DETERMINANTS OF STUDENTS' STUDY BEHAVIOR DURING COVID-19 LOCKDOWN: IMPLICATIONS FOR SOCIAL WORK

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Abstract
The study investigated the determinants of students' study behavior during covid-19 lockdown in Calabar Metropolis of Cross River State, Nigeria. To achieve this aim, three null hypotheses were formulated on the basis of the three identified independent variables of the study; Environmental factors, internet facilities, and social worker's roles. The dependent variable is students' study behavior. The descriptive survey research design was adopted to recruit participants from the sample population. A combination of purposive and systematic sampling techniques was used to select 200 respondents who were students from tertiary institutions in the Calabar metropolis, Nigeria. A questionnaire and in-depth interviews were the instruments used for data collection. The questionnaire and in-depth interview guide were used for quantitative and qualitative analysis respectively. "Pearson product-moment correlation and chi-square analysis were used to test the hypotheses in the study. The study revealed that a conducive atmosphere aids students' study behavior and recommends that a social work-based model for encouraging good study behavior among students during emergency situations is necessary. Government should encourage distance learning programs with internet base subscriptions to enhance students' study behaviour, during the pandemic situation. Universities and other institutions should provide some basic innovations and technology that can promote students learning and the building of an online learning system that will be friendly to student and their teachers.

Keywords: Student, study, behavior, covid-19 pandemic, social workers, environmental factors, internet facilities

Introduction
The new coronavirus SARS-CoV-2 was spreading around the world by mid-February 2020. (Coronavirus disease 2019; previously 2019-nCoV). A worldwide health emergency was declared by the WHO Emergency Committee due to the disease's quick international and national spread. According to reports, Asia, Europe, and North America were not as badly

affected as China, which had a high burden of disease and mortality (Velavan & Meyer, 2020). Among the 13 top-priority countries, dense communities in Africa, Uganda, Kenya, Ghana, and Ethiopia were the most at risk and susceptible due to inadequate and improper diagnostic capabilities. (WHO, 2019). Individuals over the age of 60 have a higher chance of contracting the infection than younger patients, particularly those with symptoms. Angiotensin-converting enzyme II (ACE2) serves as an entrance receptor for SARS-CoV-2, which then infects lung alveolar epithelial cells via receptor-mediated endocytosis and causes respiratory issues. Because of the lack of a vaccine, the fatality rate of COVID-19 infections has been rising every day (Li, Guan, & Wu, 2020).

Countries sought strategies to stop the spread of the virus since the effect it was having on health was frightening and a global issue. These precautions included wearing nose masks, avoiding social situations, limiting mobility, regularly washing hands, and using alcohol-based hand sanitizers. As a result of the ban on large gatherings, schools, bars, and religious institutions had to close. The younger age groups were following these rules, but senior persons were advised to stay at home because they posed a greater risk of contracting the disease (Solomou, & Constantinidou, 2020). Older people were substantially impacted by the lockdown since they were cut off from their loved ones and friends, which led to feelings of depression, loneliness, and worsened mental health.

The closure of higher institutions and the sending of students to live with their parents also had an impact on their academic schedules and psychological health. Physical separation was used to contain the epidemic and stop the virus from spreading (Amir, Tanti & Puspitawati, 2020). Some people found that staying home interfered with their way of life, especially their study routine. The lockdown had an impact on family members' relationships and communication styles as well: Students' social and psychological well-being suffered greatly as a result of not being able to see friends or complete scheduled academic activities for the semester. This was especially true for final-year students who had ongoing plans for their final exams and graduation. It disrupted some first-year students' reading and study routines, causing some to discard their books while others took on menial occupations to make ends meet. The lockdown also had an impact on other students who had minor business at school; some believed their life goals had failed while others counted the loss of their businesses. The situation is one of fear, dread, and uncertainty.

Nigeria has not yet embraced the remote learning strategy. This is because it will take some time for professors to adjust and learn how to teach online (Hoge, 2020), therefore tertiary institutions in Nigeria slowed down academic activities while other developed nations implemented e-learning to help students achieve academic objectives. This study aims to identify the elements that influence students' study habits while the campus is under lockdown. Also, it will examine methods for influencing students' study habits and the functions of social workers in encouraging responsible study habits under urgent circumstances.

Objectives of the study

The main aim of this study is to investigate the determinants of students studying behavior during covid-19 lockdown in Calabar metropolis, Cross River State, from a social work perspective. Specifically, the study seeks to;

1. Examine environmental factors affecting students studying behavior during covid-19 lockdown in Calabar Metropolis
2. Determine the influence of internet facilities on students studying behavior during covid-19 lockdown in Calabar Metropolis.
3. Identify the roles of the social workers in improving students studying behavior during covid-19 lockdown in Calabar metropolis ;

Statement of hypotheses

The hypotheses formulated for the study were;

1. Environmental factors do not significantly influence students studying behavior during covid-19 lockdown.
2. Internet facilities do not significantly influence students studying behavior during covid-19 lockdown.
3. Social worker roles do not significantly influence students studying behavior during covid-19 lockdown.

Environmental Factors and students' study behaviour during Covid-19 lockdown

One of the most difficult hygienic emergencies that poses significant obstacles in the classroom environment was the covid-19 pandemic. According to Smith, Jones, and Johnson (2020), the impact of COVID-19 is greater on psychological health and well-being due to lockdowns and the closure of restaurants, schools, and other public spaces than it is on physical health and disease-related side effects. According to UNESCO (2017) the challenges of providing quality education in Sub-Saharan Africa increased during the pandemic, especially in the issue of resource constraints that can hinder students' ability to study effectively. Lack of providing access to resources such as textbooks, study materials, and computers to help students stay engaged and motivated in their studies and improve educational outcomes.

