Level of Covid-19 Anxiety among Secondary School Students in Schools and at Home in Delta State

[1]Oghounu, A. E.

[1]Department of Guidance and Counselling, Delta State University, Abraka, Nigeria,
ericoghounu250@gmail.com

Abstract

This study investigated the extent of Covid-19 anxiety among students in school and at home in Delta State. Eight research questions and four null hypotheses guided the study. The design of the study was descriptive survey research design of the ex-post facto method. The population of the study comprised 128,024 students in Delta State. A sample size of 383 students participated in the study. A questionnaire was used for the study. The instrument was adequately validated by means of experts' judgement. The reliability of the instruments was done to determine their measure of internal consistency, through Cronbach Alpha reliability coefficient and found adequate. The data collected were analysed with mean and standard deviation for the research questions, while paired and independent samples t-test were used to test the stated hypotheses at 0.05 level of significance. From the analysis of data, the following findings emerged: that the extent of Covid-19 anxiety among students in school is high; that the extent of Covid-19 anxiety among students at home is high; that the extent of Covid-19 anxiety among male students is high; that the extent of Covid-19 anxiety among female students is high; that the extent of Covid-19 anxiety among senior students is high; that the extent of Covid-19 anxiety among junior students is high; that the extent of Covid-19 anxiety among rural students is high; that the extent of Covid-19 anxiety among urban students is high; that there is no significant difference in the extent of Covid-19 anxiety among students in school and at home; that there is no significant difference in the extent of Covid-19 anxiety among between male and female students in school; that there is no significant difference in the extent of Covid-19 Anxiety among between senior and junior students in school; and that there is no significant difference in the extent of Covid-19 anxiety among between urban and rural students in school. The study recommended amongst others, that Guidance counsellors should allocate time for mental health support to relieve students' concerns and worries to mitigate depression and anxiety.

Keywords: Covid-19 Anxiety; Secondary School Students; Pandemic; Corona Virus.

INTRODUCTION

The coronavirus disease pandemic of 2019 (COVID-19) shocked the world, overwhelming the health systems of most countries. On January 30, 2020, the World Health Organization (WHO) named the novel human coronavirus illness (COVID-19) outbreak, which began on December 8, 2019, in Wuhan, China, a Public Health Emergency of International Concern (PHEIC) (WHO, 2020).

There were more over seven million cases globally as of June 7, 2020, with the United States (more than two million cases), Brazil (more than 700,000 cases), Russia (more than 500,000 cases), South Africa (more than 54,000 cases), and Egypt (more than 38,000 cases) bearing the burden.

The Coronavirus Preparedness Group was formed in Nigeria on January 31 as a result of the WHO declaration. Nigeria was identified as

one of 13 high-risk African countries for the spread of COVID-19, according to the WHO. Nigeria was also identified as one of the most vulnerable African countries due to the state of its healthcare system (Marbot, 2020). Apart from a lack of health staff, there are still areas in Africa without healthcare facilities (Amzat, 2011). According to the projections, Africa would bear the brunt of the COVID-19 pandemic if countries do not take strong anti-pandemic measures.

The pandemic resulted in the activation of strict public measures to prevent the spread of the disease. One of such measures include closing of schools, which made it more difficult and largely impractical for students to attend classes regularly and to perform their day-to-day routines. It was not until after about three months later that schools were reopened. More than a year later, measures are still being implemented to curtail the spread of the virus. In most schools, students are still being compelled to put on face masks, washing of hands and staying away from public places. At home, the students are still being asked to adhere strictly to personal hygiene such as regular washing of hands and surrounding. They are still being prevented from going to public places for fear of being infected with the deadly virus. Other places where these practices are held are churches and markets. On the news, there are cases of people who have died from the disease. Most of whom may have been known by students, either directly or indirectly related. They may have known someone who have contacted the virus. All of these are capable of introducing anxiety in the students.

Anxiety is a self-reaction or felling of worry to a noncommittal or unknown threat. This manifest it-self when the person believes that he or she may contract the virus. It is like a fear, nervousness, or a threat. Anxiety is a normal psychological reaction to certain challenges. But severe anxiety can be a serious problem for learning in students. The fear of contacting the virus could disorganizes individuals, making one to take actions to prevent from themselves from contacting it.

Those without anxiety may not take any step to prevent it from happening.

The issue of degrading mental health due to pandemics has been reported in the past (Xiang et al., 2014). The circumstances surrounding the COVID-19 pandemic have increased the stress and anxiety in people (Tandon 2020), including secondary school students. Liang et al. (2020) report a much higher fraction of youth with psychological issues during the COVID-19 pandemic when compared to prior pandemics. The American Psychological Association (APA, 2020) reports that nearly 81% of Gen Z teens Gen Z teens (ages 13–17) experience more intense stress due to COVID-19, associated with schooling. Brooks, et al. (2020) stated that most college students suffered post-traumatic stress disorder, anger, fear, sadness, nervousness, and emotional disturbances as a result of the COVID-19 outbreak.

