PERCEPTION OF COVID-19 AMONG UNDERGRADUATE STUDENT'S ACADEMIC PERFORMANCE IN FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, NIGER STATE.

 \mathbf{BY}

SHEHU, Emmanuella Yohanna

2017/3/69248BE

DEPARTMENT OF SCIENCE EDUCATION

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA,

NIGER STATE, NIGERIA.

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A PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF BACHELOR OF TECHNOLOGY (B TECH) IN SCIENCE EDUCATION DEPARTMENT OF SCIENCE EDUCATION SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, NIGER STATE

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ABSTRACT

COVID-19 pandemic has raised dreadful alarm in the world which resulted to school closure in educational sector in Nigeria. The study assesses the perception of COVID-19 among undergraduate students' academic performance in Federal University of Technology Minna, Niger State. Descriptive Survey was employed in the study. Population for the study were8397 students in different schools in Bosso campus, from which a sample of 200 students were randomly selected. Data was collected using a structured questionnaire. The reliability of the instrument was found to be 0.81 using Cronbach Alpha. Thequestionnaire was validated by 2 senior lecturers in the department, data were analyzed using descriptive statistics of mean, Standard Deviation by the means of SPSS. The result of the finding showed that, students perceived that COVID-19 has influenced their academic performance with a grand mean score of 3.40, at different levels students adhered to COVID-19 protocols in the University with a grand mean score of 3.52, H01 revealed that there is no significant difference in the adherence of COVID-19 protocols between gender in the University with p value of 0.73, COVID-19 influenced students' mode of learning with grand mean score of 3.44. $H0_2$ revealed that there is no significant difference in the adherence of COVID-19 protocols based on age grade with P value of 0.77. The following recommendations were made: Students should be given emotional support by means of motivation, education on how to manage stress, anxiety and depression. Alternative measures should be adopted by school administrators in the University to minimize physical gathering of teachers and students by considering online teaching and learning.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Dealing with the unpredictable challenges caused by COVID-19 pandemic which has raised dreadful alarm, resulting in many setbacks and confusion in the world, whereby a lot of people live with uncertainties and questions on how the next moment will become because of the fear caused by covid19. COVID-19 pandemic is a public emergency of international concern that affects several nations, (Aylie & mekonin, 2020).

According to World Health Organization (WHO), coronaviruses belong to a family of viruses that cause illness such as the common cold to more serious diseases like the severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). These viruses were formally transferred from animals to humans. SARS, For example was transmitted from civet cats to humans while MERS moved to humans from a certain camel. Several known coronaviruses are circulating in animals that have not yet infected humans. The name coronavirus comes from the Latin word corona, meaning crown or halo. Under an electron microscope, the looks like it is surrounded by a solar corona.

COVID-19 was first discovered in Wuhan, China in December 2019 and thereafter spreads all over the world. The coronavirus was officially known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) by the International Committee on Taxonomy of Viruses (ICTV), SARS-CoV-2 is seen to be a spillover of an animal coronavirus and later adapted the ability of human-to-human transmission(Yen-Chin et.al, 2020,this disease spreads fast and easily among humans, all humans, in this manner

the World Health Organization(WHO)has announced it as a pandemic on March 12,2020. signs of infection include fever, cough, Short-ness of breath and breathing difficulties. In more severe cases, it can lead to pneumonia, multiple organ failure and even death. Current estimates of the incubation period - the time between infection and the onset of symptoms - range from one to 14 days. Most infected people show symptoms within five to six days. However, infected patients can also be asymptomatic, meaning they do not display any symptoms despite having the virus in their systems. (Wikipedia, 2020).COVID-19 pandemic has caused international governments authorities to take drastic decisions to control the spread of the infections .Many countries declared nationwide lock-down, banned the local and international flights, postponed school attendance ,hinder universities and business operations, restricted large gatherings and asked people to stay back at home. The total number of confirmed cases and mortalities were 23,491,520 and 809,970, respectively, (WHO 2020). The COVID-19 pandemic has caused the loss of human life worldwide and presents unbearable problems to public health, food systems and different system of work. The economic and social setbacks caused by the pandemic has made people fall into extreme poverty (World Bank 2020) The first case of COVID-19 in Nigeria broke on February 17, 2020 by an Italian citizen who landed at Lagos Airport 2 days earlier on flight from Northern Italy and had previously travelled from Lagos to Ogun State, where he became ill and was isolated, he was treated in Lagos hospital, National emergency operation centres traced his contact, by March suspected cases where found in different state in Nigeria.

The extreme effect on business, education, health, and social life has caused fear, anxiety and depression, and has led to poor mental health and poverty.

COVID-19 pandemic has also affected and slowed down different activities in educational system. Educational institutions across the world were temporarily shut-down and has affected Students performance nationwide. Many universities suspended all campus activities, curtail gatherings so as to lower the transmission of virus. Nevertheless these protocols lead to setbacks in school, face to face interactions was changed to online teaching for undergraduates. This new method of learning opened an easier way to stop either direct contact among students or among the lectures, Unfortunately, many students had no link to the online teaching due to lack of electricity or financial limitations, And as such has increased the rate of depression, anxiety, and distress.

Furthermore, staying at home, history of medical illness, and poor social support has increased the chance of depression. Staying away from parents, relatives getting infected with coronavirus and family low source of income are risk factors for anxiety. Moreover, substance un-prescribed antiseptic or drugs used has increased rate of stress.

At the end of February 2020 as alarm bells began to sound on the growing speed of the COVID-19, the World Bank established a multi-sector global task force to assist country response and coping strategies. At that time only China and some schools in other affected countries were enforcing social distancing and school lockdown .nevertheless school lockdown seem to present an easier way to reduce the virus from spreading the more through social distancing within communities, the prolong lock-down tend cause imbalance and negative impact on the most vulnerable students due to individual difference ,students had little opportunities for learning at home, and their time out of school presented economic burdens for parents who are not financially stables and finding it hard to properly provide square meals in the absence of food issued to their

children in schools. Proprietors and workers in educational sectors who depend on school as their only source of income has face so much loss in human capital and diminished economic opportunities. School administrators who are responsible for impacting nearly a billion students across the world had watched their schools close for a very long period of time, this made them loose concentration on their daily routine and hence showed symptoms of fear, depression and distress.