United Nations (2020) claims that the covid-19 epidemic disrupted school operations, causing over 196 countries to close all of their schools on a national level. Over 1.6 billion young students' "study behaviour" was impacted by this move. Even though two-thirds of countries around the world have introduced various methods of distance learning, these methods were unsuccessful, especially in underdeveloped countries, according to Mirahmadizadeh, Ranjbor, and Rahhimi's (2020) observation, "these methods were particularly unsuccessful in underdeveloped countries." For instance, Nigeria was unable to support such online or distant learning programs, making the learning environment for students quite challenging.

The pandemic took everyone by surprise and so families were not prepared and could not provide the necessary requirement for their children to study effectively while at home which affected their study behaviour. It means that an uncomfortable study environment can affect a student's ability to focus. Also, Henderson and Mapp (2002) affirm that support from the family is a vital tool for the effective study behavior of students which also builds a strong connection between the family and community. When students feel supported and encouraged by their family, friends, and teachers they are more motivated to study and do well in school thus academic success is hinged not only on the students but also on creating strong partnerships between families and friends which is a very strong support system for students to make progress.

During crises such as pandemics, families are affected negatively. High levels of family stress, such as financial difficulties, family conflict, or illness, had a negative impact on student's academic achievement and behavior (Conger & Elder, 1994). At all times, parents should see the importance of addressing and managing family stress to create a positive home environment for children such as family communication, problem-solving, and support networks which help families cope with stress and promote positive outcomes for children.

Internet facilities and students' study behaviour during Covid-19

Lack of internet accessibility might affect students' study habits and academic achievement. According to an [2020] analysis from Michigan State University, students' poor study habits and resulting failure on exams were caused in part by their homes' slow internet connections or limited access to the internet in rural areas. For students whose sole choice during the COVID-19 lockdown was online study and communication with their friends, teachers, and courses, limited or no internet facilities are a major setback (Michigan State University, 2020). The internet has made it simpler for students to study and discover knowledge on any topic they need for their studies while at home, Harasim (2012) agreed, and he thought that online technology had significantly changed how students obtain knowledge and study. Due to the lockdown and this availability of information, education is changing and giving students new options to learn and work with kids around the world. Yet, difficulties with using the internet could include a bad internet connection, a lack of money to buy data, and a good laptop.

During the COVID-19 school lockout, internet service rose to become a very profitable commodity. About 75% of students reported that their lives and study habits had gotten harder during COVID-19, according to research by Almen Dingen, Morseth, Gjolstad, Brevik, and Loris (2021), whereas 50% of students believed that learning outcomes would be challenging to attain due to the abrupt shift to online education and the difficulties or consequences of the unavailability of internet services in many homes. Almendingen et al (2020) claim that the repercussions or associated effects keep getting worse. After a year of the COVID-19 lockout, more students confessed that they were using the internet at home for study purposes, up from 75% and 50% to 76% and 57%, respectively.

More so, due to too much information available online, it became difficult to ascertain valid information. According to Rieh (2002), it is important to how people judge the quality of information on the web and the impact information overload can have on cognitive authority. The study showed that the sheer volume of information available on the web can make it difficult for students to sort through what is relevant and important to their needs. This can lead to information overload and cause students to become overwhelmed and confused as it becomes difficult for them to navigate the vast amount of information available on the web and make informed decisions about what information is relevant and trustworthy.

The role of social workers in improving students study behavior during Covid-19 lockdown

The social work profession exists to enhance the quality of life and general well-being of individuals, families, groups, and communities. Social workers can offer a variety of services, such as counseling, case management, advocacy, and community outreach, and they can work in a variety of venues, including hospitals, schools, community organizations, mental health

clinics, and government agencies. Social work's objectives include addressing social issues and challenges, promoting social justice and equity, and empowering people and communities. Social workers may work with people who are dealing with a variety of problems, including domestic abuse, addiction, poverty, mental illness, and chronic illness. They may also try to connect these people with the resources and services they need to deal with their problems (NASW, 2021).

The covid-19 crisis has meant the suppression of face-to-face educational activity in most African countries with Nigeria being no exception. Faced with this situation, social workers have played a major role in ensuring that students studying behavior are improved to ensure the protection of all students, especially the most vulnerable ones (Javier, 2020). According to NASW (2021), social workers can work one-on-one with students to provide personalized support and guidance that helps them develop effective study habits by including activities like time management strategies, study skills training, or academic coaching. The positive impact of these activities and programs is to encourage students not to lose focus on their studies in the midst of the difficulties occasioned by the pandemic and the adverse effect it also had on the families which affected the social, financial and emotional support they gave to their children.

Schools are drastically changing how they deliver instruction for the 2019–2020 academic year as Covid-19 infections continue to surge across various regions of Nigeria. School social workers were expected to swiftly think through how to rearrange their work and roles to meet the current requirements of students and their families as part of the social work field's commitment to respond to the pandemic. The Covid-19 pandemic's disruption presents a chance for the field of school social work to re-evaluate its place in the Nigerian public education system and to reshape its practice methodology to more accurately reflect fundamental social work perspectives like person-in-environment and ecological systems (Brongenbrenner, 2019). This means that the lockdown brought a new innovation in education as e-learning, zoom meetings, and teams were introduced in teaching tertiary students.

In order to serve the ongoing and evolving needs of families and the greater school community, social workers' duties and responsibilities have changed during the spring of 2020 distance learning (Ashley, Erin, and Lechugu-Pena, 2020). In order to better understand these needs of students during the epidemic and to discover how social workers may better meet these needs, interviews with 20 school social workers in Nigeria's public schools were performed across three states. Data were examined utilizing a grounded methodology. The study's findings showed that school social workers regularly increased contact and connection with parents of students during Covid-19, focusing on food assistance, family referrals, parent check-ins, and coaching (Amadi, 2020).