Adolescents exhibited a higher incidence of depressive symptoms than adults during COVID-19, according to an online mental health survey of ordinary Chinese people. In an online survey of Chinese students aged 12–18 years, Zhou et al. (2020) discovered that female gender and higher grades may be risk factors for depressive and anxiety symptoms. Having relatives infected with COVID-19, its economic repercussions, and affects on daily life, as well as delays in academic pursuits, were found to elevate anxiety levels in college students in a previous study (Cao, et al., 2020). Also, in another COVID 19 study of Nigerian university students, 24% of the university students were found to experience severe anxiety, 22% moderate anxiety, and 30% mild anxiety (Rakhmanov & Dane, 2020).

It is possible that the Covid-19 fear may exacerbate already existing mental health problems in children and adolescents as a result of the rare combination of the public health crisis with social isolation and an economic hardship. Students are among those who lack the necessary coping abilities to deal with the pandemic's challenges. Because adolescents are still evolving, they lack the psychological and social abilities to deal with stressful situations

(Crone & Dahl, 2012). Adolescence is a period of life during which people are subjected to rapid developmental changes that have an impact on their psychological and social well-being (WHO, 2017). As a result of the COVID-19 outbreak and the resulting quarantine and public health restrictions, they may be more impacted by emotional responses (Fegert et al., 2020).

The level of anxiety may also have a serious effect on the performance of the students, especially those preparing for their senior school certificate examination. According to the research by Rakhmanov, Shaimerdenov, and Dane, there appears to be a link between anxiety and educational performance (2020). That is, anxiety reduces academic achievement, while poor academic performance leads to anxiety among pupils. According to the literature, changes in current lifestyle and students' perceptions of the risk of contracting COVID may raise the risk of depression and anxiety (Xiang et al., 2020).

If not treated by competent psychological interventions throughout adolescence, such problems often remain into adulthood, increasing the likelihood of developing additional mental health problems and diseases (APA, 2013). School guidance counsellors and other stakeholders need to be aware of the additional psychological and social support needs of these students during the pandemic. Guidance counselors are in a special position to play an important role in supporting emotional well-being, screening for mental well-being and early intervention programs, and helping to monitor the continued treatment of mental health. There is therefore, the need to determine the level of anxiety among secondary school students during the period of Covid-19 pandemic. This is the crux of the study, to find out the extent of Covid-19 anxiety among secondary school students at home and in school in Delta State.

Research Questions

The following research questions guided the study:

1.   What is the extent of Covid-19 anxiety among students in school?

2.   What is the extent of Covid-19 anxiety among students at home?

3.   What is the extent of Covid-19 anxiety among male students?

4.   What is the extent of Covid-19 anxiety among female students?

5.   What is the extent of Covid-19 anxiety among senior students?

6.   What is the extent of Covid-19 anxiety among junior students?

7.   What is the extent of Covid-19 anxiety among rural students?

8.   What is the extent of Covid-19 anxiety among urban students?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1.   There is no significant difference in the extent of Covid-19 anxiety among students in school and at home

2.   There is no significant difference in the extent of Covid-19 anxiety among between male and female students

3.   There is no significant difference in the extent of Covid-19 anxiety among between senior and junior students

4.   There is no significant difference in the extent of Covid-19 anxiety among between urban and rural students

Methods

The study adopted the descriptive survey research design of the ex-post facto method. This enabled the researcher to achieve the purpose of the study. The use of ex-post facto is based on the fact that the researcher did not manipulate the independent variable, as the data that were used for the study are already in

existence. The population of the study comprised 128,024 public secondary school students in Delta State. The sample size for the study comprised 383 students. a proportionate stratified sampling technique was employed in the selection of the students based on each local government area.

The instrument that was used to collect data in this study is a questionnaire. The questionnaire contains three sections. Section A dealt with the Demographic Data of the students; Section B contains Covid-19 Anxiety in School Setting; while Section C contains Covid-19 Anxiety in Home Setting. The instrument was structured on a 4-point scale of SA (4), A (3), D (2) and SD (1). An expert panel from the Department of Guidance and Counseling reviewed and validated the survey questions. In order to confirm the instrument's face and content validity, a copy of the questionnaire was given to the experts, who read over it and gave ideas for improvements to the instrument. The corrections were made before the final draft was prepared. Based on the judgement of the experts, the instrument was considered valid. A method of internal consistency was used to estimate the reliability of the instrument. The

questionnaire was administered to 30 students, who were not part of the study area. The data were analysed using Cronbach alpha reliability coefficient. A coefficient of 0.81 and 0.79 was obtained for Covid-19 Anxiety in School Setting and Covid-19 Anxiety in Home Setting, respectively. This implies that the instrument is reliable and can be used for the study.

The questionnaire was administered directly to the respondents by the researcher. The researcher solicited the assistance of five research assistants. The researcher met the students in their classes after permission was sought from the principal of the schools. The instrument was retrieved immediately. The data obtained were analysed with descriptive and inferential statistics. Mean and standard deviation were used to answer the research questions at a criterion mean of 2.50, while independent samples t-test was used to test the hypotheses at 0.05 level of significance.

