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**Students' Perception of Teaching and Learning During Pandemics:
A Case Study**



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Students' Perception of Teaching and Learning During Pandemics: A Case Study

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Abstract

Purpose: This study explored university students' perception of teaching and learning during the COVID-19 pandemic and describes students' experiences.

Methodology: The study's mixed methodology was primarily focused on the enrolled students at a chosen public university in Namibia, which comprised of approximately 12 500 students of which 390 participants were conveniently. The study encompassed qualitative open-ended questions analysed using a deductive approach. Qualitative data was organized; coded to generate themes. Quantitative data was analysed using SPSS.

Findings: Most students claimed the online system was better than they had expected, but many also highlighted that the Internet connections were problematic, including erratic and unstable connections and insufficient data. Students further revealed that the online teaching and learning platforms helped them to master skills in digital devices.

Unique contribution to theory, practice and policy: The academic achievement of students during a pandemic, as well as sociodemographic factors prevailing and previous university students' performance data, should be taken into consideration in similar studies to ascertain the real influence of the pandemic on students' academic performance.

Keywords: *COVID19, Pandemic, Perception, Expectation, Satisfaction, Teaching and Learning, Service Gap*



INTRODUCTION

1.1 Introduction

In 2019, a new coronavirus 2019-nCoV or SARS-CoV-2, commonly referred to as (COVID-19) made its initial appearance in China. One of the biggest socioeconomic problems in history was brought on by this sickness, which spread globally. Additionally, this epidemic has had a negative impact on educational systems across the world. To guarantee continuous educational delivery to their remote students, numerous institutions and universities quickly advanced their digital tools and platforms (Nakale, 2020). Students' perceived quality can be defined by their judgment of digital learnings' overall excellence or superiority relating to extrinsic and intrinsic attributes (Zeithaml, 1988). Whether a students' perception of learning is strongly related to his or her actual learning is questionable (Spooren, Christiaens, & Mortelmans, 2014). However, it is believed that, in the higher education context, student perceptions are crucial to the success of e-learning, especially in the unique setting brought about by the COVID-19 epidemic (Kaisara & Bwalya, 2021).

Another aspect is that of educational marketing which represents the extension of marketing for schools to differentiate themselves on the education market and to build trust, loyalty, and credibility with customers (Manea & Purcaru, 2017).

1.2 Problem Statement

To ensure that learning activities continued throughout the COVID-19 epidemic, Namibian academic institutions implemented e-learning in 2020. To improve e-learning platforms and to ensure that remote teaching occurs during the COVID-19 pandemic, the chosen university created a registration page for students to sign up for and apply for online connectivity devices (Nakale, 2020). Considering the new e-learning mode, a new question arose as to whether students' perception of online learning would be related to better learning outcomes during the COVID-19 pandemic (Setiawan, Patah, & Gani, 2021). According to (Bali & Liu, 2018), while its effects on student experiences have not yet been completely investigated, blended learning is likewise becoming more and more popular in higher education. Therefore, since the idea of expectations is measured against performance outcomes, it is anticipated that students' perceptions of service quality will have a direct and favorable impact on their satisfaction (Malik, 2012). Hence, there is a knowledge gap that must be studied because of the scarcity of prior studies on how college students perceive e-learning (Kaisara & Bwalya, 2021).

1.3 Research objectives

The study seeks to achieve its general objective of student's perception of teaching and learning during the COVID-19 pandemic by focusing on the following specific objectives:

- To investigate the chosen university students' experiences during the COVID-19 pandemic.

- To determine the chosen university students' learning challenges during the COVID-19 pandemic.
- To evaluate the chosen university students' level of satisfaction of learning during the COVID-19 pandemic.

1. 4 Significance of the study

The implications for positive consumer perception increases customer satisfaction which contributes to higher standards of learning, to empowering employees, future consumers and making a better service provider.

LITERATURE REVIEW

2.0 Introduction

A coronavirus known as SARS-CoV-2 is to blame for the worldwide COVID-19 pandemic. Coronaviruses (CoVs) come in a variety of forms and are classified into four genera: alpha-, beta-, gamma-, and delta- CoV (Milibari, 2020). These viruses have virus-related RNA genomes which enable them to mutate (Milibari, 2020). Middle East respiratory disease (MERS) and SARS, both of which have high fatality rates, are caused by the vast CoVs family (World Health Organization, 2021).

The first human cases of COVID-19 were reported from Wuhan City, China, in December 2019. The first human cases of MERS-CoV were traced in dromedary camels and humans in 2012 (World Health Organisation, 2021).

An infectious condition known as Coronavirus Disease 2019 was brought on by a brand-new Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) (COVID-19) (Lone & Ahmad, 2020). The encapsulated RNA virus known as COVID-19 is clearly prevalent in both humans and animals (Milibari, 2020). Late December 2019 and early January 2020 saw the onset of the first COVID-19 instances in humans. These incidents had a direct connection to Wuhan City's Huanan Wholesale Seafood Market, which sold seafood and wild and domesticated animal species (World Health Organisation, 2021).

SARS CoV-2 is extremely contagious and quickly spread around the world. The World Health Organization (WHO) designated COVID-19 as a public health emergency of worldwide concern on January 30, 2020, and on March 11, 2020, it was classified as a pandemic (Balkhair, 2020). There were 217 000 fatalities and 935 000 recovered cases as of April 29, 2020, with over 3.1 million confirmed cases in 185 countries (Verikios, 2020). As of December 14, 2021, the WHO had received reports of 270 031 622 confirmed cases of COVID-19 worldwide, including 5 310 502 fatalities (World Health Organisation, 2021). The number of nations affected, confirmed cases, and mortality rates continue to change because the pandemic is ongoing (Lone & Ahmad, 2020).

A new SARS-CoV-2 variant of concern (VoC), omicron, was reported on November 25, 2021 (Karim & Karim, 2021). The most divergent form, the omicron variant, raises concerns that it

might be linked to higher transmissibility, a considerable decline in vaccine effectiveness, and an increased risk of reinfection (European Centre for Disease Prevention and Control, 2021).

There is no better way for consumers to protect themselves than by engaging in their own preventative behaviors, such as social isolation, taking public health precautions, limiting social gatherings, tracking down cases, participating in active testing, and, most importantly, getting vaccinated, which is the most reliable way to prevent and control COVID-19 in the long run (Hu, Guo, Zhou, & Shi, 2020).

2.1 Learning during the COVID-19 pandemic in Namibia

According to (UNESCO, 2020), it is clear how the crisis is currently affecting higher education, but it is unclear which effects will have a long-term or medium-term influence on the various actors. It is challenging to forecast what might occur soon given the lack of precedent for similar events (UNESCO & IESALC, 2020). As a result, COVID-19 control mechanisms have been put in place globally in the education sector. These initiatives in the educational field are intended to help slow the virus's spread and mortality rates. Due to this circumstance, a sizable fraction of pupils worldwide are no longer in school (Strategy, 2020).

Namibia announced its first confirmed COVID-19 infections on March 13, 2020. On March 14, 2020, the Ministry declared a COVID-19 epidemic, and on March 17, 2020, the government declared a State of Emergency. Several urgent public health and safety precautions were rapidly implemented, including a complete lockdown, a prohibition on international travel, a ban on large gatherings, and mandatory quarantine measures (World Health Organisation, 2021).

Namibia has a few higher education institutes (HEIs) and universities that offer tertiary degrees and post-graduate certifications (Jellenz, Bobek, & Horvat, 2020). Many such institutions have either rescheduled or canceled all on-campus activities like workshops, conferences, sports, and other events as a response to growing worries over the COVID-19 outbreak. Transitioning to online teaching platforms is already underway for faculty members.

In 2020 UNESCO says the immediate impact on students' lives, costs incurred, financial burdens, and, of course, learning continuity and continuity of instruction, has naturally been the temporary cessation of face-to-face instruction at higher learning institutions. This has particularly affected undergraduates and those who are about to complete upper secondary school and want to pursue higher education (UNESCO, 2020).

Universities are now required to use online teaching methods due to the global condition of emerging legislation. Students will undoubtedly be impacted by this circumstance in some way, especially in the early stages of implementation. The quality of online education is a crucial issue, though, and it needs to be addressed properly (Sahu, 2014). It might be difficult to apply assessments made for in-person instruction to online courses. The same author also asserts that professors and students are unsure of how to administer unfinished assignments, projects, and other continuing evaluations (Sahu, 2014).

Regarding the effects of COVID-19 on the educational sector, it has been noted that there have been conflicting opinions. However, it has been shown that restoring educational facilities to their prior state could not be sufficient if wash stations or latrines are absent, leaving kids open to new health concerns (Sahu, 2014).

Despite the impact of COVID-19 on the students and academic performance of institutions, there is a positive view about the efforts made by academic institutions of higher learning. For example, according to (Gagnon, 2020), the resiliency and commitment of the higher education community is inspiring, considering the amount of adversity they continue to overcome, particularly with many research institutions and their academic medical centers on the frontlines of the fight against COVID-19. However, it is worth understanding that research gaps still exist in literature with regards to the specific effects of COVID-19 on the academic performance of students at higher learning institutions.