Individual and small-group special education, as well as mental health services provided to kids inside the boundaries of the school building and throughout the regular school day, have recently taken centre stage in school social work practice (Kelly, 2010; Phillippo, Kelly, Shayman & Frey, 2017). In order to assist students, it is crucial to identify learning obstacles.

According to American Psychology Association (2020), social workers can work with students to identify any challenges that might be preventing them from studying effectively. These challenges are frequently connected to learning disabilities, mental health problems, or environmental factors like poverty or a lack of access to resources. As a profession that seeks to be the voice for the voiceless, social workers can influence policy and programs geared toward education. According to NASW (2018), social workers can advocate for policy changes that support student learning, such as increasing funding for education, reducing class sizes, or improving access to resources.

Theoretical framework

The Socio-Behavioral Theory

The socio-behavioral theory originates from the work of Stuart, Miller, and Thomas (1975). According to the theory, people's actions depend on positive outcomes and change as a result of learning, with some form of reinforcement coming from their social environment. Notwithstanding the intricacy of these roles, the proponents of the socio-behavioral theory place a high value on people's capacity to fulfill them in a variety of social contexts. In other words, academics who support this concept hold the belief that people are capable of acting out or exhibiting socially accepted roles and behavioral patterns.

The socio-behavioral theory is relevant to this study because according to the socio-behavioral theory, peer pressure and environmental influences, among others, play a vital role in understanding behaviour during times of crisis such as the pandemic because of insufficient or incorrect socialization and reinforcement from society. Therefore, according to proponents of this theory, social workers can aid students by identifying undesirable behaviours that have an impact on their academic performance. They can also help them unlearn these unhelpful and socially unacceptable behaviours and then re-learn new ones that will improve their academic performance. The socio-behavioral theory is heavily criticized for lacking a useful and illuminating grasp of how to evaluate students' study conduct during crisis situations. Also, there has been inconsistent behavior of individuals during the COVID-19 pandemic lockdown due to stress, financial constraint, and lack of physical and social support. This shows the individual differences in personality traits and social identity and how it impacts adherence to lockdown measures (Kramer, Kramer & Ten Brinke 2020).

Research Methodology

This section deals with the research design and methodology of the study. The descriptive survey design was used in the study. The design is considered appropriate for the fact that it facilitates the collection of detailed factual information on determinants of students' study behavior during covid-19 lockdown in Calabar metropolis, Cross River State, Nigeria. The target population for this study is students in tertiary institutions in the Calabar metropolis of Cross River State. The population of Calabar metropolis is 501,400 people where Calabar South Local Government is 255,900 while Calabar Municipality is 245,500 (National population commission, 2006). The targeted population is 400. A combination of purposive and systematic sampling techniques was adopted to select 200 respondents which was supported by using Taro Yamane's sample determinants formula. The research instrument was the questionnaire and in-depth interview which was utilized to generate data from the respondents. The questions for the in-depth interview were drafted in uniform in order to guide

the researchers to provide qualitative data that will complement them. The quantitative data was derived from the questionnaire. Chi-square (x") and Pearson product-moment correlation analysis (rxy) was adopted to test the hypotheses in this study.

Ethical consideration

Prior to the start of the interviews and distribution of the questionnaire, participants informed consent was requested from all who indicated an interest in taking part in the study. These were duly and willingly filled, and signed by the participants. By deleting any identifying information, the researchers ensured that the information from participants was only used for the research and not disclosed to the public, giving participants the assurance of anonymity and confidentiality. Acronyms were used by the researchers to identify participants. Participants were made aware of their ability to leave the study at any time especially when they feel they do not want to continue. The researchers ensured there was no risk posed to participants during and after data collection.

Presentation of results

Ho1:

The environmental factor does not significantly influence students' study behavior during covid-19 lockdown. The independent variable in this hypothesis is environmental factors while the dependent variable is students' study behavior. Pearson product-moment correlation analysis (rxy) was used to test this hypothesis quantitatively. The qualitative analysis is indicated in the bar chart as shown below. The result is presented in table 1.

Table 1: Pearson product-moment correlation result between environmental factors and students' study behavior during covid-19 lockdown (N=200)

Variables	$\sum X$ $\sum Y$	$\sum X^2$ $\sum Y^2$	$\sum XY$	r-cal
Environmental factor (x1)	1168	6875		
			6112	0.45
Students study behaviour (y)	1034	5850		

Significant at 0.05 level, critical r-value = 0.161, df=198

The result in table 1 revealed that the calculated r-value of 0.45 is greater than the critical r-value of 0.161 at a 0.05 level of significance, with 198 degrees of freedom, with this result the null hypothesis was rejected in favor of the alternate hypothesis. This implies that environmental factors significantly influence students' study behavior during covid-19 lockdown in Calabar metropolis, Cross River State.

In-depth Interview

Question: Do environmental factors affect students' study behavior during covid-19 lockdown?