As a result, before the reopening of schools in Nigeria Ben Goong spokesman for the Nigeria ministry of education out-listed COVID-19 protocols to saying;:Parents and respective institutions must ensure compliance to COVID-19 protocols, which included compulsory wearing of face masks by all students, teachers, and workers in all schools, temperature checks, and hand-washing facilities at strategic locations in all schools, constant supply of water, hand sanitizers, and enforcing maintenance of social distance and suspension of large social gathering such as assembly (Xinhia,2021). This is because the nation and educational sector has the interest of students academic performance at heart knowing that the students are going to take full position of leadership in the nearest future

In Federal University of Technology Minna Niger State this protocols were put in place in order to have a COVID-19 free environment and to ensure there is an effective learning activities or outcomes. Wikipedia defines Learning activities as activities designed or deployed by the teachers to bring about or create the conditions for effective learning it is designed purposely to give relevant information to students in an efficient way so have good academic performance. Example include lectures, demonstration and reading. Temperature check has made some get to lecture hall late because of long

queuing, use of nose mask has made students uncomfortable during lecture time, thereby losing concentrating, teachers don't move in classroom to check students who might not be engaged in class activities due to the of fear of getting infected by COVID-19, student not allowed to go into school premises without nose-mask when they forget it ,this has made students miss lecture or go into lectures hall with high tensions and nervousness. Assessing the perception of COVID-19 on students academic performance and how best to support students' social and emotional needs after the huge disruption of COVID-19 and the stated protocols will be essential. Many students may perform below standard, face greater food insecurity, loss of personal and family income, loss of family members to COVID-19, and fear of catching the virus itself.

1.2. Statement of the problem

All over the world, education has been a great tool for excellence, it is essential and thrive best in a good and conducive environment for both learners and teachers. Education has helped trained good professionals who had been a source of great help to the society at large, through standardized and effective academic activities. Academic and Learning activities loose its' goal when students are not psychologically stable, COVID 19 pandemic has helped in creating alot of imbalance in the educational system. There is fear, anxiety which has permeated the heart of many undergraduate students. Deborah Jegede, (2020) carried out a research on the impact of COVID-19 pandemic on higher institution development, she found out that COVID-19 Pandemic affect academic calendar of student. Few researches has been The protocol has raised downturn effects such as; student not comfortable with nose mask during lecture hours, asthmatic patient not finding it favourable, purchase of sanitizers out of students pocket money, going to

lecture hall late with anxiety caused by long queuing at the gate for temperature check, student missing classes as a result of change in venue etc all this has shown tremendous impacts on student's disposition towards Academic activities

Therefore this study is carried out to find out the perception of COVID-19 on academic performance of undergraduate students in Federal university of Technology Minna, Niger state.

1.3. Aim and objectives of the study

The study aimed to examine the perception of COVID-19 on undergraduate Students academic performance in Federal university of Technology.

Specifically, the study was designed to achieve the following objectives:

- To find out whether COVID-19 has influenced undergraduate student's academic performance.
- To find out whether COVID-19 protocols are adhered to amongst undergraduate students at the University.
- To determine which gender group adhere to COVID-19 protocols in the University.
- iv. To determine which of COVID-19 protocols has influenced undergraduate students' modes of learning at the University.
- v. To determine whether undergraduate students Age-grade influence adherence to COVID-19 protocols in the University.

1.4 Research questions

The following research questions were raised to guide the study;

- 1.Did COVID-19 influence undergraduate students' academic performance in the University?
- 2.Do undergraduate students in the University adhere to COVID-19 protocols?
- 3. Which gender group in the University adhere to COVID-19 protocols?
- 4.Does COVID-19 influence students' modes of learning in the University?
- 5. Do student age grade influence adherence to COVID-19 protocols?

1.5 Research Hypotheses:

The following hypotheses were formulated for research question three and five to guide the study and tested at 0.05 level of significance:

- H0₁:There is no significant difference between genders of students that adhered to COVID-19 protocols.
- 2. H0₂:There is no significant difference in the adherence of COVID-19 protocols by undergraduate students based on age grade.

1.5 Significance of the study:

Good Academic performance in Education has helped students to achieve best learning outcomes and made them useful to themselves and to the society at large. The educational sector have often made efforts to ensure that the best quality education are obtained at all levels of education.

Therefore, the result of the study will help University administrators and other stakeholders in the educational sector to:

 Plan academic calendar that can take care of pandemics especially with regards to ways and means of achieving effective learning outcomes in the University.

- This study will help university chancellor to know the impact cause by COVID on academic performance and to handle it
- 3. This study will provide awareness for students on how to manage and overcome psychological impact of covid19, so has to be proactive in carrying out their roles as students and to achieve their main aim or objectives of coming to school.
- 4. This study will help lecturers to be aware of the challenges faced by students and the psychological impact it poses on student's, for them to guide and counsel students on the best means to cope during this period of covid19 pandemic.

Subsequently, results from the study will help provide information and adequate knowledge on easier way to handle psychological impact of covid19.thus learning activities will be carried out efficiently. Furthermore, this will help people to properly follow the covid19 protocols. Finally, this research will serve as a reference material for scholars and other researcher in the field of research

1.7 Scope of the study

The scope of this research is limited to undergraduate students of Bosso campus from 100-500l students studying in the university in 2019/2020 academic session

Therefore the scope include;

Perception of COVID-19 on academic performance, Undergraduate students in Federal University of Technology Minna Niger State, Bosso campus only.

1.8 Operational Definition of Term

The following terms used in the study are operationally defined as:

Perception: This refers to undergraduate students' views or opinion regarding COVID -

19 in the University.

COVID-19:is seen as illness caused by a novel coronavirus now called severe

acuterespiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV),

which was first Identified amid an outbreak of respiratory illness. Academic

performance: This is the outcomes of the teaching and learning process in terms of

knowledge and skills that a student acquires from various teaching and learning activities.

Protocols: Protocols are set of rules and guidelines stated to prevent or stop the spread of

disease.

Undergraduate: A student in a University who has not received a degree.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Perception:

Perception based on the Latin root cipere, means "to grasp," According to Yolanda Williams, Perception can be defined as the way to recognize and interpret information that have been gathered through our senses. This also include how we respond to a certain situation with the given information.

Webster's dictionary defines perception as the way something is regarded, understood, or interpreted. It is also the quality of being aware of things through physical senses. People perceive things different through the sense organ such as the eyes, ear, nose, mouth and skin which is interpreted by the sensory neurons.

According to Robbins (2021) perception can be defined as "the process by which individuals organize and interpret their sensory impressions in order to give meaning to their environments." perception helps us to know people's behavior in the changed circumstances by understanding their present perception of the environment. One person may be viewing the facts in one way which may be different from the facts as seen by another viewer. This study is carried out on the perception of the impact of COVID-19 on undergraduate students' academic performance in Federal University of technology Minna Niger state.

2.1.2 The History of COVID 19

The corona virus pandemic also known as the COVID-19 pandemic was first discovered as an epidemic in Wuhan City China (WHO, 2019). It is a global pandemic that is caused by severe acute respiratory disorder. The COVID-19 Virus also known as Corona virus 2 (SARS-CoV-2). COVID-19 infections has so far been confirmed in 192 countries with over 141 million confirmed cases and over 3 million deaths recorded worldwide (WHO, 2020).