Many governments have mandated that institutions stop providing face-to-face instruction to most of their students during the COVID-19 pandemic and transition to online instruction and virtual learning instead (Daniel, 2020). In Namibia, the government, through the Ministry of Education, Arts and Culture (MoEAC), called for the adoption of virtual learning in all public schools for the duration of the lockdown and beyond, two weeks into the country's shutdown, in an effort to save the academic year and possibly avoid a setback of at least a year or two (Shikololo, 2020).

A study by (Faheem Uddin Syed, 2021) reveals that some of the issues that arose with the pandemic, as many parents could no longer afford sending their children to higher education institutions, included unemployed parents or parents who have lost their jobs, economic stress, reduced earning capacity versus huge family size, and the higher cost for the rural family in sending their child to school.

The pandemic's consequences were noticeable in the education sector, where they caused significant disruptions and had an impact on thousands of students, as training providers were abruptly compelled to switch to the e-learning and teaching method (Namibia Qualifications Authority, 2020).

According to (Bali & Liu, 2018) while the effects of distance learning on the experiences of students and instructors have not yet been extensively investigated, blended learning (online and traditional ways) is also expanding and developing in popularity in higher education. Accessibility, the use of proper techniques, course content, and assessment criteria are only a few of the variables that affect how successful e-learning is (Bączek, Zagańczyk-Bączek, Szpringer, Jaroszyński, & Woźakowska-Kapłon, 2021). There is little research on the difficulties these stakeholders encounter when utilizing e-learning in the Namibian higher education context, particularly in the unique atmosphere produced by the COVID-19 epidemic, despite the fact that student perceptions are a crucial component of e-learning success (Woyo, Rukanda, & Nyamapanda, 2020).

In 2020, 28 133 higher education students who are impacted by the price of data bundles did not have access to computers or tablets (Gervasius, 2020). According to one of the chosen university

students (Bodole, 2020), despite having the necessary technology, several students struggled to complete their practical examinations while being separated from other students and their professors. Additionally, pupils who lack or have low socioeconomic status and cannot afford a broadband connection are particularly at risk of falling behind (Soykan & Adedoyin, 2020). To improve e-learning platforms and to ensure that remote teaching occurs during the COVID-19 epidemic, the chosen university developed a registration page for students to sign up and apply for online connectivity devices (Nakale, 2020).

The way customers act and think is always changing as a result of globalization and technological advancement (Jashari & Rrustemi, 2017). In order to guarantee continuous educational delivery to their remote students, institutions have fast expanded their digital tools and platforms (Nakale, 2020). Despite the idealistic ideals of e-learning, more work needs to be done before it can be viewed as a tool that might improve Namibian university students' access to education and inclusive learning (Kaisara & Bwalya, 2021).

The COVID-19 pandemic has had a positive effect in that it has brought attention to the under-recognized issue of e-education. On the other hand, it has also highlighted the accessibility issues of students and institutions; students' ability to access instruction, technological infrastructure, the cost of internet access, and institutions' capacity to move programs to online learning. Therefore, educational marketing is an extension of marketing for schools to help them stand out on the education market and develop consumer loyalty, trust, and credibility (Manea & Purcaru, 2017).

A previous study by (Kadhila & Nyambe, 2021) suggests that Namibia needs to adapt to the new realities by investing in IT capacity that enables higher education institutions to transform their current quality assurance procedure to be able to respond to the new challenges posed by the online pedagogies. It also indicates that higher education institutions all over the world have recognized the importance of online pedagogies with the pandemic crises.

2.2 Customer service

Customer service, broadly speaking, is everything a business does for customers to improve their experience. Consumers of today are described as intelligent, knowledgeable, educated, self-assured, and informed. These clients have high expectations for the services they desire to obtain, and regardless of the industry, as customers start to receive better services, their expectations raise. If one takes Maslow's hierarchy of needs into account (1943), today's customers might be best viewed as self-actualizing (Jeske, Chimusoro, & Karodia, 2015).

The "Essence of Customer Value," also known as the "Superior Customer Value" hypothesis, was created by (Weinstein, 2012), in light of this, value is defined as "the satisfaction of customer requirements at the lowest total cost of acquisition, ownership, and use" (Weinstein, 2012).

Business concepts like value, quality, service, and excellence are nebulous and have many different meanings to different people. Value itself denotes relative importance or worth (Weinstein, 2012). The S-Q-I-P strategy stands for service, quality, image, and price. Value is

largely a mix of Service, Product Quality, Image, and Price needs, at the lowest overall cost of acquisition, ownership, and use, according to the S-Q-I-P strategy (Weinstein, 2012).

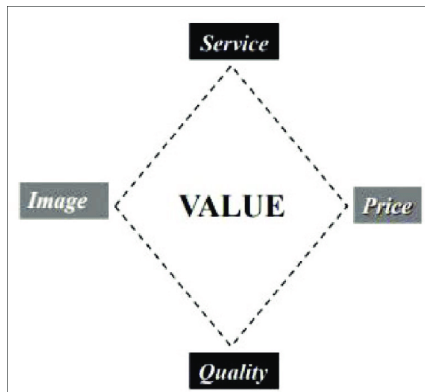


Figure 1: The Service, Quality, Image and Price (S-Q-I-P) Diamond

Source: (Weinstein, 2012)

Relating to customer, value requires exceptional delivery. (McFarlane, 2013) analyses the four value points or elements: Service (the intangible value provided to customers); Quality (how well a company's goods and services live up to customers' expectations); Image (how a customer feels about a firm or business they deal with) & Cost (the price you can command for your goods and services and that your customers are willing to pay).

Customer value is the perception of what a product or service is worth to a customer vs the possible alternatives. Benefits minus cost ($CV = B - C$) is a simplified equation for describing customer value (Mahajan, 2020). Customers may pay for a product or service with their time, experience, and success rather than just money. The ability of the business to uphold the promise through managing its value delivery system, or all the experiences the consumer will have when receiving and using the offering, determines whether the promise is kept (Kotler & Keller, 2012).

2.3 Customer Satisfaction

In literature, customer satisfaction is defined in several complex ways. Organisations have shown a keen interest in customer service and satisfaction, which is also a well-known subject in academic study and marketing practice.

Customer value and customer satisfaction are vital building blocks for creating and managing customer relationships, making it important to understand the factors that influence customer satisfaction as it is the "key" to having a successful business and has become the organization's aim. Using a marketing communication mix, every business must increase consumer demand, foster a positive perception of the brand and foster pride in its accomplishments (Todorova, 2015).

Since perceptions of service quality, product quality, and pricing, as well as contextual and individual factors, affect satisfaction, it is more inclusive (Zeithaml, Bitner, & Gremler, 2018). Client happiness is affected by a number of factors, such as the caliber of the product or service,

how reasonable or unreasonable the customer perceives the price to be, individual factors, and various types of customers, etc. (Ok, Suy, Chhay, & Choun, 2018).

(Kotler & Armstrong, 2012) argue that a product's perceived performance in relation to a buyer's expectations determines customer happiness. When a product doesn't perform as expected, the consumer is unhappy; when it does, the client is satisfied; and when it performs better than expected, the customer is extremely satisfied or ecstatic.

One of the most well-known and respected definitions of overall customer satisfaction is by (Bendle, Farris, Pfeifer, & Reibstein, 2016), it is defined as the number of customers, or proportion of all customers, whose reviews of a company, its goods, or its services are higher than predetermined levels of satisfaction. In addition, (du Plessis, Strydom, & Jooste, 2012) defines customer satisfaction as a customer's favorable assessment of a product's or service's performance in comparison to his or her expectations.

Victor Vroom has proposed the Expectancy Theory in 1964, which claims that "this depends on the degree of the attraction that the outcome has for the individual and on the intensity of the expectation that the successful completion of the job would result in a given consequence" (Kenyon & Sen, 2015). According to the expectancy theory, an individual's motivational force or effort to produce a particular outcome depends on the appeal of the reward (valence, the likelihood that the effort will produce the desired result (expectancy), and the individual's conviction that achieving the desired result will result in receiving the reward (instrument). The expectancy hypothesis can therefore be mathematically modeled:

Motivational Force (MF) = Valence x Expectancy x Instrumentality

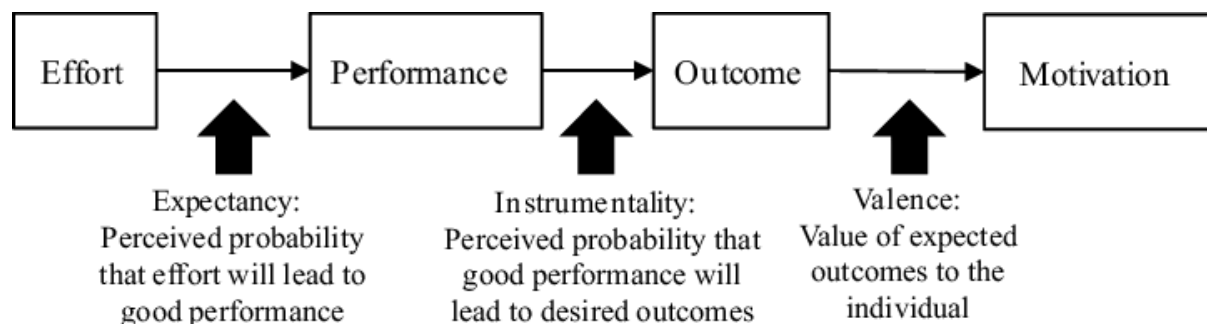


Figure 2: Vroom's (1964) Expectancy theory

Source: https://www.researchgate.net/figure/Vrooms-1964-Expectancy-Theory-adapted-from_fig2_309280058

According to a prior study, students may discover their expectations are positively disconfirmed, negatively disconfirmed, or confirmed in a class, according to the Expectations Confirmation Theory/Model (Semente, 2017). Customer expectations, on the other hand, are viewpoints on the provision of services that act as benchmarks or criteria by which performance is measured (Zeithaml, Bitner, & Gremler, 2018).