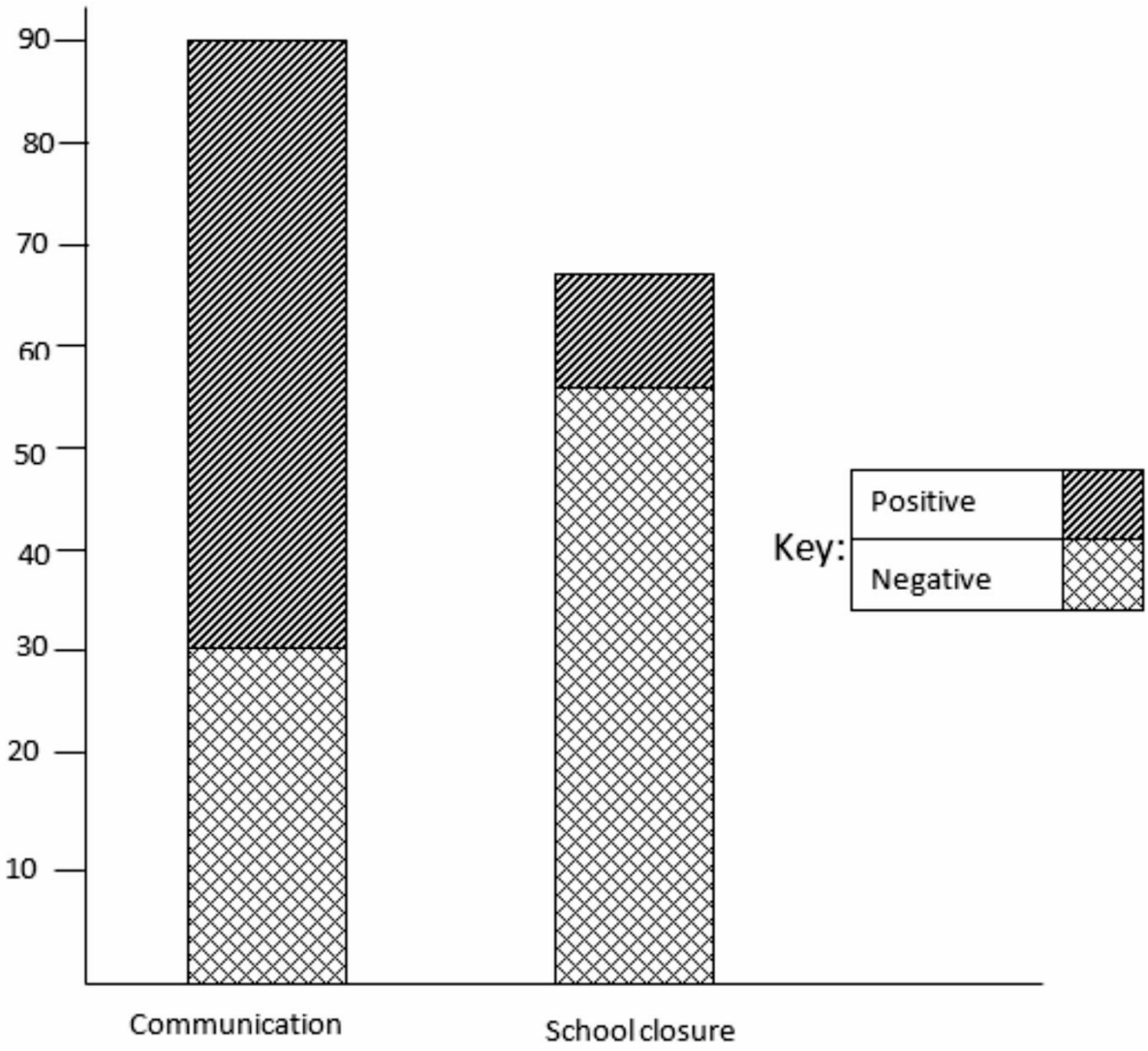
The responses relating to the question were summarized into a frequency distribution table and bar chart as shown in Table 2.

Table 2 A frequency distribution table showing the environmental factors and students' study behavior during covid-19 lockdown

Students study behaviour	Environmental communication pattern	Factors school closure	Total
Positive	40	80	120
Negative	70	10	80
Total	110	90	200

Source: fieldwork, 2022

Bar chart showing environmental factors and students study behaviour during covid-19 lock down



In-depth Interview on Environmental factors

The result as presented in the table and figure one revealed that 60% of respondents agreed that environmental factors significantly influence students' study behavior during covid-19 lockdown in Calabar metropolis, Cross River State, Nigeria.

Ho2:
Internet facilities do not significantly influence students' study behavior during covid-19 lockdown. The independent variable I is internet facilities while the dependent variable is students' study behavior. Chi-square (x") analysis was used to test this hypothesis quantitatively. The qualitative analysis is indicated in the bar chart as shown below. The result is presented in table 3.

Table 3
Contingency chi-square (x") analysis of the influence of internet facilities on students' study behavior during covid-19 lockdown (N=200)

Student study behaviour	Internet facilities availability	Non-availability	Total	X^2-cal
Positive	84(59.28)	20(44.72)	104(104)	49.94
Negative	30(54.72)	66(41.28)	96(96)	
Total	114(114)	86(86)	200(200)	

Significant at 0.05 level, critical x2-value=3.84,df=1

The result of the analysis as presented in table 3 revealed that the calculated x^2-value of 49.94 is greater than the critical x^2-value of 3.84 at 0.05 level of significance, with 1 degree of -freedom. The result of the statistical analysis is significant since the calculated x^2 value is greater than the critical x^2-value. With this result, the null hypothesis was rejected. This, therefore, implies that there is a significant relationship between internet facilities and students' study behavior during covid-19 lockdown in Calabar metropolis, Cross River State.