Corona virus (COVID-19) was declared as pandemic by the World Health Organization on the 11th of March, 2020 mainly due to the fast spread of the disease (WHO, 2020). The causative agent of COVID-19 was isolated and identified as a novel corona virus, initially designated as 2019-nCoV (Gralinski & Menachery, 2020). Later, the virus genome was sequenced (Zhou et.al, 2020) and because it was genetically related to the corona virus outbreak responsible for the SARS outbreak of 2003, the virus was named as severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) by the International Committee for Taxonomy of Viruses (WHO, 2020)

In Nigeria it first recorded in Lagos by an Italian citizen who was tested positive for the Virus (WHO, 2020). The Italian citizen who works in Nigeria returned from Milan, Italy through the Murtala Muhammed International Airport and fell ill on the 26thFebruary and was transferred to Lagos State biosecurity facility for isolation and testing (NCDC, 2020).

On the 9thMarch a second case was confirmed, this time a Nigerian in Ewekoro, Ogun State who had direct contact with the Italian after his return from Milan, Italy (NCDC, 2020) on 13th March Nigeria Centre for Disease Control (NCDC) confirmed that the second infected individual recovered and tested negative.

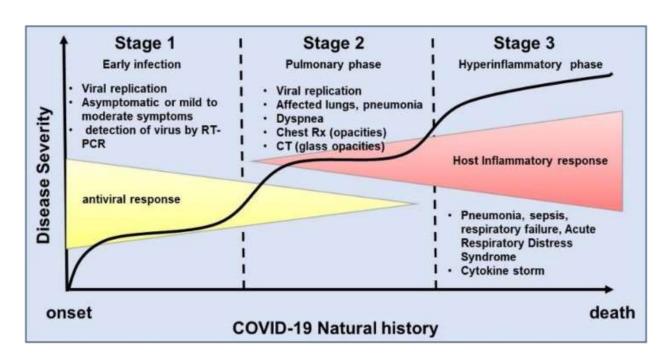
2.1.3 Transmission

SARS-CoV-2 can be transferred from human to human by respiratory droplets, close contact with diseased patients, and probably by fecal-oral and vaporizer (Hindson et al, 2020). It was recently shown that airborne transmission is highly strong and shows the main means to spread the disease (Zhang, 2020). This result was gotten based on the analysis improvement rate in three different cities seen as epicenters of COVID-19: Wuhan, China, Italy, and New York City, in the period from January 23 to May 9, 2020. The best way to prevent transmission of this illness is to avoid being exposed to the virus. Therefore, some measure taken to included washing of hands often, avoid close contact, cover mouth and nose with a mask, cover coughs and sneezes, clean and disinfect regularly touched surfaces daily (CDC, 2020). In this regard, wearing of face masks in public corresponds to the most effective means to prevent inter human transmission (Zhang, 2020).

2.1.4 Symptoms

Many of COVID-19 infected persons are asymptomatic or either show mild symptoms due to a good immune response capable of controlling the extent of the disease spread (Channappanava et al, 2020, Nelamans & Kikkert, 2020). It is obvious that these asymptomatic people can infect others with COVID- 19 (Aguire et al, 2020). It is possible to identify basically three stages or phases in the natural history of COVID-19, regarding disease cruelty. The first phase is associated to the beginning of the disease and usually characterized by the development of influenza-like symptoms from mild to moderate (chan et al, 2019). In this phase virus can be detected by molecular analysis by

reverse transcriptase-polymerase chain reaction. Most patients in this initial phase may be asymptomatic and even transmit the disease to other people, however, depending on yet unknown factors they may progress to a second stage known as pulmonary phase. In this phase, it is easy to detect pneumonia-like symptoms evidenced as lung opacities as seen in chest radiography in computed tomography (Kane,2019). COVID-19 pneumonia presents typical features such as severe hypoxemia regularly connected with almost normal respiratory system compliance with variable degrees of severity (Zhou etal,2020.These patients are typical examples of the phase 3 which is characterized by hyper inflammation and sepsis of lungs and patient often need intensive care unit (ICU) and nearly all of them unfortunately are able to overcome the infection These preliminary observations based on medical experiences since the outbreak of COVID-19 have been the search of novel or repurposed drugs to treat this disease.



2.1.5 Therapeutic Treatment for COVID-19

Better understanding of the mode of transmission, incubation period, molecular mechanisms underlying the virus infectivity and replication, as well as the path physiology and genetic factors associated to host, are crucial for the development of treatment strategies for COVID-19. Almost all patients with COVID-19 have lung involvement, as demonstrated by chest radiography, whereas severe complications are only observed in a small group of patients. Although observational studies reported older age and the presence of co morbidities as risk factors for increased disease severity in patients with COVID-19, it rapidly became clear that severe disease can also occur in younger patients with no pre-existing medical conditions (Merad & Martin, 2020).

Chloroquine is a drug that has been used universal as anti-malarial as well as for the treatment of immune disorders such as rheumatoid arthritis and Lupus (Ben 202)]. The first indication of a potential effect of chloroquine on SARS-CoV-2 infection came from a report during China outbreak. In this study, results from more than 100 patients demonstrated that chloroquine inhibited the exacerbation of pneumonia, improved lung imaging findings, promoted a virus negative conversion and shortening of the disease course (Gaoz, 2020).

2.1.6 Academic Performance

Academic performance is considered to be the outcome of teaching and learning process of students in a school. The school's aim is to help students become useful to themselves

and the society at large and therefore every school in its best capacity try to achieve this aim.

Academic performance have been defined and explained by several authors,

According to Rono, 2013 Academic performance is a key feature in education.

Narad and Abdullah,2016. opined that the academic performance of students determine the success or failure of any academic institution.

Students Factor that contribute to Academic Performance:

Oghuvbu (2017) found that there is a positive correlation between class attendance and academic performance. The attitude of students towards their learning have been found to have a significant relationship with academic performance. A lot of students' attitude to school changed as a result of the long stay at home. Similarly, Haider, Quereshi, Pirzada and Shahzadi (2015) opined that motivation play an important role in the success of a student academics. In their study, they found that intrinsic and extrinsic motivation had a good result relationship with academic performance .but the COVID -19 pandemic has created uncertainties to student, fear arouse in their minds which has resulted to discouragement instead of motivation.

Parental factor to academic performance: Mutodi and Ngirande (2014)is of the view that parent-teacher communication, family and home support as well as parenting is significantly related to academic performance. They opined that the most significant indicator of academic performance is the family and home support emergence of COVID-19 has made many parents and guide skeptical to send their children to school with the fear that the children could get infected with COVID-19 and instead of motivating them to be in full attendance in school activities carried in school they advice

them to avoid going to such places while other restrain their ward to stay back until the pandemic is over or reduced to a very little degree.

School factors which contribute to academic performance:

School factors that contributed to academic performance are factors within the school environment which are able to influence academic performance. Nambuya (2013) postulated that the availability of physical resources such as adequacy of lecture rooms, library and the environment affect the academic performance of students. In line with the Covid-19 protocols where students are not supposed to be large in number, observance of distances etc. schools with poor infrastructures will make students vulnerable to the virus and therefore make them loose interest in school activities.