(du Plessis, Strydom, & Jooste, 2012) have discussed the different types of expectations:

- Ideal expectations, the highest degree of performance that embodies the good or service that clients want to obtain.
- The lowest level of performance that customers are willing to accept before becoming unsatisfied is known as adequate expectations, or acceptable expectations.
- Predicted expectations, or what customers anticipate receiving, can be influenced by the organization's promises, prior performance, or word-of-mouth (WOM). It is recognised that WOM influences the behavioral intentions of consumers (Prasad, Gupta, & Totala, 2017).

Many businesses emphasize exceeding client expectations by surprise and satisfying customers by providing more than they anticipate. According to (Zeithaml, Bitner, & Gremler, 2018), this can be achieved through organizations who:

- Are expected to be precise, dependable, and to deliver the service they committed to.
- Intentionally undersell the service to boost the chance of exceeding customers' expectations.
- Portray a typical service as distinct rather than the norm.

2.4 Consumer Perception

Because people receive stimuli differently as individuals due to their personalities, backgrounds, and experiences, different consumers often perceive the world around them in different ways. The process through which a person chooses, arranges, recognizes, and interprets the sensory data they receive to comprehend their surroundings is known as perception (Kenyon & Sen, 2015). As a result, perceptions serve as filters that stop consumers from becoming overstimulated by the stimuli all around them. A consumer's perceptions can also be influenced by learning, memory, and expectations, allowing them to perceive the world as stable even though the stimuli they are exposed to are insufficient and/or changing (Kenyon & Sen, 2015).

Any service a consumer receives is transportable in their minds, which causes them to compare various services they have received—regardless of the industry or sector—in conscious and unconscious ways (Cook, 2011). In other words, if the service received exceeds the customer's expectations, it is exceptional service; if it falls short of their expectations, it is bad service. The customer's perception is their reality, which is frequently a subjective and ethereal experience. It is crucial to keep in mind that different customers have different expectations, which affect how satisfied they are with the company's service. With the expectation that service quality and customer satisfaction will have an impact on customer loyalty, service quality leads to focused evaluation that describes customers' impressions of specific service characteristics (Supriyono, Wiyono, Burhanuddin, & Olan, 2021). This is depicted by theoretical model Figure 3.

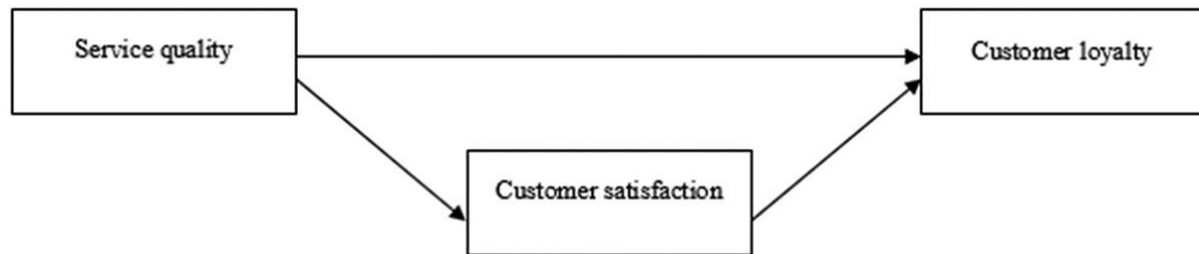


Figure 3: Theoretical model of the effect of service quality on customer satisfaction loyalty

Source: (Supriyono, Wiyono, Burhanuddin, & Olan, 2021)

Looking at (Kotler & Keller, 2012) In order to classify each aspect of value for the customers' perception, the determinants of customer-perceived value consider the relationship between customer satisfaction and customer perceived value. Customers will perceive value when the whole customer benefit outweighs the total customer costs, as shown in Figure 4. (Determinants of Customer-Perceived Value).

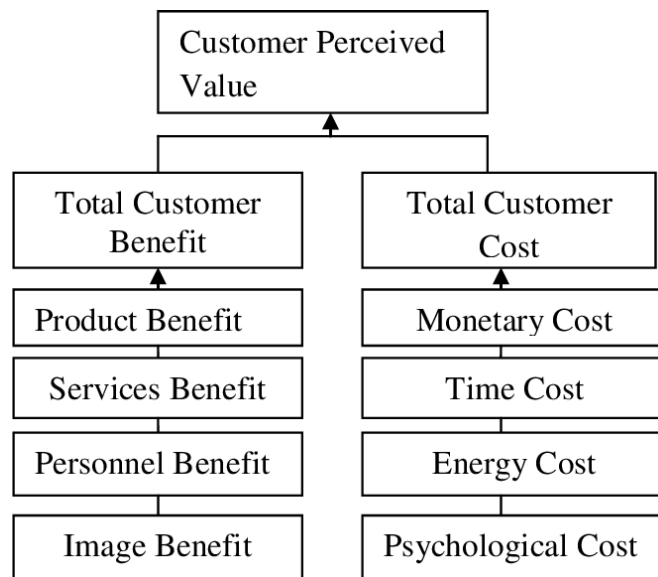


Figure 4: Determinants of Customer-Perceived Value

Source: (Kotler & Keller, 2012)

The Gap Analysis Model for Service Quality was created by Berry, Parasuraman, and Zeithaml to analyze the root causes of issues and to help service providers by outlining ways to enhance their offerings. This model's significance is that any gap at any time might cause the service quality to decline, hence the gap should be filled as soon as feasible.

A particularly well-liked measurement instrument for evaluating service quality is called SERVQUAL. The GAP model, which has as its primary objective to determine whether customer expectations are accurately satisfied, is where the SERVQUAL model gets its start. The service gap [Q] can be calculated from the difference between anticipation [E] and perception [P], that is

$Q = P - E$ The apparent service quality discrepancy [Q] that is noted by (Palaima & Banyte, 2006)[is] that the perceived or experienced service is not consistent with the expected service.

According (Parasuraman, Zeithaml, & Berry, 1988) Organizations can utilize SERVQUAL, a short multi-item scale with strong reliability and validity, to better understand consumer expectations and views of service. As a result, service will be improved.

The main elements influencing the gaps are: GAP 1: The Knowledge Gap: Lack of understanding of client expectations, GAP 2: The Standard Gap: Failure to choose or maintain the appropriate service designs and standards GAP 3: The Delivery Gap: Failure to Meet Service Level Agreements, GAP 4: Internal Communications Gap: Performance Promises Not Met GAP 5: The Perceptions Gap, which is the discrepancy between what customers expect from the level of service and how they really perceive it.

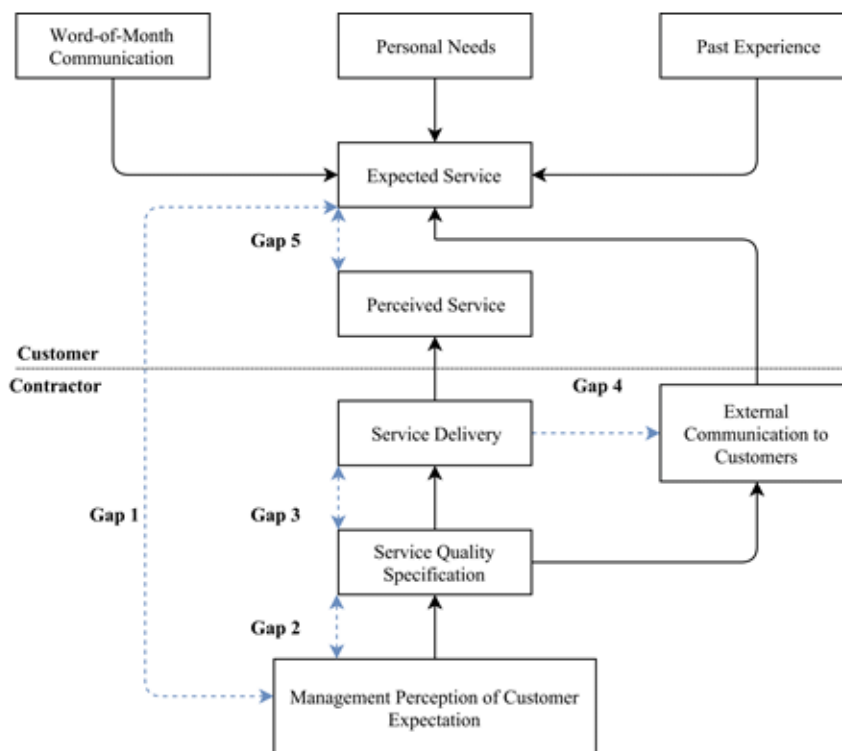


Figure 5: The Model of Gaps

Source: (Parasuraman, Zeithaml, & Berry, 1988)

The SERVQUAL 22 dimensions have been refined by Parasuraman, Zeithmal, and Berry in 1988, and after further processing, they have been reduced to just 5 dimensions, thus:

1. Tangibles: these include physical assets, machinery, personnel, and communication resources.
2. Reliability: The capacity to promptly, accurately, and satisfactorily deliver the service that has been promised.