Results

Research Question 1: What is the extent of Covid-19 anxiety among students in school

Table 1: *Mean rating of the extent of Covid-19 anxiety among students in school*

S/N	Statement	Mean	SD	Remark
1	I've examined myself for signs and symptoms of Covid-19.	2.98	0.90	High
2	Because of my concern of catching Covid-19, I have avoided touching anything at school.	2.83	0.81	High
3	I have checked all of my classmates for evidence of Covid-19 infection.	2.76	1.09	High
4	I was concerned that I had not kept completely to the social distance recommendations for Covid-19, and I was right to be concerned.	2.75	0.89	High
5	I've spent a lot of time investigating the symptoms of Covid-19, which has taken time away from my participation in school activities.	2.69	0.90	High
6	At the cost of participating in school activities, I have read about Covid-19 news that interferes with my ability to concentrate.	2.62	0.94	High
7	I've been keeping a close eye out for any of my classmates who appear to be suffering from Covid-19 symptoms.	2.56	1.02	High
8	I've tried to imagine what may happen to my pals if they became infected with Covid-19.	2.54	1.00	High
9	I have avoided talking about Covid-19 in school.	2.53	0.94	High
	Average Mean	**2.70**	**0.94**	**High**
			Criterion Mean = 2.50	

Table 1 shows that the mean rating of the extent of Covid-19 anxiety among students in school. From the result, the mean, arranged in a descending order, ranged from 2.53 to 2.98. The average mean is 2.70 with a standard deviation of 0.94. The result shows that all the

items had a mean rating that is greater than the criterion mean of 2.50. This means that the extent of Covid-19 anxiety among students in school is high.

Research Question 2: What is the extent of Covid-19 anxiety among students at home?

Table 2: *Mean rating of the extent of Covid-19 anxiety among students at home*

S/N	Statement	Mean	SD	Remark
1	In the past few weeks, I've been paying special attention to those who appear to be exhibiting symptoms of Covid-19.	3.16	1.04	High
2	Because of my concern about contracting, I have avoided taking public transportation. Covid-19	2.94	1.02	High
3	I've tried to imagine what may happen to my family members if they became infected with Covid-19.	2.91	0.85	High
4	I've examined myself for signs and symptoms of Covid-19.	2.83	1.06	High
5	I've investigated all of my family members and loved ones for evidence of Covid-19	2.69	1.03	High
6	In order to explore symptoms of Covid-19, I have sacrificed off-line social activities such as spending time with family and friends.	2.66	1.00	High
7	In order to avoid contracting Covid-19, I have avoided going to public areas (such as shops and parks) for several weeks.	2.66	1.01	High
8	In order to avoid doing household tasks, I have been reading about Covid-19-related news stories.	2.63	1.11	High
9	I've been concerned that I haven't followed the handwashing requirements for Covid-19 at home to the letter.	2.62	1.02	High
10	As a result of my concern about catching Covid-19, I have avoided touching anything in my house.	2.60	1.06	High
11	I've tried to keep the topic of Covid-19 out of the house.	2.56	1.07	High
	Average Mean	**2.75**	**1.02**	**High**
			Criterion Mean = 2.50	

Table 2 shows that the mean rating of the extent of Covid-19 anxiety among students at home. From the result, the mean, arranged in a descending order, ranged from 2.56 to 3.16. The average mean is 2.75 with a standard deviation of 1.02. The result shows that all the items had a mean rating that is greater than the criterion mean of 2.50. This means that the extent of Covid-19 anxiety among students at home is high.

Research Question 3: What is the extent of Covid-19 anxiety among male students?

Table 3: *Mean rating of the extent of Covid-19 anxiety among male students*

S/N	Statement	Mean	SD	Remark
1	In the past few weeks, I've been paying special attention to those who appear to be exhibiting symptoms of Covid-19.	3.16	1.09	High
2	I've examined myself for signs and symptoms of Covid-19.	2.96	0.88	High
3	Because of my concern about contracting, I have avoided taking public transportation. Covid-19	2.96	1.04	High
4	I've tried to imagine what may happen to my family members if they became infected with Covid-19.	2.87	0.92	High
5	As a result of my concern about catching Covid-19, I have avoided touching anything in my house.	2.80	1.04	High
6	Because of my concern of catching Covid-19, I have avoided touching anything at school.	2.75	0.73	High
7	In order to avoid contracting Covid-19, I have avoided going to public areas (such as shops and parks) for several weeks.	2.75	1.08	High
8	I've been concerned that I haven't followed the handwashing requirements for Covid-19 at home to the letter.	2.69	1.07	High
9	I've investigated all of my family members and loved ones for evidence of Covid-19	2.67	1.04	High
10	In order to explore symptoms of Covid-19, I have sacrificed off-line social activities such as spending time with family and friends.	2.65	1.00	High
11	I have checked all of my classmates for evidence of Covid-19 infection.	2.64	1.10	High
12	I was concerned that I had not kept completely to the social distance recommendations for Covid-19, and I was right to be concerned.	2.62	0.87	High