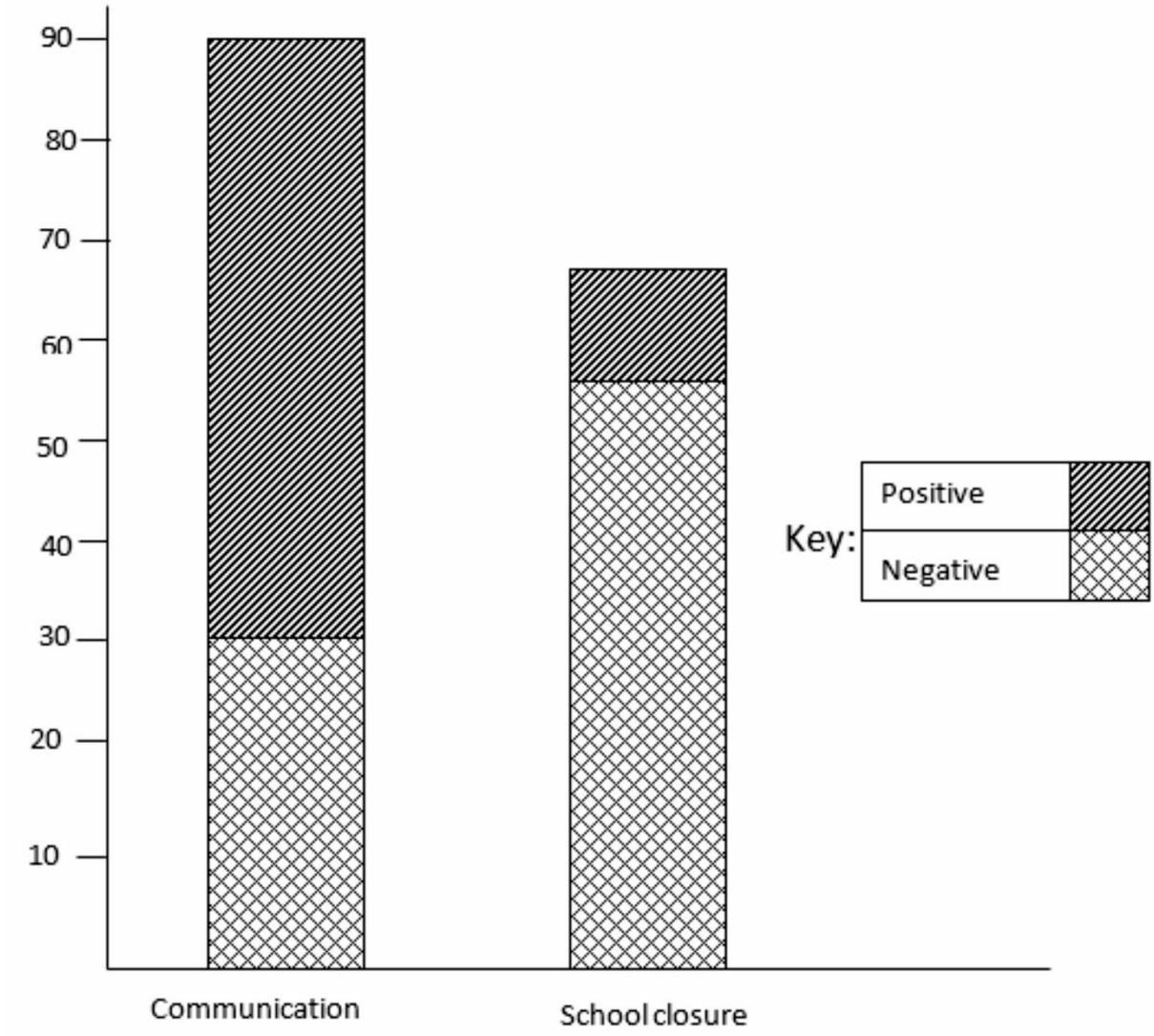
In-depth Interview
Question: To what extent does the availability of internet facilities influence students' study behavior during covid-19 lockdown?
The responses relating to the question were summarized into a frequency distribution table and bar chart as shown in Table 4

Table 4
A frequency distribution table showing the influence of internet facilities and students' study behavior during the covid-19 lockdown

Students study behaviour	Internet facilities availability	Factors school closure	Total
Positive	84	20	104
Negative	30	66	96
Total	114	86	200

Source: fieldwork, 2022

Bar chart showing the influence of internet facilities on students' study behaviour during covid-19 lockdown



In-depth Interview on Internet facilities

The result as presented in the table and figure three revealed that 65% of respondents ' agreed that internet facilities significantly influence students' study behavior during covid-19 lockdown in n Nigeria.

Ho3:

Social workers' roles do not significantly influence students' study behavior during covid-19 lockdown. The independent variable in this hypothesis is social work roles while the dependent variable is students' study behavior. Chi-square (x) analysis was used to test this hypothesis quantitatively. The qualitative analysis is indicated in the bar chart as shown below. The result is presented in table 5.

Table 5
Contingency Chi-square (x) analysis of the influence of social workers' roles on students' study behavior during covid-19 lockdown (N=200)

Students study behaviour	The roles of referrals to parents	Social workers counseling	Total	X^2-cal
Positive	68(54.88)	30(43.12)	98(98)	13.977*
Negative	44(57.12)	58(44.88)	102(102)	
Total	112(112)	88(88)	200(200)	

Significant at 0.05level, critical x2 -value=3.84, df=1 .

The result of the analysis as presented in table 2 revealed that the calculated X^2 value of 13.977 is greater than the critical X^2-value of 3.84 at 0.05 level of significance, with 1 degree of freedom. The result of the statistical analysis is significant since the calculated X^2-value is greater than the critical X^2-value. With this result, the null hypothesis was rejected. This, therefore, implies that there is a significant relationship between social workers' roles and students' study behavior during covid-19 lockdown in Calabar metropolis, Cross River State.

In-depth Interview

Question: What roles can social workers play to enhance students' study behavior during covid19 lockdown?