3. Responsiveness: The desire of workers to assist clients and offer services in a timely manner.
4. Assurance: the knowledge, skills, politeness, and reliability of the employees, free from risk, uncertainty, or danger.
5. Empathy: comprises being approachable, having effective communication, giving individual attention, and comprehending the needs of clients (Triandini, Aswin, & Nanik, 2021)

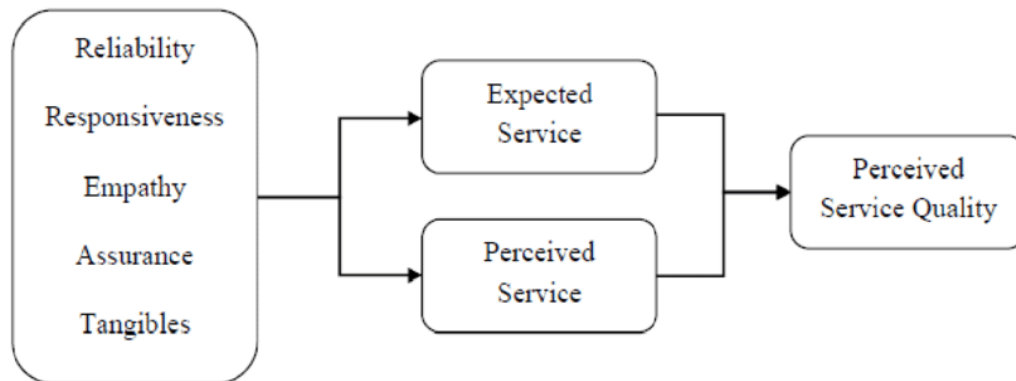


Figure 6: SERVQUAL Model

Source: (Parasuraman, Zeithaml, & Berry, 1988)

Moreover, (Sharmin, 2012) has identified the lack of marketing research, the absence of an adequate service recovery mechanism, the reduced engagement between management and consumers, and the lack of relationship emphasis as the primary causes of an expanding gap. In addition to inadequate service design, the absence of consumer driven standards, and incorrect physical proof, the second gap lacks managerial commitment to service quality and satisfying customer expectations. Poor personnel selection, insufficient training, and incorrect job design are all factors in the third gap, which lacks collaboration. The last gap demonstrates that there are variations in service delivery, external communication, and service cost.

The difference between what customers expect from a service and what they receive is what the service quality gaps model defines as service quality. As a result, organisations can implement (Raval, 2014) strategies to close these market gaps as follows:

- It is important to understand consumer expectations through market research and putting in place a strong customer feedback system will help close any knowledge or service quality gaps.
- Standards Gap: By streamlining processes, consistency and dependability can be ensured by setting clear, attainable service goals.
- Delivery Gap: cross-functional service teams need to be formed to address customer issues and train staff in time management.

- It is important to ensure that contacts with customers create reasonable expectations. There may be a communication gap here.
- To close the perception gap, tangibles, and effective communication about the quality of the services provided must be used.

3.0 METHODS

3.1 Research Design

An approach based on case studies was used. For this investigation, a convergent mixed techniques design is used (Creswell & Creswell, 2018). To generalise findings on a population, the study starts with a large survey. Next, it focuses on qualitative open-ended questions before moving on to quantitative closed-ended questions. To provide a contextually rich and relevant interpretation of the research, it is the goal of the quantitative data collection to incorporate a variety of viewpoints and data sources. This qualitative data can help provide a more thorough insight, using closed-ended questions.

3.2 Research Philosophy

The purpose of the study is to analyse the significance and outcomes of learning during the COVID-19 epidemic. This study therefore has a Pragmatic Philosophical Worldview.

3.3 Population

The population of a study refers to the largest number of participants who share some basic attributes of interest and therefore constitute the target and accessible population (Asiamah, Mensah, & Oteng-Abayie, 2017). With respect to the definitions, the units of analysis of this study are the chosen university students in Windhoek Namibia. The target population of this study is enrolled students at the chosen university which is approximately 12 500 students.

3.4 Sample

A sample is a portion of the population that has been chosen that is a fair representation of the entire population (David, 2018). As a result, a very small group of individuals were chosen from the general community for this case study. Participants are the individuals who make up a sample (Alvi, 2016). Alvi (2016) adds that a sample is considered representative if the traits of the elements it contains resemble those of the target population.

This study was based on convenience non-probability sampling. The sample size was derived using Taro Yamane (1967) formula, which according to (Adam, 2020) approximates known sample size formulas such as Krejcie and Morgan (1970) and Cochran (1977) i.e., $N = N / K + N(e)^2 = 12500 / 1 + 12500(0.05)^2 = 388$.

3.5 Research Instrument

The study uses a cross-sectional survey methodology. The research tool used to collect data is a questionnaire. This questionnaire includes closed-ended questions to assess the intensity of attitudes or emotions, and the answers are based on a Renis Likert (1932) scale (theory), which is

appropriate for studies in social and behavioral sciences that deal with perceptions, attitudes, emotions, opinions, personalities, and descriptions of people's environments (Olaniyi, 2019, Welman, 2012). The survey also includes open-ended inquiries that allowed participants to express their attitudes, preferences, and opinions in a variety of ways.

3.6 Data Collection Procedure

The questionnaire was personally distributed on the chosen university campus.

3.7 Data Analysis

The study encompassed qualitative open-ended questions to be analysed via a deductive approach. Qualitative data was organized; coded to generate themes and analysed using Excel and QDA Miner Lite computer software. The qualitative data findings were presented in narrative passages and graphs representing the frequencies of the codes and themes. Quantitative data was analysed in statistical terms and conveyed in statistical findings using a computer software program i.e., SPSS. Qualitative data findings were analysis through detailed discussion as well as visuals, figures or tables using Excel and QDA Miner Lite. Quantitative data were analysed and presented through descriptive statistics which included the percentage distribution, mean and measures of frequency.

3.8 Response Rate

The study targeted 390 respondents, and a 100% response rate was reached.

4.0 RESULTS

The study involved both male and female students from the chosen university in the survey. This included students that are currently enrolled at the chosen university representing different faculties and departments. The results show that there were more male students (61%) than female students (39%). However, female to male ratio did not have a significant effect on the results.

From the results, it was found that most of the students into the age group 18-25 years (43%), followed by 26-30 (27%). There were relatively few students within the age group 41-50 years old (12%).

The results show that most of the students were in possession of (high school degrees) (high school certificates) (28%), followed by diploma (22%), certificate (23%), bachelor (16%), honors (6%), master's (4%) and Doctorate (1%) (one student).

Most of the students indicated that they were not employed (70%), and only 30% of them were employed. There were no pensioners among the students that participated in the study.

The residential areas in this study referred to the places where the students were originally from. According to the results, most of the students came from suburban areas (49%), followed by city or urban areas (34%) and rural (17%).

4.1 Learning and teaching during the COVID-19 pandemic

The study's claimed objective was to examine how students perceived instruction and learning during the COVID-19 pandemic as well as their experiences. Students' experiences with COVID-19 were assessed according to five main themes, namely loneliness, self-learning, motivation to learn, skills in the use of digital devices for online learning and the help from lecturers during the pandemic.

4.1.1 Loneliness

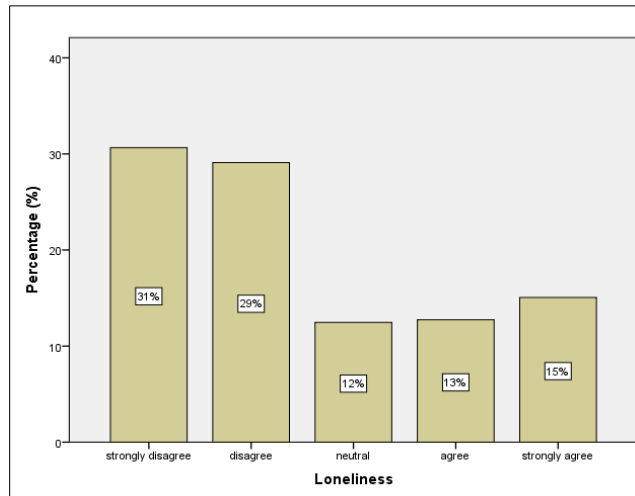


Figure 7: Students' experience with COVID-19 pandemic

Most of the students indicated that they did not experience loneliness (31% = strongly disagree). However, there was a small portion of students who felt lonely (15% = strongly agree).