S/N	Statement	Mean	SD	Remark
13	I've tried to imagine what may happen to my pals if they became infected with Covid-19.	2.62	1.03	High
14	In order to avoid doing household tasks, I have been reading about Covid-19-related news stories.	2.58	1.12	High
15	I've tried to keep the topic of Covid-19 out of the house.	2.58	1.05	High
16	I've spent a lot of time investigating the symptoms of Covid-19, which has taken time away from my participation in school activities.	2.56	0.83	High
17	At the cost of participating in school activities, I have read about Covid-19 news that interferes with my ability to concentrate.	2.55	0.92	High
18	I've been keeping a close eye out for any of my classmates who appear to be suffering from Covid-19 symptoms.	2.47	1.03	Low
19	I have avoided talking about Covid-19 in school.	2.42	0.85	Low
	Average Mean	**2.70**	**0.98**	**High**
				Criterion Mean = 2.50

Table 3 shows that the mean rating of the extent of Covid-19 anxiety among male students. From the result, the mean, arranged in a descending order, ranged from 2.42 to 3.16. The average mean is 2.70 with a standard deviation of 0.98. The result shows that all the items except items 18 and 19, had a mean rating that is greater than the criterion mean of 2.50. This means that the extent of Covid-19 anxiety among male students is high.

Research Question 4: What is the extent of Covid-19 anxiety among female students?

Table 4: *Mean rating of the extent of Covid-19 anxiety among female students*

S/N	Statement	Mean	SD	Remark
1	In the past few weeks, I've been paying special attention to those who appear to be exhibiting symptoms of Covid-19.	3.16	1.00	High
2	I've examined myself for signs and symptoms of Covid-19.	3.00	0.93	High
3	I've tried to imagine what may happen to my family members if they became infected with Covid-19.	2.96	0.77	High
4	Because of my concern of catching Covid-19, I have avoided touching anything at school.	2.93	0.89	High
5	Because of my concern about contracting, I have avoided taking public transportation. Covid-19	2.91	1.02	High
6	I was concerned that I had not kept completely to the social distance recommendations for Covid-19, and I was right to be concerned.	2.91	0.90	High
7	I have checked all of my classmates for evidence of Covid-19 infection.	2.91	1.08	High
8	I've spent a lot of time investigating the symptoms of Covid-19, which has taken time away from my participation in school activities.	2.84	0.95	High
9	I've investigated all of my family members and loved ones for evidence of Covid-19	2.71	1.04	High
10	At the cost of participating in school activities, I have read about Covid-19 news that interferes with my ability to concentrate.	2.71	0.97	High
11	In order to avoid doing household tasks, I have been reading about Covid-19-related news stories.	2.69	1.10	High
12	I've been keeping a close eye out for any of my classmates who appear to be suffering from Covid-19 symptoms.	2.67	1.00	High
13	In order to explore symptoms of Covid-19, I have sacrificed off-line social activities such as spending time with family and friends.	2.67	1.00	High
14	I have avoided talking about Covid-19 in school.	2.67	1.02	High
15	In order to avoid contracting Covid-19, I have avoided going to public areas (such as shops and parks) for several weeks.	2.56	0.92	High
16	I've tried to keep the topic of Covid-19 out of the house.	2.53	1.10	High
17	I've been concerned that I haven't followed the handwashing requirements for Covid-19 at home to the letter.	2.53	0.97	High
18	I've tried to imagine what may happen to my pals if they became	2.44	0.97	Low

	infected with Covid-19.			
19	As a result of my concern about catching Covid-19, I have avoided touching anything in my house.	2.36	1.05	Low
	Average Mean	**2.75**	**0.98**	**High**
		Criterion Mean = 2.50		

Table 4 shows that the mean rating of the extent of Covid-19 anxiety among female students. From the result, the mean, arranged in a descending order, ranged from 2.36 to 3.16. The average mean is 2.75 with a standard deviation of 0.98. The result shows that all the items except items 18 and 19, had a mean rating that is greater than the criterion mean of 2.50. This means that the extent of Covid-19 anxiety among female students is high.

Research Question 5: What is the extent of Covid-19 anxiety among senior students?