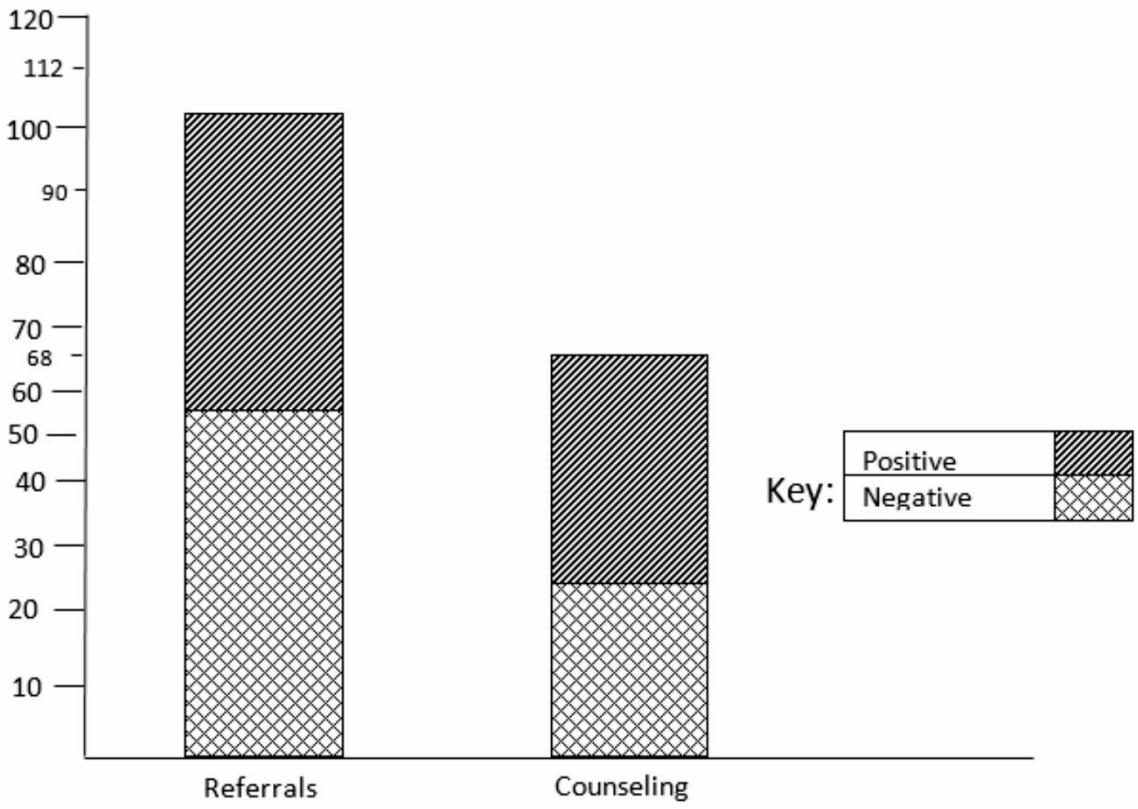
The responses relating to the question were summarized into a frequency distribution table and bar chart as shown in Table 6

Table 6

Students study behaviour	Social workers' roles referrals	Counseling	Total
Positive	68	30	98
Negative	44	58	102
Total	112	88	200

Source: fieldwork, 2022

Bar chart showing the influence of social workers' roles on students' study behaviour during covid-19 lockdown



In-depth Interview on roles of social worker

The result as presented in the table and figure two revealed that 75% of respondents agree that social workers played a major role in improving the students' study behavior during covid-19 lockdown in Calabar metropolis, Cross River State, Nigeria

Discussion of results

In this study, certain findings were arrived at based on data gathered from the field and subjected to statistical analysis using chi-square (x2) and Pearson product-moment correlation analysis. This section discusses the major results of the study and the determinants of students' study behavior during covid-19 lockdown in the Calabar metropolis, Nigeria.

Results from hypothesis one show that environmental factors significantly influence students' study behavior during covid-19 lockdown. The result obtained showed that the calculated r-value of 0.45 was found to be greater than the critical r-value of 0.161 needed at a 0.05 level of significance with 198 degrees of freedom. This result was in favour of the alternate hypothesis while rejecting the null hypothesis. The finding of this hypothesis confirmed the earlier position of the United Nations (2020) which maintained that school functioning was affected by covid-19 pandemic and its environmental implications impacted the students' study behavior during the covid-19 lockdown. It also corroborates with the study of Conger & Elder (1994) which revealed that stress encountered by parents during this pandemic affected the

home environment such that the support system and networks from the home were distorted leaving the students with an unhealthy environment to study.
The result of the quantitative analysis of hypothesis one is in consonance with an in-depth interview result that environmental forces significantly influence the students' study behavior during covid-19 lockdown in Tertiary institutions in Calabar metropolis of Cross River State. During covid-19 in the study area, all participants during an interview session demonstrated positive responses to the influence of environmental factors on students' study behavior covid-19 in Calabar metropolis. An extract from an interview with a participant reported the findings of this hypothesis. He said;

> "*Environmental factors in terms of communication patterns and school closure influence students' study behavior during covid-19 lockdown. The way we relate physically with students in the school is different when we talk to them over the phone. Students find it easier to understand lectures in person because of the physical contact and interaction with their peers. And the university learning environment keeps them in check to always study compared to when they are at home with several distractions and less support from their teachers and friends. The closure of schools due to lockdown has affected not only the students' study behavior but also the lecturers because as you prepare to teach students you also improve in your study behavior"* (Male, 50, Lecturer, Participant 5)

Another participant noted that communication pattern makes learning and studying environment difficult. The extract from an interview with another participant states;