4.1.2 Enjoying self-learning

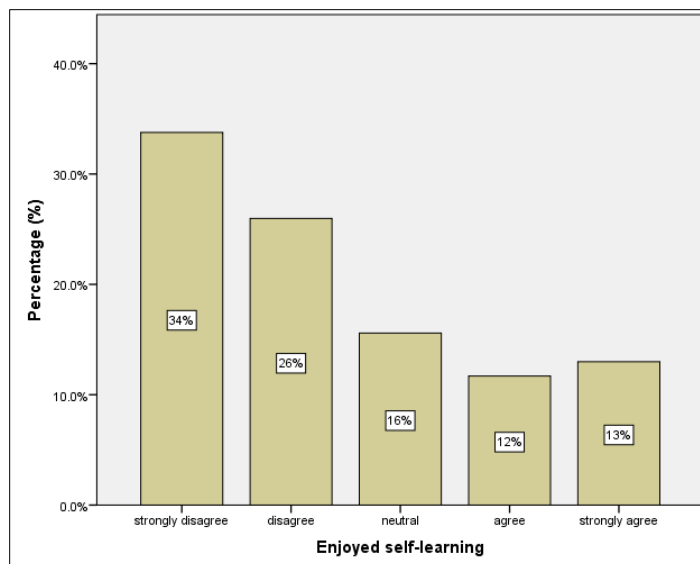


Figure 8: Enjoying self-learning

Most of the students indicated that they did not enjoy self-learning (34% = strongly disagree). Only 12% indicated that they enjoyed self-learning (agree) and 13% indicated that they really enjoyed self-learning (strongly agree). Overall, it can be argued that during the pandemic, students did not like learning on their own.

4.1.3 Motivation to learn

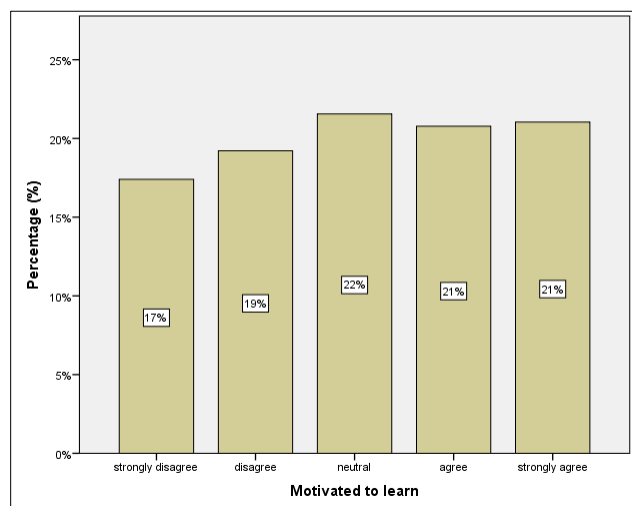


Figure 9: Motivation to learn during the pandemic

Most students reported being inspired to learn throughout the pandemic. According to the findings, 21% of the respondents said that the pandemic had inspired them to learn (agree and strongly agree). Another group of students, however, did not feel inspired to learn during the pandemic (17% strongly disagreed; 19% disagreed).

Improved skills for digital devices for online learning

The figure below shows how students indicated whether they acquired skills in using devices for online learning.

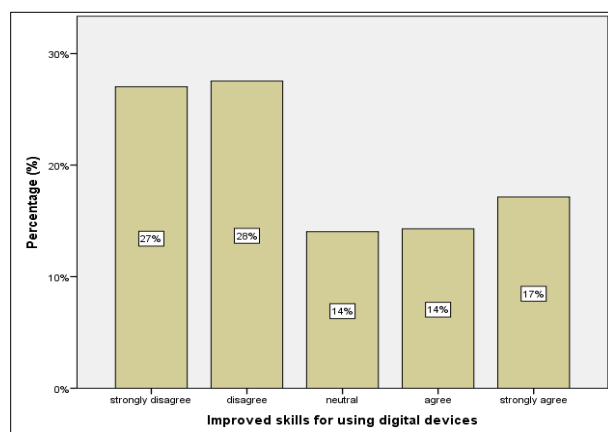


Figure 10: Improved skills for online learning

Most students said they didn't learn many new abilities when using online learning tools. Most students (28% disagreed) and 27% (seriously disagreed) said they had not made any progress in their ability to use online teaching and learning. However, 17% of the students said they had increased their knowledge of how to use Internet tools.

4.4.5 The availability of lecturers to help students during the pandemic

Most students said that professors were accessible to them during the pandemic (21% said they agreed and strongly agreed). During the pandemic, just 18% of the students said their professors were not available to assist them.

4.4.6 Learning experience during COVID-19 pandemic

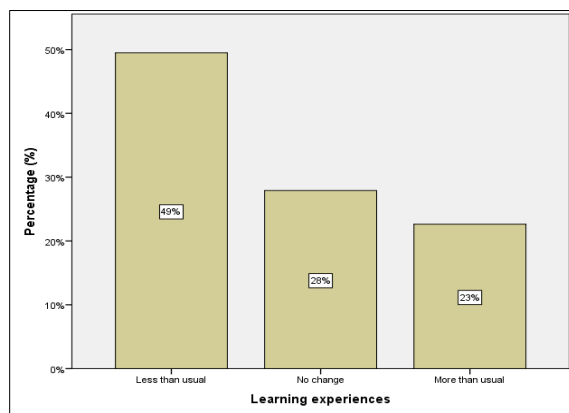


Figure 11: Learning experiences

According to the results, most of the students (49%) indicated that they learned “*less than usual when the chosen university was on the lockdown*”. About (23%) of the students indicated that they learned “*more than usual*”. Furthermore, (28%) of the students indicated that they feel that there was “*no change*”.

4.4.7 Ownership of digital devices used to access e-learning during the pandemic

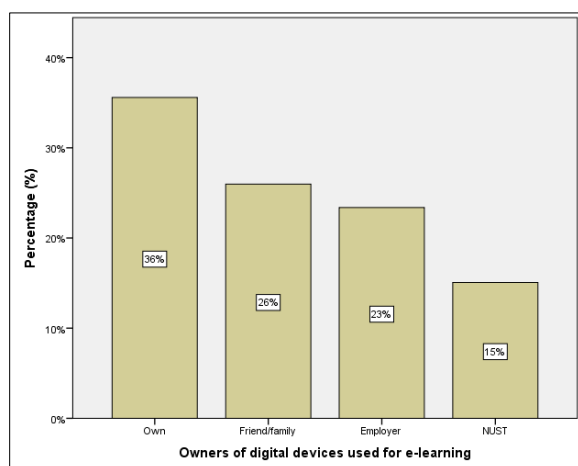


Figure 13: Owners of digital devices

Most of the students indicated that they own devices (36%) such as laptops, tablets, and mobile phones, followed by the group of students who indicated that they used devices owned by a friend or family member (26%). The rest of the students indicated that they used devices that belong to their employers (23%) or the chosen university owned devices (15%).

4.4.8 Challenges in teaching and learning during COVID-19 pandemic

To understand the impact of COVID-19 pandemic on learning and teaching, the study looked at some of the main challenges that students experienced during their learning during the pandemic.

Challenges were grouped according to themes: unstable internet connections, lack of WIFI, unstable internet, login problems, delays in starting classes, staying in noisy places and insufficient data available.

4.4.8.1 Unstable internet connections

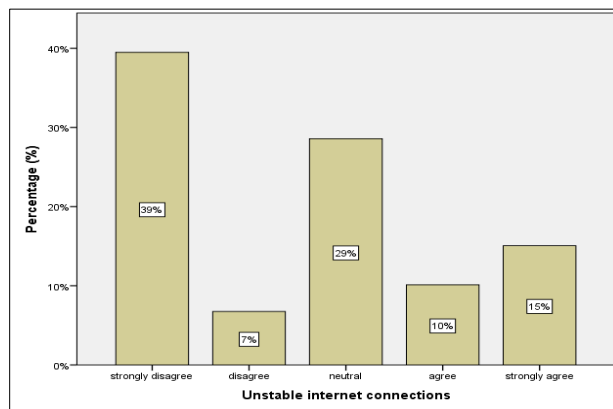


Figure 14: Unstable internet connections

Most of the students indicated that they did not have issues with internet connections (39% = strongly disagree). However, 15% (strongly agree) indicated that they did suffer from unstable internet connections.

4.4.8.2 Login problems

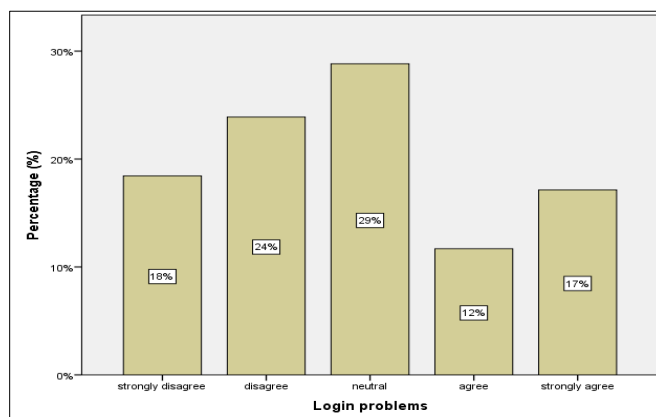


Figure 15: Login problems

Most of the students indicated that they did not have issues with logging into the system for online learning (24% = disagree), followed by strongly disagree (18%). However, 17% of the students indicated that they had issues with the login (strongly agree) as well as 12% of the students who indicated that they agreed that there were issues with the login.