When COVID-19 began to subside Nigerian government directed all schools to reopen on Jan. 18 2021 after the long stay at home as a result of the COVID-19 pandemic in the country. Ben Goong, spokesperson for the Nigerian education ministry, announced that "Parents and respective institutions must ensure full compliance with COVID-19 protocols, including the compulsory wearing of face masks by all students, teachers, and workers in all schools, temperature checks, and hand washing facilities at strategic locations in all schools, they must ensure a constant supply of water, hand sanitizers, and enforcement of maintenance of social distancing and suspension of large gatherings such as assembly and visiting days (Xinhua, 2021).

Academic performance is considered to be the centre around which the educational system revolve.

2.1.7 Impact of COVID-19 on Nigeria Educational System

COVID-19 pandemic has upset the lives of students in diverse ways, not just on their level and course of study but also on the phases they have attained in their studies. Those coming to the end of one phase of their education and aspire to move on to another, for instance student transitioning from school to tertiary education, or from tertiary education to employment, face the same challenges. They are not able to complete their school curriculum and assessment in the usual way and, in many cases; they have been torn away from their social group almost overnight. Nations has to weigh up the imbalance between economic activity and public health So as to cease restrictions on normal life. However, the change to normality will not be a simple one-time transition to life as it used to be.

Law makers set precautionary measure for Institutions, teachers, and student and continue to look forward to flexible ways to repair the damage caused by COVID-19's interruptions to learning objectives, institutions are trying possible ways to ensure conducive learning facilities environment and man power to provide the variety of courses and flexibility of time and place for learning to help students get back on track. Although institutions that normally teach in the four corners of the classrooms or on campuses will eventually return to that mode of instruction with some relief, the special arrangements and protocols they put in place during the COVID-19 crisis will leave a long trace. The expansion of online learning in tertiary education will further grow, and schools will organize themselves more systematically to pursue the areas of technology-based learning that have been adopted.

All institutions will achieve from the current measures that have put in place to continue their educational goals and training missions in a time of crisis or pandemic.

2.1.8 Impact of School Closure on Families

COVID-19 Pandemic has made life unbearable for a lot families, it has brought about disorder in the lives of so many people [Di, 2018]. From the beginning of schools' closure, only few parents who are financially stable arranged online education for their children at home, so that they will meet up with their education plan. Many pressures were put on the parents as they need to stay with their children to ensure needed child care were provided and to supervise their online teaching and learning processes. This made them to have wages loss, and put them under unnecessary burdens and affecting their productivity negatively. Some parents who cannot afford to absent from their daily job had to leave their children alone at home and this caused the children to be expose to immorality and other risky activities [Bao et al, 2020]. Whereas, many of families who were not financially stable abandoned their children education during the prolong stay at home. Disruption of education due to pandemic causes so many risks such as child trafficking pregnancies and exploitation among others for the children. Students' dropout rates increase and of disadvantaged students may not return to classroom after the closures would have ended (Baytiyeh, 2018)

2.1.9 Impact of School Closure on Teachers

A lot of teachers particularly private school teachers were not paid salaries during the time schools were locked up. Many of them found it difficult to provide adequate needs for their families (Affouneh,2020). COVID-19 pandemic has created alot of disorder in the lives of many teachers and they battle with a lot of psychological problems such as

stress, fear, anxiety, depression, and insomnia which leads to lack of focus and concentration for some of the teacher (Di, 2018)

2.1.10 Impact of School Closure on Undergraduates

University students have been seriously affected by the COVID-19pandemic. Students have faced major teaching distractions in their studies, some private universities that teach their students online could not conduct examinations or assess their students is which was a major disruption in an online learning environment (Barrett 2020)in general the time of graduation for every undergraduate have been indirectly prolonged and they are not graduating as supposed by the calendar.

2.1.11 Impact of School Closure on Communities

School environment is a commercial environment that provides income for a lot of people living near-by. School closure had an extreme social and economic cost impacts all over the community. People who are not financially strong earn their daily income by selling sachet water, pencil, snacks, pen etc. to primary school secondary school students and tertiary institution. Furthermore, universities, polytechnics, colleges of education and other higher institutions operate as mini-cities and majority of people living around them obtain of income by involving themselves in diverse business activities that include operating personal hostels, cafes, restaurant shops, transport services, selling of food items etc. people that rely on college students to earn their living are greatly affected and experience a lot of economic down turn due to school lockdown and absence of students on campus (Nelemans & Kikert 2020).

2.2 Theoretical Framework

Two theoretical frameworks underscore this research study which are:

Terror Management Theory

Walberg's (1981) Theory of Educational Productivity

2.2.1 Terror Management Theory

It is different defenses for conscious and unconscious death-related thoughts as well as responses to the covid-19 pandemic

TMT (Greenberg et al., 1986; Pyszczynski et al., 2015) propound that an inherent consequence of humankind's cognitive abilities is awareness of the inevitability of death. Awareness of death in an animal with an essential proclivity for self-preservation gives rise to an ever-present potential for existential terror. This potential for terror is managed by an anxiety-buffering system consisting of cultural worldviews, self-esteem, and close interpersonal relationships.

Cultural worldviews are shared beliefs about reality that provide answers to basic questions about life, standards for valued behavior, and the promise of literal or symbolic immortality to those who live up to these standards. Literal immortality beliefs provide hope that life will continue after physical death, as exemplified by afterlife concepts such as heaven, reincarnation, or joining with ancestral spirits. Symbolic immortality comes from contributing to something greater than oneself that will continue long after one has died, such as a family, nation, or the memories of others.

Self-esteem is a sense of personal value that results from believing that one is living up to the standards of one's cultural worldview.

Close relationships provide consensual validation of one's worldviews and self-esteem needed to maintain confidence in them, as well as providing security in their own right (Mikulincer et al., 2003). TMT suggests that people manage the potential for anxiety

inherent in awareness of the inevitability of death by maintaining faith in their cultural worldviews, self-esteem, and close relationships; these anxiety-buffering systems reduce existential terror by imparting a sense that one is a person of value living in a meaningful world, (Solomon *et al.*, 2015).

Different Defenses for Conscious and Unconscious Death-Related Thoughts

TMT postulated that people deal with death anxiety with two distinct systems, referred to as proximal and distal defenses (Pyszczynski *et al.*, 1999). When an individual conscious of death-related thoughts proximal defenses are activated to control such thoughts or intending to engage in healthier behavior to ensure a longer life. However, when death-related thoughts are on the border of consciousness; that is no longer in focal attention but still highly accessible, people making active distal defenses.

Conscious awareness of death requires defensive shift that is significant, that means that death is not a problem until many years in the distant future. But proximal defenses do less to suppress anxiety rising from the ultimate certainty of death. Research has also shown that distal defenses reduce the convenience of death-related thoughts, which is presumably how they manage anxiety (Arndt et al., 2002).