Table 5: *Mean rating of the extent of Covid-19 anxiety among senior students*

S/N	Statement	Mean	SD	Remark
1	In the past few weeks, I've been paying special attention to those who appear to be exhibiting symptoms of Covid-19.	3.45	0.92	High
2	I've tried to imagine what may happen to my family members if they became infected with Covid-19.	3.04	0.85	High
3	Because of my concern about contracting, I have avoided taking public transportation. Covid-19	3.00	0.98	High
4	I've examined myself for signs and symptoms of Covid-19.	2.94	0.84	High
5	In order to avoid contracting Covid-19, I have avoided going to public areas (such as shops and parks) for several weeks.	2.86	0.90	High
6	Because of my concern of catching Covid-19, I have avoided touching anything at school.	2.84	0.73	High
7	I've been concerned that I haven't followed the handwashing requirements for Covid-19 at home to the letter.	2.80	0.94	High
8	In order to explore symptoms of Covid-19, I have sacrificed off-line social activities such as spending time with family and friends.	2.78	0.97	High
9	I have checked all of my classmates for evidence of Covid-19 infection.	2.75	1.09	High
10	I was concerned that I had not kept completely to the social distance recommendations for Covid-19, and I was right to be concerned.	2.73	0.87	High
11	I've investigated all of my family members and loved ones for evidence of Covid-19	2.73	0.98	High
12	In order to avoid doing household tasks, I have been reading about Covid-19-related news stories.	2.73	1.12	High
13	I've spent a lot of time investigating the symptoms of Covid-19, which has taken time away from my participation in school activities.	2.61	0.90	High
14	At the cost of participating in school activities, I have read about Covid-19 news that interferes with my ability to concentrate.	2.59	0.88	High
15	As a result of my concern about catching Covid-19, I have avoided touching anything in my house.	2.55	1.01	High
16	I've tried to keep the topic of Covid-19 out of the house.	2.53	1.08	High
17	I've been keeping a close eye out for any of my classmates who appear to be suffering from Covid-19 symptoms.	2.51	0.97	High
18	I've tried to imagine what may happen to my pals if they became infected with Covid-19.	2.49	1.03	Low
19	I have avoided talking about Covid-19 in school.	2.47	0.95	Low
	Average Mean	**2.76**	**0.95**	**High**
		Criterion Mean = 2.50		

Table 5 shows that the mean rating of the extent of Covid-19 anxiety among senior students. From the result, the mean, arranged in a descending order, ranged from 2.47 to 3.45. The average mean is 2.76 with a standard deviation of 0.95. The result shows that all the items except items 18 and 19, had a mean rating that is greater than the criterion mean of 2.50. This means that the extent of Covid-19 anxiety among senior students is high.

Research Question 6: What is the extent of Covid-19 anxiety among junior students?

Table 6: *Mean rating of the extent of Covid-19 anxiety among junior students*

S/N	Statement	Mean	SD	Remark
1	I've examined myself for signs and symptoms of Covid-19.	3.02	0.97	High
2	Because of my concern about contracting, I have avoided taking public transportation. Covid-19	2.88	1.07	High
3	In the past few weeks, I've been paying special attention to those who appear to be exhibiting symptoms of Covid-19.	2.86	1.08	High
4	Because of my concern of catching Covid-19, I have avoided touching anything at school.	2.82	0.88	High
5	I was concerned that I had not kept completely to the social distance recommendations for Covid-19, and I was right to be concerned.	2.78	0.92	High
6	I have checked all of my classmates for evidence of Covid-19 infection.	2.78	1.10	High
7	I've spent a lot of time investigating the symptoms of Covid-19, which has taken time away from my participation in school activities.	2.78	0.90	High
8	I've tried to imagine what may happen to my family members if they became infected with Covid-19.	2.78	0.85	High
9	I've investigated all of my family members and loved ones for evidence of Covid-19	2.65	1.09	High
10	As a result of my concern about catching Covid-19, I have avoided touching anything in my house.	2.65	1.13	High
11	At the cost of participating in school activities, I have read about Covid-19 news that interferes with my ability to concentrate.	2.65	1.01	High
12	I've been keeping a close eye out for any of my classmates who appear to be suffering from Covid-19 symptoms.	2.61	1.08	High
13	I have avoided talking about Covid-19 in school.	2.59	0.93	High
14	I've made an effort to keep the subject of Covid-19 out of the classroom. .	2.59	1.06	High
15	I've tried to imagine what may happen to my pals if they became infected with Covid-19.	2.59	0.98	High
16	In order to explore symptoms of Covid-19, I have sacrificed off-line social activities such as spending time with family and friends.	2.53	1.02	High
17	In order to avoid doing household tasks, I have been reading about Covid-19-related news stories.	2.53	1.10	High
18	In order to avoid contracting Covid-19, I have avoided going to public areas (such as shops and parks) for several weeks.	2.45	1.08	Low
19	I've been concerned that I haven't followed the handwashing requirements for Covid-19 at home to the letter.	2.43	1.08	Low
	Average Mean	**2.68**	**1.02**	**High**

Criterion Mean = 2.50

Table 6 shows that the mean rating of the extent of Covid-19 anxiety among junior students. From the result, the mean, arranged in a descending order, ranged from 2.43 to 3.02.

The average mean is 2.68 with a standard deviation of 1.02. The result shows that all the items except items 18 and 19, had a mean rating that is greater than the criterion mean of 2.50. This means that the extent of Covid-19 anxiety among junior students is high.

Research Question 7: What is the extent of Covid-19 anxiety among rural students?

