

Full Length Research Paper

Influence of COVID-19 Pandemic on the Psychological Wellbeing of Students of Hassan Usman Katsina Polytechnic, Katsina, Katsina State, Nigeria

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Received 7 October 2021; Accepted 15 November, 2021; Published 20 November 2021

ABSTRACT: The purpose of this study was to look into the impact of the COVID-19 pandemic on the psychological well-being of students at Hassan Usman Katsina Polytechnic in Katsina, Katsina State, Nigeria. To guide the research, two null hypotheses were developed. A descriptive survey research method was used. The target population totaled 4,043 students, with 306 students serving as the study's sample. A questionnaire was used as the research instrument. The data was analyzed using chi-square, and all null hypotheses tested were rejected because there is a significant difference in

support of decisions on p-value to an alpha value of 0.05 level of significance. The findings revealed that the COVID-19 pandemic has an impact on students' psychological well-being in terms of depression and stress at Hassan Usman Katsina Polytechnic in Katsina, Katsina State, Nigeria. As a result, it was suggested that strict measures be put in place to prevent the disease from spreading further.

Keywords: Covid-19 pandemic, psychological wellbeing, depression, stress

INTRODUCTION

COVID-19, in keeping with the current trend, requires no further introduction. In December 2019, the virus (officially known as SARS-COV-2) was responsible for over a million infections worldwide, resulting in approximately 2.5 million deaths. The deadly corona virus (COVID-19) was a worldwide disease that the World Health Organization (WHO) declared a pandemic on March 11, 2020. (WHO, 2020). A pandemic, according to Agbele and Oyelade (2020), is a disease that has spread across a large region, such as multiple continents or globally.

Psychological well-being (PWB) is a term used to describe a person's emotional health and overall functioning; it is the combination of feeling good and functioning effectively (Huppert, 2009). In this regard, depression is a mental illness characterized by sadness, loss of interest, feelings of hopelessness, disturbed sleep, poor concentration, suicidal ideation or attempt, inability to move around, and significant impairment (Akorede et al., 2020). Stress, on the other hand, is an unavoidable experience that results from the complex

interactions between an individual and his or her environment. Excessive stress has also been linked to physical and mental health issues, as well as lower self-esteem and academic achievement. Stress is associated with negative health behaviors such as smoking, alcohol abuse, illicit substance use, insomnia, and relapses (Cowan et al, 2013, as cited in Akorede et al., 2020). According to the Centers for Disease Control (CDC), lockdowns or quarantines are necessary as protective measures for physical health, but prolonged impositions can be harmful to individuals' well-being. In accordance with these protocols, the public was subjected to certain measures, including total school lockdown. School closures caused by the pandemic have disrupted educational institutions at all grade levels for over one billion students in 129 countries (UNESCO, 2020).

According to Burgess and Sievertsen (2020), education is the most effective public policy tool for improving skills. Even a brief absence from school will have an impact on skill development. Certain measures, including total school lockdown, were implemented to the public in

accordance with the protocols endorsed by the Centers for Disease Control (CDC). As another measure to slow the spread of the pandemic, the general public, including students, were asked to stay at home for more than eight months with little or no physical contact. The only difference between this and being locked up in a prison cell is that you have access to your own door (Brooks et al. 2020). Disruptions to normal routines, activities, and livelihood may increase depression, loneliness, self-harming and suicidal behavior, and harmful alcohol and drug use (WHO, 2020).

According to Zhai and Du (2020), prior to the pandemic, one in every five college students worldwide had experienced one or more diagnosable mental disorders. Akorede et al. (2020) added that long-term monitoring of young people's mental health status is necessary, as is research into how prolonged school closures, strict social distancing measures, and the pandemic itself affect the wellbeing of children and adolescents. As a result of the closure of day-to-day activities, most of these students are more vulnerable to developing symptoms of internet addiction, emotional distress, anxiety about the safety of the information, concerns about exposure to unwanted materials, online victimization, and the practice of dangerous online behaviors.

According to the research, many people will experience an increase in one of the aforementioned psychological problems, such as depression, low mood, anxiety, and stress, to name a few. The researcher also discovered that many students suffer from one of these issues as a result of their fear of contracting the disease, loneliness as a result of isolation, disruption from academic activities, delay in graduation for final year students, and so on. Despite several studies on the COVID-19 pandemic and its impact on the psychological well-being of students around the world, none have been conducted to determine its impact on Hassan Usman Katsina Polytechnic student in Katsina State, Nigeria. As a result, immediate action is required to assess the extent of the damage and devise potential solutions to the problem.

Purpose of the study

This study seeks to investigate whether COVID-19 pandemic has influence on psychological wellbeing (depression and stress) on Hassan Usman Katsina Polytechnic students, Katsina State, Nigeria.