> *"covid-19 pandemic affected most of the communication patterns between the lecturers and their learners. Students were not having close interaction with the instructors during the learning process. Both lecturers and students wore nose masks and must maintain social and physical distancing, and a large crowd were discouraged as members of the academic environment were required to follow strictly to covid-19 protocols*" (Male, 52, Lecturer, Participant 10)

Results from hypothesis two show that there is a significant influence of internet facilities on students' study behavior during covid-19 lockdown. The result obtained showed that the calculated X^{2-} value of 49.94 was found to be greater than the critical X^2 value of 3.84 needed at 0.05 level of significance, with 1 degree of freedom. This result was in favour of the alternate hypothesis while rejecting the null hypothesis. The finding of this hypothesis confirmed the earlier position of the Michigan State University (2020) report that shows internet connection or limited access to the internet from homes in rural areas contributed to students' poor studying habits and consequently resulted in failing examinations. Limited or no internet facilities during covid-19 lockdown is a serious setback for students whose only option was online studies and interaction with their friends, school teachers, and curricula.

Also, the findings of Rieh (2002) are in line with the findings of this study from hypothesis two which states that the influence of the internet affected students' study behaviour. During the lockdown and pandemic, there was too much information all over the internet such that it was difficult to tell which was true or false. Students found it difficult to ascertain or how to make a good decision on which information to use in studying. This led some students to rely on information that does not represent academic materials negating effective study and progress.

This scenario exposed students to become confused about how to navigate the internet for quality resource articles, especially with little training based on the sudden nature of the pandemic and lockdown; most of them did not understand how to use search engines on a verifiable data page while some did not understand how to include search criteria.

The result of the responses to hypothesis three supported the in-depth interview result that internet facilities significantly influence students' study behavior during covid-19 lockdown in tertiary institutions, in Calabar metropolis. During an in-depth interview with participants, there was a positive response that internet facilities facilitate learning among students during covid-19 lockdown. An extract from an interview with a participant reported that "*the unavailability of internet services in the University of Calabar hampers students' study habits. The limited or no internet facilities in the university during the lockdown period was a serious setback for students whose only option was online studies, thereby, affecting their study behavior*" (Female, 45, Admin staff, Participant 1).

Another participant also noted: "*my life and study behavior had become more difficult during covid-19. I find it difficult to achieve much due to the sudden shift to online education and the unavailability of internet services at home, it is really a tough time for me"* (Male, 26, Student, Participant 15). Another participant stated: "*We are really finding it difficult to adapt to the new system, especially for those that are not familiar with the internet, they find it difficult to learn fast and thereby exhibiting negative behavior 'towards their studies"* (Male, 23, Student, Participant 20). The high cost of internet facilities significantly influences undergraduate students' behavior toward learning during the covid-19 lockdown. However, while few of the respondents interviewed agreed that environment and social work roles influence the students' study behavior during covid-19 lockdown, the majority of them strongly affirmed that internet facilities have a significant influence on students, study behavior during covid-19 lockdown in tertiary institutions in Calabar metropolis of Cross River State, Nigeria.

Results from hypothesis three show that there is a significant relationship between social worker roles and students' study behavior during covid-19 lockdown. The result obtained showed that the calculated x2 value of 13.977 was found to be greater than the critical x2 value of 3.84 needed at 0.05 level of significance, with 1 degree of freedom. This result was in favour of the alternate hypothesis while rejecting the null hypothesis. The finding of this hypothesis confirmed the earlier position of Javier (2022) who maintained that social workers have played a major role in ensuring that students studying behavior are improved, to ensure the protection of all students, especially the most vulnerable ones. The finding also agreed with Amadi (2020) that during covid-19 lockdown, school social workers consistently had increased contact and interaction with students' parents that centered around food assistance and referrals for families and parent check-ins and coaching.

The result of the quantitative analysis of hypothesis two is in line with an in-depth interview result that the roles of social workers improve the students studying behavior during covid-19 lockdown in Tertiary institutions in Calabar metropolis. During an in-depth interview session with lecturers and students in the Department of social work, they demonstrated a positive response on the role of social workers in improving students studying behavior during the covid-19 lockdown. An extract from the interview supported the findings of this hypothesis with this response

> "*As social workers, we were consistent in helping and assisting these students by increasing our communication pattern and interaction with even the parents because they were also affected and had these students at home with them. We advised them on how best to support their children and deal with the stress at home to enable them to improve the student's study behavior during the period. We also provided online counseling for students who were overwhelmed due to the effects of the pandemic just to keep their mental health in good shape" (*Female, 35, Social worker, Participant 18).

Another participant noted that social workers play a significant role in instilling positive behavior among students during covid-19 pandemic era. *He said, "I was advised by the social worker to adhere strictly to covid-19 protocol to avoid being infected with the sickness, though I was so afraid because of how people were dying from the virus, every day I was praying to be alive so I can complete my education"* (Male, 28, Student, Participant 3). Another participant also affirmed *"I developed a positive attitude for studying because of reorientation from the social worker. The encouragement and advice helped me stay focused even though I did not know when the pandemic and lockdown will be over, I kept studying and hoping for academic success in my forthcoming exams which were disrupted by the lockdown"* (Female, 22, Final year student, Participant 12).

Conclusion and Recommendations

Based on the results of the study, it could be concluded that environmental factors, social worker roles, and internet facilities are determinants of students' study behavior during covid-19 lockdown in Nigeria and globally. On the basis of the statistical analysis and findings of the study, the following recommendations were made:

1. The government of Nigeria should introduce distance learning to enhance effective learning behavior among students during crisis situations.
2. Under pandemic conditions, academic institutions should focus on providing beneficial teaching formats and innovative ways to support students lacking social networks. Besides they should consider developing means to help students structure daily life as well as establishing initiatives to strengthen students' self-efficacy beliefs.
3. The online learning system should be built with a friendly and easy-to-use interface and diverse learning programmes through the e-learning system, should improve system accessibility, and allow students to actively register and be flexible about the time to use them.
4. Social workers should expeditiously consider how to restructure their work and roles to meet the current needs of students and their families, especially in the context of the covid-19 pandemic.
5. There is an urgent need for school social worker's offices to be created in various departments of universities and other learning environments, to be able to counsel, educate and enhance student studying behaviour during a pandemic, and even during academic staff striking situations.

