implies that the students highly seek facilities such as classrooms, libraries, multi-function halls, and restrooms.

In the classroom indicator, the classroom attained the highest mean of 4.12,  $SD .68$ , interpreted as highly utilized, which means they often utilize the classroom facility provided by the university. The tables and chairs got the highest mean ( $M= 4.59$ ,  $SD= .74$ ), interpreted as highly utilized, which means they always utilize them. In contrast, the chalks, writing pens, etc., got the lowest mean ( $M= 3.33$ ,  $SD= 1.09$ ), interpreted as moderately utilized, which means they sometimes utilize them. This implies that the students could maximize the use of the infrastructure provided by the school.

Moreover, in the library indicator, the library attained a mean score of 3.67,  $SD .88$ , interpreted as highly utilized, meaning they often utilize the library facility provided by the university. The Wi-Fi ( $Mean = 3.79$ ,  $SD = .1.19$ ) got the highest mean, interpreted as highly utilized, which means they always utilize them. In contrast, resources like books, periodicals, and electronic databases got the lowest mean ( $M= 3.36$ ,  $SD= 1.19$ ), interpreted as moderately utilized, meaning they sometimes utilize them. This implies that the students were accessing resources more on the internet through Wi-Fi than in physical books. Thus, their needs were still catered to by the facility.

Furthermore, in the multi-function halls indicator, the multi-function halls attained a mean score of 3.52,  $SD .93$ , interpreted as highly utilized, which means they utilize them often. The furniture provided ( $M= 3.85$ ,  $SD= 1.03$ ) got the highest mean, interpreted as highly utilized, which means they often utilize the classroom facility provided by the university. In contrast, the sound equipment ( $M= 3.27$ ,  $SD= 1.16$ ) got the lowest mean, interpreted as moderately utilized, which means they sometimes utilize them. This implies that the facility provides a comfortable and functional environment for students.

Lastly, the restroom indicator attained the mean score of 3.72,  $SD .94$ , interpreted as highly utilized, meaning they utilize the restroom facility provided by the university often. Specifically, the comfort room ( $Mean = 4.06$ ,  $SD = 1.06$ ) got the highest mean, interpreted as highly utilized, which means they utilize them often. In contrast, the sanitary supplies ( $Mean = 3.06$ ,  $SD = 1.31$ ) attained the lowest mean score, interpreted as moderately utilized, which means they sometimes utilize them. The result implies that the facility provided sufficient and convenient access to restroom facilities for the students.

The results support the claim of Dambo & Kayii (2022) [14] that the high utilization of physical resources in schools manifests its relevance and value in achieving educational objectives and goals. These resources have been observed as a potent factor in qualitative education delivery, and they could equally determine the level of success or failure of the educational institution. This is due to the resources' quality, which could render the students redundant or effective, as the case may be based on availability and utilization or vice-versa.

#### 4.5 Extent of Utilization of ICT Infrastructure

Table 4.5. The Extent of Utilization of ICT Infrastructure

ICT Infrastructure	Mean	Interpretation	SD
1. Computer laboratory room	3.71	Highly Utilized	1.20
2. ICT Equipment and Accessories	3.60	Highly Utilized	1.21
3. ICT fixtures and appliances	3.69	Highly Utilized	1.18
4. Internet or Wi-Fi	3.90	Highly Utilized	1.11
Mean	3.73	Highly Utilized	1.02

*Legend: (4.50-5.00) Very Highly Utilized, (3.50-4.49) Highly Utilized, (2.50-3.49) Moderately Utilized, (1.50-2.49) Less Likely Utilized (1.00-1.49) Least Utilized.*

Table 4.5 shows the extent of utilization of the participants with the ICT infrastructure is highly utilized (M= 3.73, SD= .102), interpreted as highly utilized, which means that they utilize the facilities the university provides often. This implies that the students could utilize and maximize all the necessary ICT Infrastructures the university provides.

The internet or Wi-Fi got the highest mean (M= 3.90, SD= 1.11). In contrast, the ICT equipment and accessories got the lowest mean (M= 3.60, SD= 1.21), both interpreted as highly utilized, meaning they utilize the facilities the university provides often. This implies that the students could access digital resources for engagement in their academic work.

The result supports the claim of Sánchez & Alemán (2011) [39]. Students are now more frequently engaged in the meaningful use of computers.

#### 4.6 Significant Difference in Satisfaction with Physical Facilities When Students are Grouped According to Sex, Academic Program, and Year Level.

Table 4.6. Significant Difference in Satisfaction with Physical Facilities When Students are Grouped According to Sex, Academic Program, and Year Level.

Variables	Statistical Tool	Tabular Value	P value
Sex	t-test	1.515	0.131
Academic Program	Anova	.253	0.938
Year Level	Anova	2.356	0.072

*\*Significant if p-value is  $\leq 0.05$   $\alpha$  level*

This study determined if significant differences will occur in students' satisfaction levels when grouped according to sex, academic program, and year level. The data needed for the objective were gathered and treated using the statistical tools: t-test for sex and Analysis of Variance (ANOVA) for the academic program and year level.