Table 7: *Mean rating of the extent of Covid-19 anxiety among rural students*

S/N	Statement	Mean	SD	Remark
1	In the past few weeks, I've been paying special attention to those who appear to be exhibiting symptoms of Covid-19.	3.16	1.08	High
2	Because of my concern about contracting, I have avoided taking public transportation. Covid-19	2.98	0.98	High
3	I've tried to imagine what may happen to my family members if they became infected with Covid-19.	2.94	0.71	High
4	I have checked all of my classmates for evidence of Covid-19 infection.	2.86	1.13	High
5	I've examined myself for signs and symptoms of Covid-19.	2.82	0.90	High
6	Because of my concern of catching Covid-19, I have avoided touching anything at school.	2.78	0.79	High
7	I've spent a lot of time investigating the symptoms of Covid-19, which has taken time away from my participation in school activities.	2.72	0.90	High
8	I was concerned that I had not kept completely to the social distance recommendations for Covid-19, and I was right to be concerned.	2.68	0.89	High
9	In order to explore symptoms of Covid-19, I have sacrificed off-line social activities such as spending time with family and friends.	2.64	1.03	High
10	I've been concerned that I haven't followed the handwashing requirements for Covid-19 at school to the letter.	2.64	1.01	High
11	I've been keeping a close eye out for any of my classmates who appear to be suffering from Covid-19 symptoms.	2.62	1.05	High
12	In order to avoid contracting Covid-19, I have avoided going to public areas (such as shops and parks) for several weeks.	2.62	0.92	High
13	At the cost of participating in school activities, I have read about Covid-19 news that interferes with my ability to concentrate.	2.58	0.91	High
14	As a result of my concern about catching Covid-19, I have avoided touching anything in my house.	2.58	1.03	High
15	I've investigated all of my family members and loved ones for evidence of Covid-19	2.58	1.07	High
16	I've tried to imagine what may happen to my pals if they became infected with Covid-19.	2.56	1.05	High
17	I have avoided talking about Covid-19 in school.	2.52	0.93	High
18	In order to avoid doing household tasks, I have been reading about Covid-19-related news stories.	2.44	1.07	Low
19	I've tried to keep the topic of Covid-19 out of the house.	2.36	1.08	Low
	Average Mean	**2.69**	**0.97**	**High**
			Criterion Mean = 2.50	

Table 7 shows that the mean rating of the extent of Covid-19 anxiety among rural students. From the result, the mean, arranged in a descending order, ranged from 2.36 to 3.16. The average mean is 2.69 with a standard deviation of 0.97. The result shows that all the items except items 18 and 19, had a mean rating that is greater than the criterion mean of 2.50. This means that the extent of Covid-19 anxiety among rural students is high.

Research Question 8: What is the extent of Covid-19 anxiety among urban students?

Table 8: *Mean rating of the extent of Covid-19 anxiety among urban students*

S/N	Statement	Mean	SD	Remark
1	In the past few weeks, I've been paying special attention to those who appear to be exhibiting symptoms of Covid-19.	3.16	1.02	High
2	I've examined myself for signs and symptoms of Covid-19.	3.14	0.88	High
3	Because of my concern about contracting, I have avoided taking public transportation. Covid-19	2.90	1.07	High
4	I've tried to imagine what may happen to my family members if they became infected with Covid-19.	2.88	0.98	High
5	Because of my concern of catching Covid-19, I have avoided touching anything at school.	2.88	0.82	High
6	In order to avoid doing household tasks, I have been reading about Covid-19-related news stories.	2.82	1.12	High
7	I was concerned that I had not kept completely to the social distance recommendations for Covid-19, and I was right to be concerned.	2.82	0.90	High
8	I've investigated all of my family members and loved ones for evidence of Covid-19	2.80	0.99	High
9	I've tried to keep the topic of Covid-19 out of the house.	2.76	1.02	High
10	In order to avoid contracting Covid-19, I have avoided going to public areas (such as shops and parks) for several weeks.	2.70	1.09	High
11	In order to explore symptoms of Covid-19, I have sacrificed off-line social activities such as spending time with family and friends.	2.68	0.98	High
12	I've spent a lot of time investigating the symptoms of Covid-19, which has taken time away from my participation in school activities.	2.66	0.90	High
13	I have checked all of my classmates for evidence of Covid-19 infection.	2.66	1.06	High
14	At the cost of participating in school activities, I have read about Covid-19 news that interferes with my ability to concentrate.	2.66	0.98	High
15	As a result of my concern about catching Covid-19, I have avoided touching anything in my house.	2.62	1.11	High
16	I've been concerned that I haven't followed the handwashing requirements for Covid-19 at home to the letter.	2.60	1.05	High
17	I have avoided talking about Covid-19 in school.	2.54	0.95	High
18	I've tried to imagine what may happen to my pals if they became infected with Covid-19.	2.52	0.95	High
19	I've been keeping a close eye out for any of my classmates who appear to be suffering from Covid-19 symptoms.	2.50	1.00	High
	Average Mean	**2.75**	**0.99**	**High**
	Criterion Mean = 2.50			

Table 8 shows that the mean rating of the extent of Covid-19 anxiety among urban students. From the result, the mean, arranged in a descending order, ranged from 2.50 to 3.16. The average mean is 2.75 with a standard deviation of 0.99. The result shows that all the items had a mean rating that is greater than the criterion mean of 2.50. This means that the extent of Covid-19 anxiety among urban students is high.