Responses to the COVID-19 Pandemic as Terror Management Processes

The personal, social, economic, and political costs of the COVID-19 crisis are unprecedented. From the standpoint of TMT, the main cause of all these problems is obvious the fear of dying from the virus. In spite of how easily it can be transferred and how deadly the virus will eventually turns out to be the chances of dying from it is so evident in the high record of deaths. These side effects of the pandemic severely reduce

all of the anxiety-buffering system that people use to maintain composure. The world has suddenly become more fearful and confusing place, in which tendency of death is everywhere, and individual try to maintain meaning and safety of life. People are living with the much threat of death from the pandemic, coupled with challenges to their worldviews, loss of jobs, interruption to career goals, and isolation from friends and family who normally help. From TMT view, it is presently more difficult for people to manage the terror of death.

2.2.1 Walberg's (1981) Theory of Educational Productivity

This study is anchored on the theory of educational productivity by Herbert J. Walberg. Walberg's theory deals with the influences on learning that affects the academic performance of a student. It is an exploration of academic achievement whereby Walberg used a variety of methods on how to identify the factors that affects the academic performance of a student. He analyzed his theory with the help of different theorists and included his study with over 3000 studies. In his theory, he classified 11 influential domains of variables, 8 of them were affected by social-emotional influences namely, classroom management, parental support, student-teacher interactions, social-behavioral attributes, motivational-effective attributes.

The variables are reflected with different representation. In the first three variables (ability, motivation, and age reflect characteristics of the student. The fourth and fifth variables reflect instruction (quantity and quality), and the fourth variables (classroom climate, home environment, peer group, and exposure to media) represent aspects of the psychological environment. He explained that these variables has a certain effects that might cause problems with the academic performance of students if it will not be

properly. Giving importance with a certain variable can mean a big impact with the student's academic performance.

Many studies have been carried outto identify problems that affects student's academic performance. The students' academic performance depends on a number of socioeconomic factors like students' presence of trained teacher in school, teacher-student ratio, attendance in the class, sex of the student, family income, mother's and father's education, and distance of schools (Amitava Raychaudhuri 2010)

Students are most vital asset for any educational institute. The social and economic development is directly linked with student academic performance. The students' performance plays an important role in producing the best quality graduates who will become great leader and manpower for the country thus responsible for the country's economic and social development. Student academic performance measurement has received considerable attention in previous research, the COVID-19 has become difficult aspects of academic performance in the country and worldwide, it has become a thing of concern in educational sector, student performance are affected due to social, psychological, economic, environmental and personal factors. These factors strongly influence on the student performance, but these factors vary from person to person (Irfan Mushtaq and Shabana Nawaz)

2.3 Empirical Framework

Empirical studies related to the perception of COVID 19 on the school system whether at basic, secondary and tertiary education are presently very scarce. To this moment, there is still no sufficient literature to back this study. However, the researcher was able to lay hands on few relevant literature.

Esteban et al (2020) who Carried out a research to understand the impact of COVID-19 on higher education students, where descriptive survey method was used, research instrument were designed to recover the caused impact of the pandemic on students current expected outcome. The result show large negative effect across many dimensions due to COVID-19.13% of students have delayed graduation,40% have lost a job internship or job offer and 29% expect to earn less at age 35.

Similarly ,Deborah (2020) in the study perception of the undergraduate students on the impact of COVID -19 pandemic on institution development where the aim of the study is purposely on the impact of COVID-19 pandemic high institution development. The study population comprises all higher institutions in FCT Nigeria ,the questionnaire was in two part A and B. Result collected and, analyzed showed that 100% of the respondent agreed that COVID-19 have effect on the implementation of higher institutions financial budget ,45% of the respondent agreed that COVID-19 have relationship with reduction of man power in higher institutions, 89% of the respondent agreed online education is the alternative measures for conversional in class teaching and learning for future occurrence of any pandemic. 100% respondent agreed that COVID-19has affected the academic calendar.

Furthermore, Aleksandr et al (2020) pointed out that amid the worldwide lockdown and transition to online learning students were most satisfied with the support provided by

teaching staff and their Universities public relations. Still deficient computer skills and the perception of a higher workload prevented them from perceiving their own improved performance in new teaching environment.

Owusu-Fordjour et al (2019) conducted a research that assessed the impact of COVID-19 on Ghana's teaching and learning. The study adopted a descriptive design in which Linkert scale type of questionnaire was administered to respondent, mainly 2001 level in the institution of Ghana. The study employed a simple random sampling technique in selecting the respondent for the study. The study revealed some challenges students encounter in the closedown of schools due to the outbreak of pandemic COVID-19, Students were unable to study effectively from the house, thus making online system of learning very ineffective. Parents are unable to assist their children on online learning program neither can they effectively supervise them without any complication. The study also revealed that the pandemic had a negative impact on their learning as many of them are not use to effectively learn by themselves.

Mohammed (2020) Pointed out that COVID-19 pandemic lockdown affected the academic performance of student in Faculty of veterinary Medicine South Valley university Qena Egypt. Most respondents, (96.7%) with varying degree. Although online education provides opportunity for self stud, The main challenge that online education face in veterinary medical science is how to give practical lesson.

Yang (2020) this investigated the overall learning experience after the sudden shift from face-to-face to online distance learning due to the COVID-19 lockdown at one of the universities in Nigeria. The study assessed variation in students' academic performance in their present semester and semester before and collected feedback and students. This

investigation will contribute to the current literature by providing a clear insight about the effect of the interruption of face-to-face education due to the pandemic. In addition, the recommendations provided based on the findings of the study may help rectify the situation and guide educational leaders, professors, and higher education portals designers for integrating online distant learning in future higher education plans of their institutions, especially in developing context, where lack of IT infrastructure and skills represents big challenges.

2.4 Summary of Literature Review

The review of literature related to this topic was done under the sub headings; Conceptual Frame work, Theoretical frame work and Empirical Studies. Under conceptual frame work, the history of COVID -19, perception, academic performance, and its impacts. Under the Theoretical Frame Work, Terror Management Theory (TMT) and Walberg theory of educational productivity was reviewed and under Empirical studies, closely related studies were reviewed.

From the discussion so far, COVID-19 is an emerging infectious illness which broke out during the winter of 2019 (Al-Hanawi et al., 2020; WHO, 2020a). Due to its presentations, it has been declared a public health emergency of international concern by the World Health Organization (WHO) (WHO, 2020). An alarming response has been introduced across the globe due to its high infectiousness and case fatality rate (Zhong et al., 2020). The identification of the risks and the prevention of infectivity regarding COVID-19 have been stated to depend on human perception (Zhong et al., 2020). Especially in the submergence of an infectious disease such as COVID-19, different thoughts have shaped individuals' views and attitude.

As a part of the emergency response activities across all States in Nigeria, health education campaigns have been directed at members of the public (NCDC, 2020). These campaigns have been aimed at knowledge improvement and the correction of certain misconceptions that have been widely circulated among community members (NCDC, 2020). In Education, precautionary measures such as wearing of face masks, regular hand washing with soap and water or with alcohol-based hand sanitizers, and social distancing have been adopted (NCDC, 2020).