4.4.8.3 Students who stay in noisy places

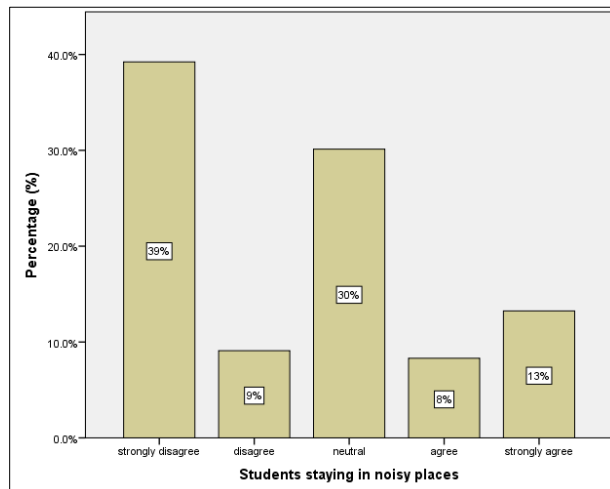


Figure 16: Students who stay in noisy places

Most of the students indicated that they were not staying in noisy places during the pandemic (39% = strongly disagree), followed by 30% of students who indicated that they were neither in noisy places nor in quiet places. However, 13% (strongly agree) of the students indicated that they were staying in noisy places.

4.4.8.4 Insufficient data

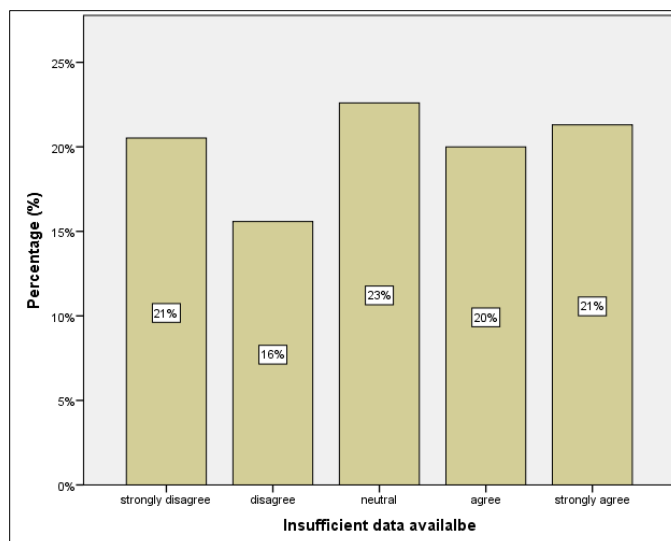


Figure 17: Insufficient data

The results show that there was an equal number of students who had issues with sufficient data (21% = strongly agree; 21% strongly disagree). However, there were also 20% of the students who indicated that they had issues with data insufficiency (agree).

Lack of WIFI and Delay in starting class

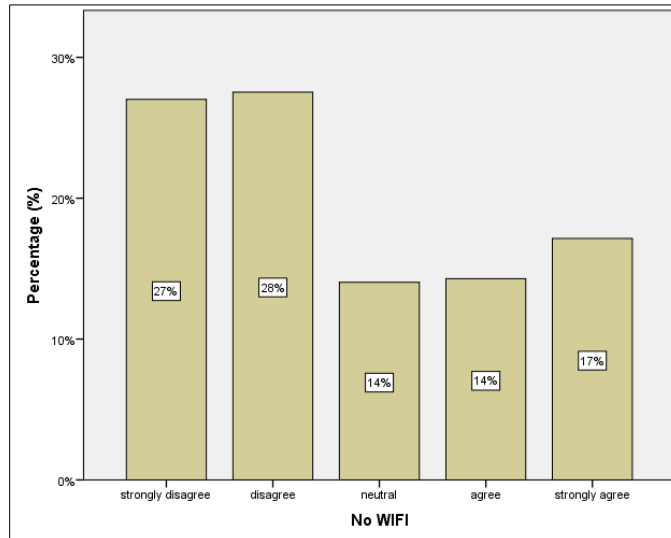


Figure 18: Lack of WIFI

According to the results, most of the students indicated that for them the lack of WIFI was not a challenge (28% = disagree), followed by another group of students (27%) who indicated that they disagreed that the lack of WIFI was a challenge. However, 17% of the students indicated that for them the lack of WIFI was a challenge, followed by 14% of students who indicated that they also did not have WIFI during the pandemic.

Login delays caused by other students logging in

Most of the students indicated that they were affected by the delays due to other students who sometimes struggle to login to the online system (29% = agree), followed by students who strongly agreed that delays caused by other students logging in to the systems affected them. Furthermore, 21% (disagree) of the students indicated that they did not have issues due to delays caused by other students who were struggling to login into the system.

4.4.9 Students' perception of teaching and learning during the COVID-19 pandemic

4.4.9.1 Flexibility

The results show that some of the students considered that the online teaching and learning system was flexible (26% = agree and 8% = strongly agree). However, another (26%) of the students indicated that they did not think that the system was flexible (disagree), followed by (18%) of the students who expressed that the system was not flexible (strongly disagree). Overall, it can be said that most of the students (18% + 26% = 44%) considered that the system was not flexible.

4.4.9.2 Confidence in using internet devices

The results show that 25% of students strongly disagreed with most students' claims that using online learning during the epidemic did not help them acquire confidence (30% = disagree). However, 16% of the students in the group said they firmly agreed that they gained confidence. Students from a different group also reported they felt more confident (16% said they strongly agreed; 15% said they agreed).

4.4.9.3 Simplicity of online learning

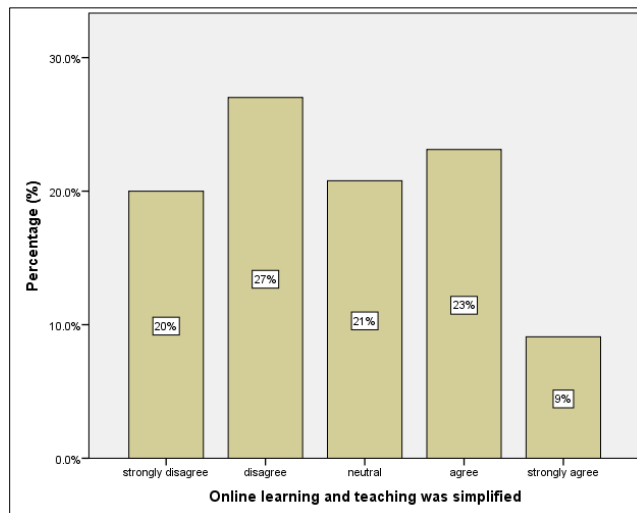


Figure 19: Simplicity of the online system

Most of the students indicated that the system was not simple (27% = disagree; 20% = strongly disagree). However, 23% of the students indicated that they agreed that their system was simple, followed by 9% of the students who felt that their system was very simple (strongly agree).

4.4.9.4 Online learning improved students' skills

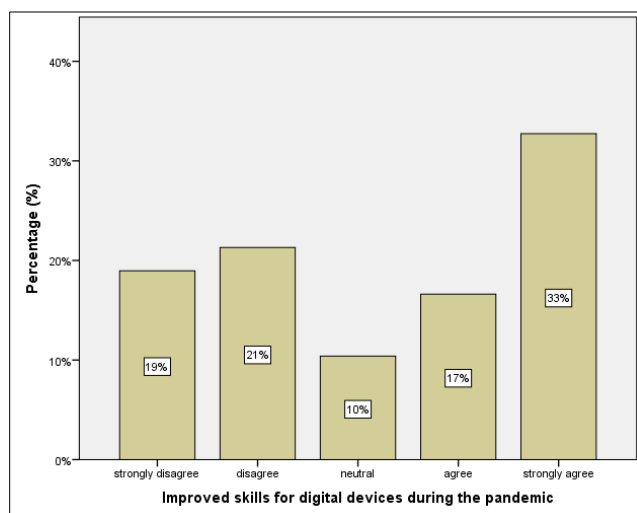


Figure 20: Improved skills for digital devices during the pandemic

The results show that 33% of students reported that the program helped them get better at using digital gadgets, and 17% of students said that they felt that the system had enhanced their skills. However, according to 21% of the students, they did not get better at using digital gadgets. This was followed by 19% of the students who strongly disagreed.

4.4.9.5 Better learning services than expected

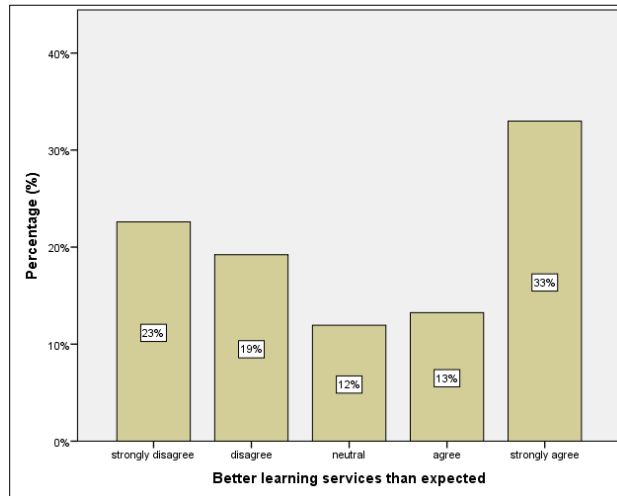


Figure 21: Better learning services than expected

Most of the students (33% = strongly agree) indicated that they believe that the chosen university provided better learning services for the students than they expected, followed by 13% (agree) who also shared the same sentiment. However, 23% of the students indicated that they strongly disagreed that the services were better than expected.