Research hypotheses

The following null hypotheses were formulated;

Ho₁: Depression is not significantly an influence of COVID-19 pandemic on the psychological wellbeing of Hassan Usman Katsina Polytechnic students.

Ho₂: Stress is not significantly an influence of COVID-19 pandemic on the psychological wellbeing of Hassan Usman Katsina Polytechnic students.

RESEARCH METHODOLOGY

Research design

This study employs descriptive survey research design.

Area of the study

The research was carried out at Hassan Usman Katsina Polytechnic, which is located at Km 8 of the Katsina-Dutsinma road in Katsina State, Nigeria. The polytechnic is made up of seven colleges: The College of Administration and Management Studies (CAMS), the College of Agriculture, the College of Science and Technology (CST), the College of Engineering, the College of Environmental Studies, the College of Liberal Studies, and the College of Vocational and Technical Education.

Population of the study

This study covered all students of Hassan Usman Katsina Polytechnic, Katsina State. A total of four thousand and forty-three (4,043) students were enrolled for the 2019/2020 academic session (Bagiwa, 2021).

Sample and sampling techniques

According to the Research Advisors 2006 table for determining sample size, a sample of three hundred and sixty (306) students from the College of Science and Technology (CST) was chosen, and the size is considered reasonably adequate, whereas a simple random sampling technique was used in selecting the sample students to ensure equal representation of each element (Table 1).

Research instrument

Akorede et al. (2020) used an adopted questionnaire titled "Influence of Covid-19 on Psychological Wellbeing of Tertiary Institution Students in Nigeria Questionnaire" to collect data (IC19PWTISNQ). The researcher later re-structured the instrument aimed at getting vital information which consists of a list of twenty (20) items relating to the objectives and research questions of the study with closed ended questions on a five-point likert scale i.e. Strongly Agree (5) Agree (4) Undecided (3) Disagree (2) and Strongly Disagree (1) and the reverse pattern for the negative responses i.e. SA=1, A=2, U=3, D=4, and SD=5.

Validity and reliability of the instrument

The validity of the instrument was determined using face and content validity. The modified instrument was thoroughly and carefully examined for clarity, precision, and comprehension by two (2) experts in Educational Psychology, Department of Education, Umaru Musa Yar'adua University. The instrument has been corrected to be simple and brief in relation to the respondent's task. Pilot testing was performed on a group of forty (40) students from the Department of Basic and Applied Sciences to ensure the instrument's internal consistency. The students were given copies of the questionnaire, which were then collected and analyzed using the test-retest method. Using the Pearson Product Moment Correlation Coefficient (r) technique in SPSS version 20.0, the instrument yielded a reliability coefficient of 0.76.

Data collection

The instrument was self-administered with the assistance of the class representatives from each level who were being trained by the researcher on questionnaire distribution and administration. After thorough explanations, 306 copies each of the questionnaires were then distributed to the respondents and then collected after completion which lasted for one week. A total of 288 were retrieved and usable for data analysis.

Data analysis

The researcher analyzed the quantitative data gathered from the field using Statistical Package for Social Sciences (SPSS) version 20.0. Descriptive statistics was used in the presentation and analysis of demographic data, whereas, inferential statistics of Chi-Square (χ^2) test was used in testing null hypotheses at 0.05 level of significance in rejecting or retaining the null hypotheses.

RESULTS AND DISCUSSION

Table 2 shows that 150(52.1%) of the respondents are male students, while 138(47.9%) were female students. Table 3 shows that 103(35.8%) of the respondents are from Basic and Applied Science, 81(28.1%) are from Computer Studies, 63(21.9%) are from Math's and Statistics, 41(14.2%) are from FSHHM. This shows that most of the respondents were from Basic and Applied Science. Table 4 shows that the mean scores of the responses was 4.3875 which is greater than the scale average which is significant which shows that COVID-19 pandemic cause depression on Hassan Usman Katsina Polytechnic Students. Table 5 shows that the mean

scores of the responses were 4.253472 which is greater than the scale average which is significant which shows that COVID-19 pandemic cause stress on Hassan Usman Katsina Polytechnic Students.

Answering research hypothesis

H_{01} . Depression is not significantly an influence of COVID-19 pandemic on the psychological wellbeing of Hassan Usman Katsina Polytechnic students. Table 6 above shows that the computed chi-square was 286.97 which is greater than the tabulated chi-square value 249.7. We reject the null hypothesis H_0 and accept H_1 which shows that the result was significance at $\alpha = 0.05$. It was concluded that depression is significantly an influence on COVID-19 pandemic on the psychological wellbeing of Hassan Usman Katsina Polytechnic students.