It is evident that perception shapes one's knowledge and the adoption of safety measures concerning the transmission of an infection. Data obtained from the perception of university students regarding COVID-19 could help target interventions needed to improve the knowledge of these students regarding COVID-19. At the onset of the COVID-19 outbreak in Nigeria, infected persons belonged to either the political class or high socioeconomic cadre (Chukwuorji & Iorfa, 2020). The characteristic prevalence of COVID-19 infection among this group of persons accorded COVID-19 the name, 'a disease of the rich and mighty' (Nwaubani, 2020). Such perceptions could have been influenced by several factors. Social media platforms such as WhatsApp, Facebook and Twitter have been used to spread false news on COVID-19, resulting to panic disorder and anxiety among some persons and shunning of safety measures among others (Olapegba et al., 2020).

Students were asked to resume school after the long stay at home to continue with school activities as announced by the Federal government but with the instruction to follow the COVID-19 protocols. Among many persons, temperature check, use of nose masks, physical distancing, social isolations sand social gatherings etc. have been opined

as alien solutions in overcoming the COVID-19 pandemic in Nigeria Universities (Olapegba et al., 2020).

Different literatures have reported the existence of knowledge relating to COVID-19 among Nigerians, and it is expected that this would influence precautionary behavior among them. In the COVID-19 context, the practice of hand washing, hygiene, and use of face masks among universities students should be strictly adhere to as a means to reduce the spread of the disease. Such an occurrence could be due to the perceived susceptibility to illnesses among students as well as their health-conscious nature.

Given importance to Student's achievement in education is essential to assess the perception of COVID-19 on undergraduate students' academic performance in Federal university of Technology Minna. To the best of our knowledge, perception of COVID-19 on undergraduate students' academic performance in Federal University of Technology Minna is currently unknown. Therefore, this study is aimed to find out whether COVID-19 has influenced undergraduate students' academic performance at the University, to find out whether COVID-19 protocols are adhered to amongst undergraduate student at the University, to determine which gender group adhere to COVID-19 protocols in the University to determine whether COVID-19 has influenced undergraduate students modes of learning in the university and to determine whether undergraduate students age-grade influenced adherence to COVID-19 protocols.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study adopted descriptive survey research design. The choice for the descriptive survey for this study was because the research questions for this study were answered from facts that were gathered from the opinion of subject on the problem the researcher intended to investigate. This Chapter describe the research design ,population of the study ,sampling as well as the method that were used to sample the population and the targeted population showing the sample size, the chapter looked at method of data collection.

3.2Population of the Study

The population of the study comprises undergraduate from 100level -500level studying in the university in 2019/2020 academic session which are 21617 in number. The target population was the students studying in Bosso campus of the University which includes School of Science and Technology Education (SSTE), School of Life Science (SLS), and School of Physical Science (SPS) with a total number of 8397 Students.

3.3. Sample and Sampling Techniques

Sampling makes it possible to draw valid inference or generalization on the basis of careful observation of variables with a relative small proportion of the population. The sample for this study was made up of 200 students were selected through random sampling from the 100-500level student of Bosso campus in the University. This method allows each member of the population to have equal chance of being represented.

3.4 Instrument for Data collection

Data was collected using questionnaire entitled Questionnaire on the perception of COVID-19 undergraduate academic on students performance university(QOPCOUSAPU) was develop by the researcher which contain two section (Biological information of the students and perception of COVID -19 on academic performance))the first section of PCAP form consist 0f 4 item questions regarding to Biographical information of the participant , while the second section of the QOPCOUSAPU form perception of COVID-19 on academic performance on 5-point likert scale: Strongly agreed(SD), Moderately Disagreed (MD), Agreed(AG), Moderately Disagree (MD) and Strongly Disagree (SD) which consist of 30 items to evaluate multiple aspects of perception of the COVID-19 on undergraduate students academic performance in the university.

3.5. Validity of the Research Instrument

Validity Of research instrument is based on how an instrument measure what it is supposed to measure or perform the instrument was subject to content validity by the research supervisor and other experts for a review of the designed items. This is to ensure that the content were relevant, clear and not ambiguous their suggestion and correction were implemented by the researcher and the research instrument was finally found fit for the research.

3.6 Reliability of the Instrument

The research used independent sample test (T-test) together with one way ANOVA to determine the perception of COVID -19 on undergraduate students' academic performance in Federal University of technology Minna.

The research carefully administered the instrument to the respondent and the data analyzed using Cronbach Alpha and were found to be effective. The coefficient obtained was within the range of 0.81 value which is reliable estimated. This means that the instrument is reliable and can be used for data collection.

3. 8. Method of Data Collection

Questionnaire used were to achieve the objectives of the research. The researcher introduced herself and further administered the questionnaire to students in Bosso campus. The students fill the questionnaire on the spot, and it was collected back from them for data analysis. Based on the results obtained, conclusions of the research were made.

3.7. Method of Data Analysis

The survey data from students were summarized descriptive statics. An independent sample T-test was used to compare the satisfaction level of student. The data were analyzed using Mean(X) and Standard Deviation (S.D) to answer the research question. The null hypothesis were tested at 0.05 level of significant. A mean score of 0.1-1.4 was considered Strongly Disagree(SD),1.5-2.4 was Considered Disagree(D)While 2.5-3.4 was considered Agree,3.5-4

was considered moderately Agree(MD) and 4.5-5.0 was considered Strongly Agree(SA). By implication 2.5 and above is the criterion mean for an item to be categorized as Agree. The analysis was done with the application of a computer software program-statistical program for social sciences (SPSS) version 22.0

CHAPTER FOUR

RESULT AND DISCUSSION

4.1 Demographic Data

In this section the demographic data are presented, showing the distribution of the sample in terms of gender and age grade of respondents.

4.1.1 Distribution of Respondents Based on Gender

Table 4.1.1 shows the distribution of male and female respondents

Gender	Total number	Percentage
Male	106	53.5%
Female	92	46.5%
Total	198	100%

Table 4.1.1 showsthe distribution of respondent who were male and female students. The male students were 106 which represent 53.5 percent of the total research sample while 92 of the respondents were female representing 46.5 percent of the sample.

Distribution of Respondents Based on Age Grade

Table 4.1.2: Distribution of respondents based on age grade

Age Grade	Total number	Percentage	
16-20	59	29.8	
21-25	97	49.0	
25 and above	42	21.2	

Table 4.1.2 shows the distribution of the respondents who were between different ages 59 0f the respondent were within the ages of 16-20 which represent 29.8 percent of the total population while 97 of the respondents were within the ages of 21 to 25 representing

49.0 percent and 42 of the respondents were within the ages of 25 and above which represents 21.2 percent of the total research population sample.