4.4.9.6 Necessary COVID-19 protocols provided by the chosen university

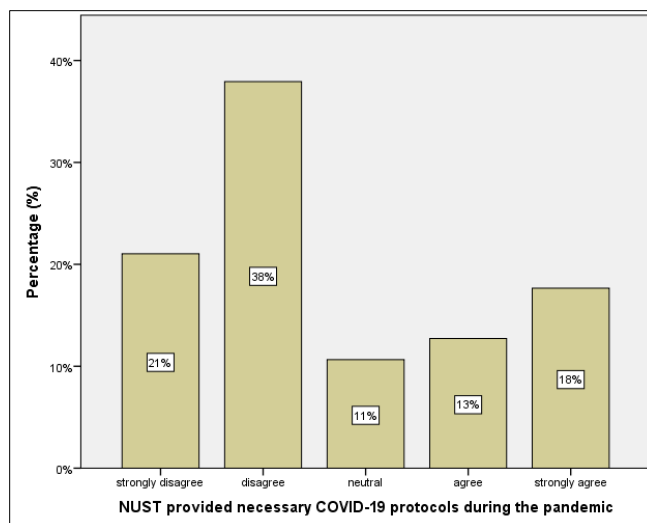


Figure 22: Necessary protocols provided by the chosen university

Most of the students indicated that they did not think that the chosen university provided the necessary protocols against COVID-19 (38% = strongly disagree). Followed by 21% of the students who strongly disagreed. On the contrary, 18% of the students indicated that they strongly agreed that the chosen university provided the necessary protocols. The same sentiment was shared by 13% of the students (agreed).

4.4.9.7 Satisfaction with online learning

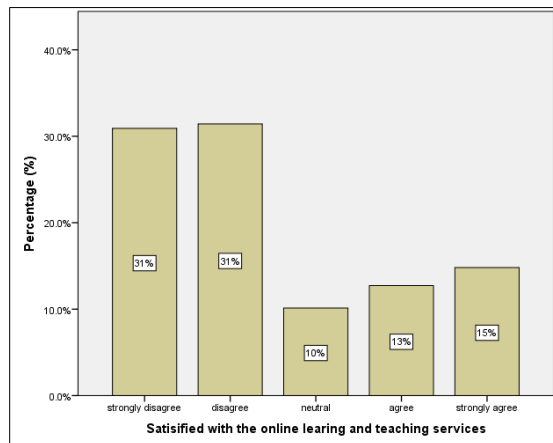


Figure 23: Satisfaction with the online learning during the pandemic

Most students were not happy with the online learning environment (31% strongly disagreed; 31% disagreed). However, 15% of the students said they were very satisfied (strongly agreed), and 13% said they agreed (agreed) that the system was satisfactory.

4.4.10 Expectations from the chosen university teaching and learning services during the pandemic

Students had various expectations from the institution during the pandemic. The Figure below shows the expectations of students concerning the chosen university teaching and learning services during the pandemic.

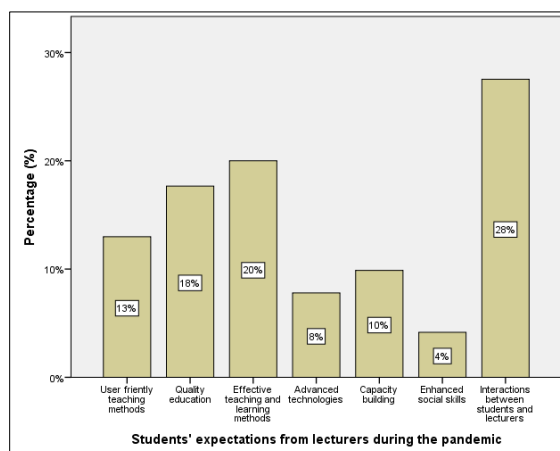


Figure 24: Students' expectations from lecturers during the pandemic

Most students (28%) said they anticipated the chosen university to promote interactions between students and lecturers in learning and teaching activities, followed by efficient teaching and learning strategies (20%), high-quality instruction (18%), and the use of user-friendly teaching techniques (13%). Advanced technologies (8%) and social skills were the lowest of all the expectations (6%).

4.4.11 Students' recommendation for future teaching and learning at the chosen university particularly in an unusual environment

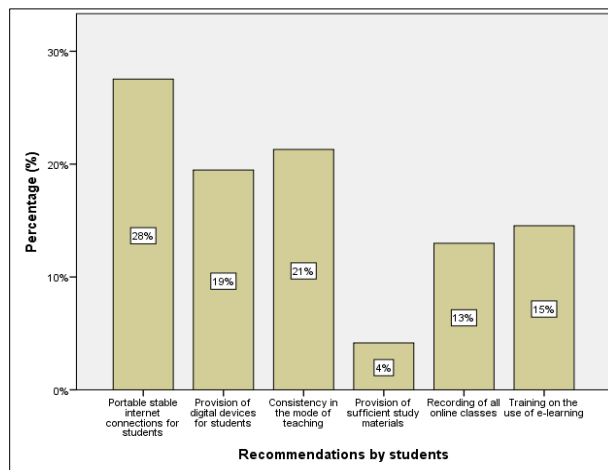


Figure 25: recommendations by students

Most of the students recommended that the chosen university should prepare portable internet connections for students (28%), followed by consistency in the methods of teaching (21%) and the provision of digital devices for students (19%). A few students also recommended the provision of sufficient study materials (4%).

5.0 Discussion of the findings

The COVID-19 virus has had an impact on almost 1.25 billion people, including children and young people, as well as the global education system. (Syed, 2021). Determining how students perceived teaching and learning during the COVID-19 epidemic, with a particular focus on the chosen university enrolled students, was the study's goal.

The results showed that although it is generally accepted that there are more women than men in Namibia: the general population of women was recorded to be 51% and males to be 49% (Centre, 2017). The results of this coincided with the results of (Bank, 2018), which showed that there were more male (9%) than female (7%) students in schools in 2018. According to the survey results, which found that 61% of respondents were men and 39% were women, this may be the reason there were more male students listed than female students. Additionally, it can be noted that young students between the ages of 18 and 30 make up most students at the chosen university (43%).

These results are consistent with the results of the students' employment status, which shows that most students are still pursuing their first degrees. The students with only high school diplomas (28%) were followed by those with higher education certificates (22%). They are therefore

ineligible for most employment prospects. However, the findings also support a report from the African Union that Namibia's jobless rate was 33 percent in 2021. (Union, 2021). A master's degree was only held by four percent of the respondents.

It is important to note that the teaching and learning during the COVID-19 pandemic are related to the students' residential locations. Most students at the chosen university (49%) live in suburban regions, according to the research, which also found that (34%) of them live in cities, with 17% living in rural areas. It has been stated that during the epidemic, students in rural areas experienced emotional, mental, and financial anguish (UNESCO, 2021).

The world's educational systems have been impacted by the closure of educational institutions as a preventive step against the spread of COVID-19, according to Hoxha (2020). There have been, however, some positive outcomes, including learning how to use Internet services. For instance, students have learnt how to use the platforms Zoom and Teams for attending meetings. However, (28%) of students at the chosen university (disagree and) claim that they did not develop many new abilities while using online learning tools, and only (17%) believe they did.

The most popular tool used by students to access e-learning, aside from mobile phones, is a laptop computer. It is important to note that the group of students who did not use digital gadgets experienced poor learning outcomes. Most students at the chosen university (49%) said they "learned less than normal when the chosen university was on the lockdown," according to the data. While (23%) reported that they "learned more than usual when the chosen university was on the lockdown," (28%) reported that they "experienced no change" and that they "learned as much as when the chosen university was not on lockdown," which means that for one group of students, things continued as usual and for the other group, their learning pattern was unaffected by the lockdown.

The findings also indicated that the students agree and disagree that studying through e-learning mode provides them with the flexibility to study at the time convenient to them with (18%) who strongly disagree. An interesting finding was that (30%) of students at the chosen university did not feel confident in using digital devices for learning with (27 %) disagreeing with the statement that online learning and teaching was simplified. It is worth pointing out that most of the learning experiences identified are centered on the online learning platforms. This is because the online learning systems were the most significant new experience, since these students were only accustomed to Face-To-Face teaching and learning and were now exposed to online learning because of the COVID-19 pandemic. Nevertheless, (33%) strongly agree that they have been able to improve their digital device skills and that their overall e-learning was better than they had anticipated.