Data in Table 4.6 shows that the variables sex (p-value = .131; t =1.515), academic program (p-value = .253; F = 0.938), and year level (p-value = 2.356; F=0.072) obtained an alpha value greater than 0.05 which means there is no significant difference on the level of satisfaction with physical facilities according to variable groupings. This implies that the result failed to reject the null hypothesis. Furthermore, the result infers that they are being male and female, enrolled in various academic programs, and the different year level where they are in has no significant bearing on how satisfied they are with the classrooms, library, multi-function halls, restrooms, and ICT infrastructures of a specific state university.

The result deviates from the findings of Abellanosa et al. (n.d.) [1] that there is a significant difference in how students rated their satisfaction with facilities when grouped by educational background.

#### 4.7 Significant Difference in the Extent of Utilization of Physical Facilities When Students are Grouped According to Sex, Academic Program, and Year Level.

Table 4.7. Significant Difference in the Extent of Utilization of Physical Facilities as to Sex, Academic Program, and Year Level.

Variables	Statistical Tool	Tabular Value	P value
Sex	t-test	-1.394	0.164
Academic Program	Anova	1.214	0.302
Year Level	Anova	2.039	0.108

*\*Significant if p-value is  $\leq 0.05$  a level*

The fifth objective of this study dealt with the possible differences in the extent of students' utilization when grouped according to sex, academic program, and year level. The data needed for the objective were gathered and treated using the statistical tools: t-test for sex and Analysis of Variance (ANOVA) for the academic program and year level.

Table 4.7 presents the data to ascertain if a significant difference occurs in the extent of utilization of physical facilities when students are grouped according to sex, academic program, and year level. Data further shows that sex obtaining a p-value = -1.394; t = 0.164, an academic program with p-value = 1.214; F = 0.302, and year level with p-value = 2.039; F = 0.108, respectively, has a higher alpha value based on 0.05 level of significance; hence the null hypothesis stating that is no significant difference on the extent of utilization of physical facilities according to variable groupings is accepted. The result implies that their sex, academic program, and year level categories have nothing to do with their extent of utilization of the classrooms, library, multi-function halls, restrooms, and ICT infrastructures.

The result contrasts with Vergara & Magallanes (2020) [50] that the variable sex indicated a significant bearing in terms of utilization of facilities; therefore, being female and male has a significant effect on their utilization of the school's facilities.

#### 4.8 Significant Relationship between the Level of Satisfaction and Extent of Utilization

Table 4.8. Significant Relationship between the Level of Satisfaction and Extent of Utilization

	Mean Level of Satisfaction	Mean Extent of Utilization
Mean Level of Satisfaction Pearson's Correlation Sig (2-tailed) N	1 333	.363** .000 333
Mean Extent of Utilization Pearson's Correlation Sig (2-tailed) N	.363** 0.000 333	1 333

*\*Significant if p-value is  $\leq 0.05$  a level*

The sixth objective of this study dealt with the determination of a significant relationship between the level of satisfaction and the extent of utilization of the physical facilities and ICT infrastructure. Given this objective, the data were analyzed using Pearson's R test.

Table 4.8 shows the p-value of .000 and the R-value of .363. It means that the linear relationship is clear but low; thus, it rejects the null hypothesis stating that there is no significant relationship between the level of satisfaction and the extent of utilization. The data further implies that although the level of satisfaction tends to go up in response to the extent of utilization, the relationship could be more assertive. The variables influenced by each other are weak, and most likely, while some students are moderately satisfied with the physical facilities, they are utilizing them to a high extent.

The result confirms the findings of Osman et al. (2017) [32] that students' satisfaction at universities is related to the use of resources, including its facilities. Nevertheless, the positive linear relationship contradicts the findings of Vergara & Magallanes (2020) [50] that despite the facilities being utilized to some extent, students have a very high level of satisfaction.

## V. CONCLUSION

This study presented findings that determine the level of satisfaction and extent of students' utilization of a state university's physical and ICT facilities. The results of the study revealed that the majority of the respondents belong to the female. Therefore, the researchers concluded that female mainly populates the university. In terms of an academic program, the Bachelor of Science in Management Account got the most respondents which shows that most students had chosen to be enrolled in this program, while the Third-Year students gained the highest number of participants; hence, they seemed to have the largest population.

The data showed that the participants expressed high satisfaction with the facilities. Based on the study's findings, the students are "highly satisfied" with the services offered and provided equipment by both physical and ICT facilities. While in the extent of utilization of physical and ICT facilities, the findings indicated that generally, the students are highly utilizing them. Furthermore, the students are using the facilities provided by the university often.

Additionally, results showed no significant difference in the level of satisfaction between sex, academic program, and year level. Therefore, the respondents' demographic profiles have little bearing on their satisfaction with the physical facilities. It is shown in the results as well that there was no significant difference in the extent of utilization among the demographic profiles, which means that it does not affect the extent of their utilization.

Lastly, the results presented that the linear relationship was clear but low; thus, it rejects the null hypothesis stating that there is no significant relationship between the level of satisfaction and the extent of utilization. The variables influenced by each other are weak, that most likely, while some students are moderately satisfied with the physical facilities, they are utilizing them to a high extent.

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