A total number of 200 questionnaires were administered in the process of data collection but only 198 were answered and returned by the respondents. Therefore, only 198 questionnaires were analyzed. Mean and Standard Deviation were used to analyze the data collected to determine the degree of agreement or disagreement in each of the questionnaire item. The five (5) point rating scale was adopted with responses and numerical values assigned as follows:

Strongly Disagree (SD) = 0.1 - 1.4

Disagree (D) = 1.5 - 2.4

Agree (A) = 2.5 - 3.4

Moderately Agree (MA) = 3.5 - 4.4

Strongly Agree (SA) = 4.5 - 5.0

4.2 Research Question one

Did COVID 19 influence undergraduate student's performance in the university?

Table 4.2: Influence of COVID-19 on Academic Performance of Undergraduate Students.

S/N	Items Analysis	N	Mean (X)	Standard deviation	Remarks
				S.D	
1	The lockdown period of stay at home affected my studies at the	198	4.31	1.12	Moderately agree
2	university The lockdown period made forget much of what i learnt in school	198	3.89	1.15	Moderately agree
3	Because of COVID 19 course	198	3.98	1.18	Moderately agree

	content were not adequately covered				
4	Most of the topics were poorly	198	3.60	1.29	Moderately agree
	taught after post COVID 19				
	pandemic				
5	ī	198	2.97	1.36	Agree
	protocols has affected my				
	academic performance in all the				
6	courses	100	2.00	1.04	Agraa
6		198	2.80	1.34	Agree
	new teaching/learning environment				
7		198	2.84	1.43	Agree
	during classes while trying to	170	2.07	1.73	6
	adhere to COVID 19 protocols				
8	-	198	3.03	1.44	Agree
	my lecture time due to the long				
	queue at the gate for temperature				
	check				
9	My interest in studies is meager	198	3.38	1.28	Agree
	due to the extended stay at home				
10	1 7	198	3.26	1.22	Agree
	presence which could not be				
	carried out remotely in school was				
	not observed		2.40	1.20	Agree
	Grand mean		3.40	1.28	115100

Table4.3 report the perception of COVID -19 on undergraduate students' academic performance. From the result, the grand mean was 3.40, standard deviation of 1.28 which is greater than the criterion score of 2.50. Hence, it is evident that undergraduate students perceived that COVID-19 has influenced their academic performance in the University.

4.3 Research Question Two

Do undergraduate students in the university adhere to COVID-19 protocols?

Table 4.4: Students Adherence to COVID 19 Protocols in the University.

S/N	Items	N	Mean (X)	Standard Deviation (S.D)	Remarks
1	I make use of a mask every time I am in	198	3.81	1.24	Moderately agree

school				
I avoid crowds as much as I can	198	3.62	1.32	Moderately
I utilize the hand washing equipment	198	3 18	1 48	agree
	170	3.10	1.70	Agree
I avail myself for temperature check before	198	3.19	1.51	
entering the school every morning				Agree
I avoid touching surfaces, especially	198	3.29	1.40	
within the school				Agree
I protected my school reputation by	198	3.85	1.18	Moderately
				agree
-	198	3.67	1.31	Moderately agree
•	100	2 60	1.04	•
•	198	3.68	1.36	Moderately agree
•	100	2.01	1 10	Moderately
•	198	3.91	1.18	agree
·	108	3.08	1.50	J
	170	3.00	1.50	Agree
•		3.52	1.34	Agree
	I avoid crowds as much as I can I utilize the hand washing equipment provided by the school for regular hand washing I avail myself for temperature check before entering the school every morning I avoid touching surfaces, especially within the school	I avoid crowds as much as I can I utilize the hand washing equipment provided by the school for regular hand washing I avail myself for temperature check before entering the school every morning I avoid touching surfaces, especially within the school I protected my school reputation by following the COVID 19 protocols I adhered to COVID 19 protocols and advice my friends to do likewise I was afraid of been punished, so i adhered to the COVID 19 protocols COVID 19 protocols COVID 19 protocols COVID 19 protocols have helped me to be more conscious of my health status Observance of social distancing has reduced interactions with my course mates.	I avoid crowds as much as I can I utilize the hand washing equipment provided by the school for regular hand washing I avail myself for temperature check before entering the school every morning I avoid touching surfaces, especially within the school I protected my school reputation by 198 3.85 following the COVID 19 protocols I adhered to COVID 19 protocols I was afraid of been punished, so i adhered to the COVID 19 protocols and to the COVID 19 protocols COVID 19 protocols COVID 19 protocols COVID 19 protocols have helped me to be more conscious of my health status Observance of social distancing has reduced interactions with my course mates.	I avoid crowds as much as I can I utilize the hand washing equipment provided by the school for regular hand washing I avail myself for temperature check before entering the school every morning I avoid touching surfaces, especially the school is protected my school reputation by the school is the school is protected my school reputation by the school is th

Table 4.4 shows students adherence to COVID-19 protocols in the university, from the grand mean score of 3.52, standard deviation of 1.34, which is greater than the criterion of 2.50. Hence it is evident that at different levels students adhered to COVID-19 protocols in the university.

4.4 Analysis of Null Hypothesis

H0₁: There is no significant between gender of students that adhered to COVID-19 protocols

Table4.5:t.Test result of adherence of students to COVID-19 protocols based on gender

Group	N	DF	Mean	Standard	t.cal	P-value	Remark
				Deviation			
Male	99	195	70.9697	19.33457	.343	0.73	No sig.
Female	98		70.0204	19.56537			

Table 4.5 showed t-test result of the mean score difference of the adherence of students to COVID-19 protocols in the university. The male students had mean score of 70.9697 and standard deviation of 19.33, while the female had mean score of 70.0204 and standard deviation of 19.57. t(195)=.343, p> 0.05. Hence the null hypothesis was retained as there was no significant difference between the mean perception scores of male and female student's adherence to COVID-19 protocols in the university.

4.5 Research Question Four

Does COVID-19 influence student's modes of learning in the university?

Table 4.6: Influence of COVID 19 on Students Modes of Learning in the University

S/N	Items	N	Mean (X)	Standard Deviation (S.D)	Remark
1	the pandemic helped me to learn how to explore materials online since contents are sometimes not covered in class	198	3.77	1.41	Moderately agree
2	my use of tutorial videos has increased because of the pandemic	198	4.00	3.79	Moderately agree
3	learning independently became more interesting by exploring other means of learning due to the pandemic	198	3.75	1.26	Moderately agree
4	my use of social media for academic purposes increased as a	198	3.70	1.20	Moderately agree
5	result of the pandemic The frequent use of ICT facilities during the lockdown has improved	198	3.45	1.33	Agree

	my ICT skills tremendously				
6	The pandemic has forced me to	198	3.42	1.33	
	prefer smaller classes to larger				Agree
	classes for my tutorial				
7	I prefer the use of audio records to	198	2.79	1.48	
	being present in the class because				Agree
	of COVID 19				
8	I prefer individualized practical	198	2.81	1.48	
	work to group work				Agree
9	I find audio records more	198	3.27	1.43	A ~~~ ~
	beneficial because I can replay				Agree
4.0	them as often as I can				36.1
10	I understand my course content	198	3.52	1.32	Moderately
	when I use tutorial videos				agree
	Grand Mean		3.44	1.72	

From table 4.6 all the items had a mean of 2.5 and above which is the minimum for an item to be categorized as agreed. This implies that COVID-19 has influenced student's modes of learning in the university. In items 1,2,3,4 and 10 the respondents moderately agreed while in items 5,6,7,8 and 9 agreed that COVID-19 has influenced student's modes of learning in the university.