Teaching and learning during the COVID-19 pandemic exposed school pupils to several obstacles, particularly because of the extensive school closures that necessitated the delivery of education remotely (Coleman, 2021), which had an unprecedented impact on education globally (UNESCO, 2021). Time management and the applicability of online teaching technology platforms are two obstacles that were encountered while teaching and learning during the pandemic, according to

(Adeyinka-Ojo & Ikumoro, 2020). The results showed that 38% of students at the chosen university believed that not all relevant COVID-19 protocols were provided by the chosen university. Unfair access to online learning possibilities worsens already-existing gaps in access to knowledge, impeding socialization and inclusion in general, not to mention the learning experience that distance education aims to deliver (Di Pietro, 2020).

According to (UNESCO, 2020), the current impacts of the crisis on higher education are easily documented, but it is debatable which ones will leave their mark on the different actors in the medium and long term. Students and lecturers alike had various expectations from the institution during the pandemic. In this study, the focus was mainly on students, hence, the findings indicated that most of the students expected the chosen university to facilitate interactions between students and lectures. This is an interesting point as physical interactions were prohibited during the lock down period and later lifted with social distancing during the pandemic. The fact that students indicated their expectations to be actively interacting with their lecturers during the online mode of teaching and learning is proof of the level of importance of the relationship between the two parties during this stage.

It can be said that the level of attainment can be attributed to the impact of COVID-19 and its impact on the academic performance of students. With COVID-19 in play, students found it hard to cope with some modules as they must study in isolation. Unfortunately, the study did not investigate lecturers' expectations about student performance during the COVID-19 pandemic. Furthermore, it is acknowledged that little research has been conducted in the field of higher education that addresses the issue of lecturers' expectations in this context.

The COVID-19 pandemic has taught students that, in addition to their typical academic skills, they must acquire certain specific abilities such as survival, critical thinking, and problem-solving (Hameed, 2021). However, even though the introduction of online teaching has taught students how to use digital devices, the students further indicated that there are areas that need improvements.

Furthermore, the COVID-19 pandemic has exposed students to various overwhelming experiences such as the increased anxiety and stress due to the sudden switch from the traditional mode of teaching and learning (face-to-face) to an online learning system. Hence, to get a better understanding of students' perception the study further asked students to give their views about how the institutions can improve the current situation and prepare for any future similar situations that disrupt learning and teaching.

6.0 CONCLUSIONS

A rising number of institutions around the world have either postponed or cancelled all campus events like workshops, conferences, sports, and other activities after raising concerns about the current COVID-19 outbreak. The spread of the highly contagious sickness is being prevented by universities for all staff members and students. Academic institutions switched to online teaching platforms as a result (Sahu, 2014).

Universities are now required to use online teaching methods due to the global condition of emerging legislation. In terms of direct effects on everyday life, costs incurred, financial difficulties, and, of course, learning continuity and international mobility, the students have inevitably experienced the most immediate effects from the temporary discontinuation of face-to-face instruction at higher learning institutions.

This situation had some effect on the students, especially when it was first implemented. However, it is important to appropriately address the issue of the quality of online education (Belay, 2020). The same author asserts that implementing assessments online to courses designed for face-to-face learning is difficult since teachers and students are allegedly unaware of the procedure for giving out incomplete assignments, projects, and other ongoing assessments (Nasir, 2021). This may be scary to some students, particularly those who don't have access to the internet at home.

4.1 Students' experiences and expectations with COVID-19 pandemic

It has been observed that there have been mixed expectations and experiences with regards to the COVID-19 pandemic among the students at the chosen university. For example, the results show that most of the students indicated that their main experience was they were lonely and did not enjoy self-learning. They were not motivated to learn and had insufficient data for internet connections. The pandemic forced students to prepare their own internet connection facilities. This situation was challenging for most students, particularly those that live in rural areas.

In addition, not all the students can always afford internet data. However, students also indicated that the online system was better than they expected. In the same vein, students also revealed that the online teaching and learning platforms helped them to master skills in digital devices. Finally, students also expressed that their main expectations included that the online teaching and learning platforms should be user friendly and flexible.

Thus, the first objective of the study was met in the sense that all students that participated described their experiences with online learning during COVID-19. It is worth noting that different students had various experiences with the pandemic in their academic life. Students expressed both positive and negative experiences. For example, some students revealed that during the pandemic (lockdown) they learned to be self-governed and how to use digital devices. Other students, on the other hand, expressed that they experienced challenges in connecting to the internet, issues with logging on to the system and many more challenges.

6.1.2 Students' challenges during the pandemic

Experiences are not too dissimilar from the difficulties brought on by the COVID-19 epidemic. But what really stands out is how negatively COVID-19 impacted children's lives in numerous ways (Belay, 2020). The results showed that 39% of the students strongly disputed that they had unreliable internet connections, because these students used their personal digital gadgets (36%) during the pandemic. The fact that most students reside in the city and suburbs, where practically every second home has WIFI, may be the cause of the high percentage of students who said they had no problems with their internet connections. However, (29%) of the students remained neutral,

this means that even students who could not afford internet data for themselves, they could always connect to their neighbors' internet especially since most students were unemployed or could not afford data bundles. Whereas (15%) of the students strongly agreed to having unstable internet connections and were those that stay in rural areas. This has been confirmed by studies that students staying in rural areas were the ones that were most negatively affected by the pandemic (Zahra, 2020). This is mostly due to facts such that they do not have good access to the internet nor good power for light during their study sessions.

In addition, the findings indicates that most of the students believed that the lack of WIFI was not a big issue. When looking at whether students had any login problems when using the e-learning platform, Microsoft Teams or ZOOM, the majority of the students were neutral which is an indication that logging in was not a major challenge, in addition the majority (39%) of the students indicated they strongly disagree that they reside in noisy places which may have affected their online class sessions, only (13%) strongly agreed that this was a challenge. In addition (29%) of the students agreed that there were delays of classes starting due to fellow students who struggled to log in and join online sessions which interrupted their classes. Most of the students indicated that the system was not simplified (27% = disagree; 20% = strongly disagree), in conclusion, most of the students felt that the system for online learning was not simple enough for them to use. This could be since most of the students were too used to the traditional methods of learning.

Therefore, the second research objective was met, as the study was able to determine which learning challenges students the chosen university had during the COVID-19 pandemic.

6.1.3 Students' level of satisfaction of learning during the COVID-19 pandemic

Prior research highlights the crucial role that student happiness plays in determining the success or failure of online education when examining students' levels of satisfaction (She, Ma, Jan, Nia, & Rahmatpour, 2021). Various higher education institutions have incorporated urgent and stressful transformations to implement smooth learning experiences for students during the COVID-19 pandemic. Therefore, for an institution such as the chosen university, it is of the utmost importance to create various strategic plans to execute effective and efficient teaching and learning services. According to the findings obtained, irrespective of the students age, gender, educational level, demographic area it is evident that the students in general were happy to be able to conduct certain assignments and sessions at their own time and pace, as most work was digitally provided, and to submit electronically; that they have been able to improve their digital device skills and agree that the chosen university provided all necessary protocols against COVID-19. Thus, the third research object was met given the findings obtained.

The findings indicated (31%) strongly disagree and (31%) disagree that they were satisfied with the online learning and teaching services from the chosen university and (34%) of the students did not enjoy self-learning. With regards to students' expectations, which connects with consumer satisfactions, the findings showed (33%) of the students strongly agree that the chosen university did in fact better learning services than expected with 23% who strongly disagree. Also, only (18%) of students indicated that their lecturers were not available to help them during the

pandemic, it can be said that lecturers were available whenever students needed help with the online learning techniques. Hence, this objective as met to determine the students' level of satisfaction.

6.1.4 Suggested strategies to improve academic performance amidst COVID-19

Considering the experiences of students with the COVID-19 pandemic, the study deemed it important to investigate what can be done to improve the situation and to help the institutions of higher education prepare for future unusual circumstances by looking into students' perceptions and expectations. Therefore, students were asked to give their views of their expectations which resulted in the most common theme of expectations: there needs to be better interaction between students and lecturers; effective teaching and learning methods, quality education, user friendly teaching methods, capacity building, advanced technology and enhanced social skills.

Additionally, the students were asked to give their views of which stable internet, the provision of digital devices for internet connections, training on the use of e-learning, consistency of the mode of teaching and recording of the online classes would be their main recommendations. They said that the most important recommendation is a stable internet connection. Most students struggled to complete their academic projects and were sometimes faced with challenges during the online examinations. Some of these students failed to submit their individual project work on time or sometimes they do not submit at all. The findings for students' recommendations for teaching and learning in unusual environments indicated three main points; the availability of portable internet connection devices; training on the use of e-learning and the provision of digital devices.

7.0 RECOMMENDATIONS

The study's findings support the notion that the COVID-19 pandemic has had a significant impact on students' lives in a variety of ways. As a result of the epidemic, there is a lot that must be done to assist students who are still learning through online platforms. In addition, the pandemic acted as a reminder for academic institutions to get ready for unforeseen events and future uncertainties. Consequently, the study recommends the following:

- A new approach is required that enables all students to receive a top-notch education outside of the classroom. A dependable internet connection is necessary for this system.
- Future research is required to determine how much the COVID-19 has impacted students from various faculties and study programs in terms of their academic achievement. However, it will be better to conduct this research after the year's final exams.
- Studies are needed to examine how expectations of students and instructors about online learning connect to student academic success during the COVID-19 epidemic, considering characteristics such as sociodemographic, entrance requirements, and prior university performance.

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