Testing of Hypotheses

Hypothesis 1: There is no significant difference in the extent of Covid-19 anxiety among students in school and at home

Table 9: *t-test analysis of the difference in the extent of Covid-19 anxiety among students in school and at home*

Environment	n	Mean	SD	df	t	P	Decision
Covid-19 Anxiety in School	383	2.70	0.64				
Covid-19 Anxiety at home	383	2.75	0.66	99	0.56	0.58	Not Significant

$\alpha = .05$

Table 9 shows a paired samples t-test analysis, which was carried out to compare the difference in the extent of Covid-19 anxiety among students in school and at home. The result shows that t = 0.56, p > .05. Hence, the null hypothesis was accepted. This means that there is no significant difference in the extent of Covid-19 anxiety among students in school and at home.

Hypothesis 2: There is no significant difference in the extent of Covid-19 anxiety among between male and female students

Table 10: *t-test analysis of the difference in the extent of Covid-19 anxiety among between male and female students*

Sex	*n*	Mean	*SD*	*df*	*t*	*P*	Decision
Male	211	2.70	0.44				
Female	172	2.75	0.42	98	0.52	0.61	Not Significant

α = .05

Table 10 shows an independent samples t-test analysis, which was carried out to compare the difference in the extent of Covid-19 anxiety among between male and female students. The result shows that t = 0.52, p > .05. Hence, the null hypothesis was accepted. This means that there is no significant difference in the extent of Covid-19 anxiety among between male and female students.

Hypothesis 3: There is no significant difference in the extent of Covid-19 Anxiety among between senior and junior students

Table 11: *t-test analysis of the difference in the extent of Covid-19 Anxiety among between senior and junior students*

Class	*n*	Mean	*SD*	*df*	*t*	*P*	Decision
Senior	195	2.76	0.39				
Junior	188	2.68	0.46	98	0.89	0.38	Not Significant

α = .05

Table 11 shows an independent samples t-test analysis, which was carried out to compare the difference in the extent of Covid-19 Anxiety among between senior and junior students. The result shows that t = 0.89, p > .05. Hence, the null hypothesis was accepted. This means that there is no significant difference in the extent of Covid-19 Anxiety among between senior and junior students.

Hypothesis 4: There is no significant difference in the extent of Covid-19 anxiety among between urban and rural students

Table 12: *t-test analysis of the difference in the extent of Covid-19 anxiety among between urban and rural students*

Location	*n*	Mean	*SD*	*df*	*t*	*P*	Decision
Urban	192	2.75	0.46				
Rural	191	2.69	0.39	98	0.75	0.45	Not Significant

α = .05

Table 12 shows an independent samples t-test analysis, which was carried out to compare the difference in the extent of Covid-19 anxiety among between urban and rural students. The result shows that t = 0.75, p > .05. Hence, the null hypothesis was accepted. This means that there is no significant difference in the extent

of Covid-19 anxiety among between urban and rural students.

Discussion

The first finding revealed that the extent of Covid-19 anxiety among students in school is high. This finding implies that students are experiencing Covid-19 anxiety in school to a large extent. This finding agrees with the research done by Alyami et al. (2020), which looked at the anxiety level of the Saudi society during COVID-19 and reported 26% level of anxiety. The finding is also consistent with Bahhawi et al. (2018), who reported a higher level of anxiety.

The second finding revealed that the extent of Covid-19 anxiety among students at home is high. This finding implies that students are experiencing Covid-19 anxiety at home to a large extent. This finding is in line with Xie et al. (2020), who reported higher prevalence of depression and anxiety among primary school children in home confinement during a Chinese nationwide school closure. The finding also agrees with Zhou et al. (2020), who described similar findings with Chinese high school students. The study also showed that there is no significant difference in the extent of Covid-19 anxiety among students in school and at home. This finding implies that Covid-19 anxiety is felt at school the same way that it is felt at home.

The third finding showed that the extent of Covid-19 anxiety among male students is high. This finding implies that male students are experiencing Covid-19 to a very large extent. The fourth finding showed that the extent of Covid-19 anxiety among female students is high. This finding implies that female students are experiencing Covid-19 to a very large extent. The finding also revealed that there is no significant difference in the extent of Covid-19 anxiety among between male and female students in school. This finding implies that Covid-19 anxiety is felt by male and female students the same way. This contradicts the findings of (Nez-Pea, et al., 2016), who discovered that while females may have higher

exam anxiety than males, exam anxiety may not affect academic performance. Alsaady, et al. (2020) revealed that female students had higher anxiety levels than male students, and claimed that the higher anxiety levels were attributable to a heavy study load, long exam duration, exhaustion, and negative thoughts.

The fifth finding showed that the extent of Covid-19 anxiety among senior students is high. This finding implies that senior students are experiencing Covid-19 to a very large extent. This conclusion is consistent with Liang et al. (2020), who showed that senior high school students suffered worry during the COVID-19 epidemic and reported low quality of life and scholastic difficulties as a result. The finding is also consistent with the finding of Hamdan-Mansour et al. (2020), which revealed that senior school students reported serious mental health problems such as substance use and lack of social support.