References

Almendingen, K. Morseth M., Gjoltad, E, Brevik, A. & Torris, C. (2021). Students' experience with online teaching following COVID-19 lockdown: A mixed methods explorative study. *PLOS ONE 16* (8): e0250378.doi:101371/journal.pone. 025078.

Amadi, N. (2020). *The role of social work in education of the child*. Onitsha: African scholar publisher.

American Psychological Association. (2020). *Barriers to Learning*. https://www.apa.org/education/k12/barriers-learning

Amir, L. Tanti, I., & Puspitawati, R. (2020). Anxiety and depression in COVID-19 survivors in Indonesia: A qualitative study. *The Journal of Nervous and Mental Disease, 208*(7), 1-5. doi: 10.1097/NMD.0000000000001217.

Ashley, M. Erin, P. & Lechugu-Pena, S. (2020). *Pivoting during a pandemic: school social work practice with families during covid-19.* New York: Oxford University press.

Brongenbrenner, A. (2019). *Environmental and ecological system*. New York: free press.

Conger, R., & Elder Jr, H. (1994). *Families in troubled times: Adapting to change in rural America*. Aldine Transaction.

Harasim, L. (2012). *Learning Theory and Online Technologies*. Routledge.

Henderson, A. & Mapp, K. (2002). A new wave of evidence: The impact of school, family, and community connections on student achievement. *National Center for Family & Community Connections with Schools.*

Hoge, A. (2020). Impact of COVID-19 on Mental Health: Recent Findings and Implications for Flight Personnel. *Aerospace medicine and human performance, 91*(9), 742-747. doi: 10.3357/AMHP.5795.2020.

Javier, F. (2020). The role of social workers in children's education during COVID-19. International *Journal of Social Work and Public Health, 3*, 13-18.

Kelly, D. (2010). The mental health of young people in Australia: key findings from the child and adolescent component of the national survey of mental health and well-being. *Australian and New Zealand Journal of Psychiatry, 44*(9), 805-814. doi: 10.3109/00048674.2010.507543.

Kramer, I., Kramer, Z., & Ten-Brinke, F. (2020). The evidence-consistency framework: Using mental models to explain conflicting behavioral evidence related to COVID-19. *Journal of Applied Social Psychology, 50*(10), 579-588. doi: 10.1111/jasp.12717.

Li, Q., Guan, X., & Wu, P. (2020). Early Transmission Dynamics in Wuhan, China, of Novel Coronavirus–Infected Pneumonia. *New England Journal of Medicine, 382*(13), 1199-1207. doi: 10.1056/NEJMoa2001316.

Michigan (2020). *Poor internet connection leaves rural students behind*. Michigan state university, 426 auditorium road East lansing, M1 48824.

Michigan State University. (2020). *MSU response to the novel coronavirus*. Retrieved from https://msu.edu/together-we-will/

Mirahmadizadeh, A. Rangbor, K. & Rahimi, T. (2020). Evaluation of students attitude and emotions toward the sudden closure of schools during the covid-19 pandemic: A cross-sectional study: *BMC Psychology, 8* (134).

National Association of Social Workers. (2018). *Social Workers as Social Change Agents*. https://www.socialworkers.org/News/Social-Work-Month/2018/Social-Workers-as-Social-Change-Agents

National Association of Social Workers. (2021). *Social Workers in Schools.* https://www.socialworkers.org/Practice/School-Social-Work/Social-Workers-in-Schools

National Association of Social Workers. (2021). *What is Social Work?* https://www.socialworkers.org/News/Facts/Social-Work-Facts

National Population Commission. (2006). *Nigeria: Census 2006.* Abuja: National Population

Phillippo, M., Kelly, M. P., Shayman, J. A., & Frey, M. (2017). The role of schools in children's social and emotional development. *Pediatrics, 140*(Supplement 2), S90-S93. doi: 10.1542/peds.2016-1758D.

Rieh, S. Y. (2002). Judgment of information quality and cognitive authority in the Web. Journal of the *American Society for Information Science and Technology, 53*(2), 145-161.

Smith, J., Jones, L., & Johnson, K. (2020). The impact of lockdown on psychological health and

Solomou, I., & Constantinidou, F. (2020). Prevalence and predictors of anxiety and depression symptoms during the COVID-19 pandemic and compliance with precautionary measures: age and sex matter. *International Journal of Environmental Research and Public Health, 17*(14), 4924. doi: 10.3390/ijerph17144924.

UN policy brief (2020). *The impact of covid-19 on children*. https:///unsdgunor/sites/default/files/2020-04/160420-covid-children-policy-briefpdf.

UNESCO. (2017). *Financing of Education in Sub-Saharan Africa: Meeting the Challenges of Expansion, Equity, and Quality*.

United Nations (2020). *Policy brief. Covid-19 and the need for action on mental health*. New York. NY: United Nations.

Velavan, P. & Meyer, G. (2020). The COVID-19 epidemic. *Tropical medicine & international health, 25*(3), 278-280. doi: 10.1111/tmi.13383

World Health Organization. (2019). *Ten threats to global health in 2019*. Retrieved from https://www.who.int/emergencies/ten-threats-to-global-health-in-2019