4.6 Research Question Five

H02: There is no significant difference in the adherence of COVID-19 protocols by undergraduate students based on age grade.

Table 4.7: Summary of Analysis of Variance (ANOVA) result for Adherence to COVID-19 Protocols Based on grade.

Groups	Sum of	Df	Mean	F	P-Value
	square		square		
Between	411227.81	2	205613.91	0.27	0.77
Groups					
Within	146917372.19	190	77 3249.33		
Groups					
Total	147328599.10				

Table 4.7 shows the result of analysis of variance (ANOVA) of undergraduate student's adherence to COVID-19 protocols based on age grade in the university. As shown in (Table 4.7) revealed F(2, 190)= 0.27, p=0.77. With p> 0.05, the null hypothesis was accepted. Therefore, there was no significant difference in the adherence of COVID-19 protocols by undergraduate student's base on age grade in the university.

4.7 Discussion of Finding

The result of the study on research question one shows the respondents' response on influence of COVID-19 on academic performance of undergraduate students. The result of the analysis was agreed that, the lockdown period of stay at home affected their study in the university, the lockdown period made them forgot much of what they learnt in school, coverage of contents have not been satisfactory because of COVID-19 lockdown. They find it challenging to adapt to new learning environment, it was difficult for them to concentrate in class while trying to adhere to COVID-19 protocols. Also getting to the lecture halls on time became a challenge because of long queue at the gate for temperature check, their interest to studies was affected by long stay at home, practical and field works could not be well attended to due to COVID-19 restriction. In a bid to adhere to COVID-19 protocol course contents were delivered poorly. This finding was in line with that of (Mohammed, 2020).

The findings from Table 2 showed high level of adherence to COVID-19 protocol based on their response to the items on the questionnaire. The students showed adherence in the use of face mask, avoidance of large crowd, utilization of hand washing equipment provided by the school management for hand washing, compliance for temperature check at the school gate, avoiding touching of surfaces within the school, upholding the

reputation of the school by adhering to COVID-19 protocol, helping in advising others to adhere to COVID-19 protocols, as well as becoming more conscious of their health status and they observed social distancing. This is in line with the findings of (Olapegba, 2020). The findings on hypothesis one showed that there is 0.05 level of significant, meaning there was no significance difference in adherence to COVID-19 between genders. Null hypothesis is hereby accepted. Hence, there was no statistical significant difference to the adherence of COVID-19 protocols based on gender.

The result from Table four also agreed that the pandemic greatly affect their mode of learning in different ways. They resorted to sourcing materials online since course contents were sometimes not covered in class adequately. Their use of tutorial videos increased because of the pandemic, learning individually became more interesting as a result of the pandemic, their use of social media for academic purposes increased, their frequent use of ICT facilities helped to improve their ICT skills, the pandemic makes them prefer smaller discussion groups to large ones, their use of audio records for learning also increased. They now prefer individual practical work to group work. This is in line with the findings of (Yang, 2020).

The findings on hypothesis two showed that at 0.05 level of significant, with p value of 0.77, the null hypothesis was accepted. This shows that no significant difference on undergraduate student adherence to COVID-19 protocols based on age group.

4.8 Summary of Findings

Summarily, when the responses of the respondents were analyzed, it was found that:

- 1. COVID-19 influenced student's academic performance in the university.
- 2. Undergraduate students showed high level adherence to COVID-19 protocols.

- 3. There is no significance difference in adherence to COVID-19 based on gender.
- 4. COVID-19 greatly influenced student's modes of learning in the university.
- 5. There is no significance difference in adherence to COVID-19 based on age grade.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The research work was carried out to find out the perception of COVID-19 on undergraduate students academic performance in Federal University of Technology Minna Niger state. The study was intended to find out whether COVID -19 influenced undergraduate students academic performance, to find out whether COVID-19 protocols are adhered to amongst undergraduate student, to also determine which gender group adhered to COVID -19 protocols, to determine whether COVID-19 influenced students mode of learning and to determine whether age range influenced adherence to COVID-19 protocols in the university.5 research questions were formulated ,samples were collected from the Schools in Bosso campus.

5.2 Conclusions

Based on the result obtained from the analysis of the data from the respondents, there are few conclusions that can be drawn from the study. Majority of the students in Bosso campus Federal university of Technology Minna Niger state agreed that COVID-19 their academic performance base on their responses in the questionnaire. Furthermore most of the students adhered to COVID-19 protocols, student's mode of learning was influenced by COVID-19, and there was no significant difference in the adherence of COVID-19 protocols based on age rage and gender.

5.3 Recommendations

COVID-19 pandemic caught the world and educational sectors by surprise causing institutions to respond with different solutions in the quest to meet up the unplanned change caused by COVID-19.the following are recommendation for this study.

- 1. Students should be given emotional support by means of motivation, education on how to handle and manage stress, anxiety and depressions.
- 2. The Government should increase funding of tertiary institutions to allow them manage all the damages caused by COVID-19 pandemic.
- 3. Administrators should improve the quality of education and its modes of learning.
- 4. Alternative measures in educational sector should be adopted where Universities minimize the physical gathering of teacher and students there by considering online teaching and learning.
- 5. The Government should encourage staff and students to carry out research work on providing vaccines, which when effectively and efficiently done will reduce the spread or contacting any disease.
- 6. Administrators should organize ICT training for both staff and student which will assist them on how to use online application for e-teaching and learning.
- 7. Basic facilities and financial support should be provided to universities, which will not only help them in adherence of COVID-19 protocols but also reduce Wi-Fi subscription that can permit online teaching and learning.
- Good Teacher student relationship should be established so as to allow student seek assistance, guidance and clarity in areas they have difficulty in the course content.

- 9. The school should organize seminars that help raise health consciousness among students and staff.
- 10. Schools should build and provide large size lecture halls and laboratories in case of emergence of any virus that is airborne and requires observance of social distancing.

5.4 Limitations of the Study

This study is not without limitation, a major of it was because it was carried out in one location which comprises of undergraduate students of Bosso campus Federal University of Technology Minna, Niger State, and large sample size may be needed to allow more generalization and possible conclusions. Another limitation was difficulties in accessing students because of engagement in preparation for exams.

5.4 Suggestions for Further Studies

In view of the limitations stated above, further studies in other institution should be put into consideration since this study was limited to undergraduate students of Bosso campus Federal University of Technology Minna, Niger State. Other researchers perhaps interested in this dependent variable that is academic performance could look at other variables such as psychological impact of COVID-19 on teachers.

Similarly, other institutions and different level of education such as College of Education, National Diploma could also be studied in future research.

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