Research hypothesis two

H_{02} . Stress is not significantly an influence of COVID-19 pandemic on the psychological wellbeing of Hassan Usman Katsina Polytechnic student. Table 7 shows that the computed chi-square was 257.73 which is greater than the tabulated chi-square value 249.7. We reject the null hypothesis H_0 and accept H_1 which shows that the result was significance at $\alpha = 0.05$. It was concluded that stress is significantly an influence on COVID-19 pandemic on the psychological wellbeing of Hassan Usman Katsina Polytechnic students. Considering results from (Table), the findings of the study showed that COVID-19 pandemic has influence on depression on the psychological wellbeing of Hassan Usman Katsina Polytechnic students.

This finding is in line with that of Liu et al (2020) which posit that the pandemic has been escalating and threatening the welfare of human beings globally, which leads to psychological consequences; ranging from anxiety, depression, and substance abuse, to behavioral changes such as difficulty sleeping and stress eating. The vast majority of students encounter some degree of negative experiences during the pandemic. Results from table above 6 revealed that Stress is significantly an influence of COVID-19 pandemic on the psychological wellbeing of Hassan Usman Katsina Polytechnic students.

This corroborates with findings of Akorede et al. (2020) it has been observed that the pandemic has caused stress, anxiety and worry for many students, Common causes of psychological stress during pandemics includes; fear of falling ill and dying, avoiding health care due to fear of being infected while in care, fear of losing work and livelihoods etc.

Table 1: Distribution of the sample size for the study.

Departments	Sample size
Basic and Applied Science	113
Computer Studies	75
Maths and Statistics	55
Food Sci. Home and Hosp. Mangt	38
Home and Rural Economic	25
TOTAL	306

Table 2: Distribution of respondents by gender.

Departments	Frequency	Percentage
Male	150	52.1
Female	138	47.9
TOTAL	288	100.0

Table 3: Distribution of respondents by departments.

Departments	Frequency	Percentage
Basic and Applied Science	103	35.
Computer Studies	81	28.1
Maths and Statistics	63	21.9
Food Sci. Home and Hosp. Mangt	41	14.2
TOTAL	288	100.0

Table 4: Responses of the COVID-19 pandemic cause depression on Hassan Usman Katsina Polytechnic students.

ITEMS	SD	D	U	A	SA	MEAN
I experience bored during lockdown	1	2	3	4	5	4.736111
Lockdown has resulted into having few or no friends around	0	0	3	70	215	4.538194
I am afraid that I will be infected with the corona virus	0	14	10	123	141	4.357639
Lockdown measures has led to antisocial behaviors	0	12	16	176	84	4.152778
I experience trouble in concentration during school closure	12	11	3	81	181	4.416667
I am depressed due to delay of academic activities	0	8	31	136	113	4.229167
Students with underlying health condition are depressed due to poor access to medical care	0	17	16	122	133	4.288194
Coronavirus period is causing me to be more emotional	0	18	30	163	78	4.055556
The coronavirus period is causing me low mood	0	6	4	77	201	4.642361
I have been anxious about being near other people	0	0	3	150	135	4.458333
MEAN						4.3875

Table 5: Responses of the COVID-19 pandemic cause stress on Hassan Usman Katsina Polytechnic students.

ITEMS	SD	D	U	A	SA	MEAN
I experience anxiety due to school closure	12	12	3	4	5	4.461806
I found it difficult to sleep during lockdown	6	8	37	106	131	4.208333
Social distance makes me feel lonely	0	17	30	144	97	4.114583
Coronavirus period causing me to eat more	0	24	5	140	119	4.229167
Even with the coronavirus, I am staying active	0	5	40	161	82	4.111111
I am always tense and agitated during lockdown	0	12	25	120	131	4.284722
The treat of coronavirus has caused me to become aggressive	0	18	38	84	148	4.256944
School closure has increase my anxiousness	0	24	8	115	141	4.295139
School closure has caused me to become frustrated	6	12	23	113	134	4.239583
I strictly follow the rule to avoid being infected	0	24	5	110	149	4.333333
MEAN						4.253472

Table 6: Chi- square.

n	X_{cal}^2	α	X_{tbl}^2	Decision
288	286.97	0.05	249.7	Significant

Table 7: Chi- square.

n	X_{cal}^2	α	X_{tbl}^2	Decision
288	257.73	0.05	249.7	Significant

Conclusion

Based on the findings of the study, it was concluded that COVID-19 pandemic has influence on psychological wellbeing (depression and stress) on Hassan Usman Katsina Polytechnic students, Katsina State, Nigeria.

Recommendations

Based on the findings of the study, therefore, it was recommended that strict measures such as use of face mask during lecture hours, use of hand sanitizers and social distancing should be put in place to avoid further spread of the disease. The polytechnic management along with government health service providers should create sensitive awareness on COVID-19 vaccination, all students should go for the vaccination and provide their cards to the school clinic for documentation. Educational Psychologists should organize interactive session with the school community and the students as well to get them informed on psychological problems such as depression, stress and other negative consequences of COVID-19 to maintain their psychological wellbeing.

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