The sixth finding revealed that the extent of Covid-19 anxiety among junior students is high. This finding implies that junior students are experiencing Covid-19 to a very large extent. This finding agrees with Hou et al. (2020), who found mental health problems and suicidality among junior school students in China during the COVID-19 pandemic. The finding also agrees with the finding of Giannopoulou et al. (2021), which showed an 15.3% increase in depression, 17% increase in severe depression, 25.7% increase in anxiety, and 16.7% increase in severe anxiety after just one month of lockdowns. The finding also showed that there is no significant difference in the extent of Covid-19 Anxiety among between senior and junior students in school. This finding implies that Covid-19 anxiety is felt by senior and junior students the same way.

The seventh finding showed that the extent of Covid-19 anxiety among rural students is high. This finding implies that rural students are experiencing Covid-19 to a very large extent. This finding is consistent with Zhang, et al. (2020), whose finding revealed that the anxiety score of rural residents in Hunan during the COVID-19 epidemic was higher than that of healthy Chinese and rural residents across

China during the non-epidemic period. The eighth finding revealed that the extent of Covid-19 anxiety among urban students is high. This finding implies that urban students are experiencing Covid-19 to a very large extent. This finding is consistent with the findings of Cao et al. (2020), who investigated the psychological impact of the COVID-19 on Chinese college students. A sample of students from Changzhi Medical College was selected using the Cluster sampling method, and it was discovered that 21.3 percent of the students were experiencing mild anxiety, 2.7 percent were experiencing moderate anxiety, and 0.9 percent were experiencing severe anxiety. However, living in urban areas, having a stable family income, and living with parents were found to be protective factors against anxiety.

The finding further showed that there is no significant difference in the extent of Covid-19 anxiety among between urban and rural students in school. This finding implies that Covid-19 anxiety is felt by urban and rural students the same way. This finding is at variance with the finding of Porter, et al. (2021), which found that the rates of anxiety and depression in rural areas were significantly lower than urban rates in Ethiopia and Peru, but significantly higher in India.

Conclusion/Recommendations

Based on the findings of the study, it could be concluded that secondary school students are experiencing anxiety both in schools and at home. This feeling is same for male and female, junior and senior, urban and rural students. no significant difference exists in the Covid-19 anxiety level among the students on the basis of their environment, sex, class and location.

Based on the findings and conclusions of this study, the following recommendations were advanced:

i.   Guidance counsellors should allocate time for mental health support to relieve students' concerns and worries to mitigate depression and anxiety

ii.   Guidance counsellors need to develop interventional packages to support secondary school students in managing stress, anxiety, and depression related to Covid-19

Reference

[1]   Alsaady, I., Gattan, H., Zawawi, A., Alghanmi, M., & Zakai, H. (2020). Impact of COVID-19 Crisis on Exam Anxiety Levels among Bachelor Level University Students. Mediterranean Journal of Social Sciences, 11(5), 33-39.

[2]   Alyami, H. S., Naser, A. Y., Dahmash, E. Z., Alyami, M. H., Al-Meanazel, O. T., & Al-Meanazel, A. T. (2020). Depression and anxiety during 2019 coronavirus disease pandemic in Saudi Arabia: a cross-sectional study. medRxiv doi: 10.1101/2020.05.09.20096677

[3]   American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (DSM-5®). American Psychiatric Pub. https://www.appi.org/Diagnostic_and_Stat istical_ Manual_of_Mental_Disorders_DSM-5_Fifth_Edition.

[4]   American Psychological Association (APA) (2020). Stress in America, 2020: A National Mental Health Crisis. Available at: https://www.apa.org/news/press/releases/st ress/2020/report-october   (Accessed January 20, 2021).

[5]   Amzat, J. (2011). 'Health inequality in Nigeria.' In: I. S., Ogundiya, A. O., Olutayo, & J., Amzat (Eds.), Assessment of Democratic Trends in Nigeria. New Delhi: Gyan Books. p. 313–22.

[6]   Bahhawi, T. A., Albasheer, O. B., Makeen, A. M., Arishi, A., Hakami, O., Maashi, S., et al. (2018). Depression, anxiety, and stress and their association with khat use: a cross-sectional study among Jazan University students, Saudi Arabia. Neuropsychiatr Dis Treat., 14, 2755–2761. doi: 10.2147/NDT.S182744

[7]   Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the

evidence. The Lancet, 395(10227), 912–920.

[8] Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., et al. (2020). The psychological impact of the COVID-19 epidemic on college students in China. Psychiatry Res. 287, 112-934. doi: 10.1016/j.psychres.2020.112934

[9] Crone, E. A., & Dahl, R. E. (2012). Understanding adolescence as a period of social–affective engagement and goal flexibility. Nature Reviews Neuroscience, 13(9), 350–636.

[10] Fegert, J., Vitiello, B., Plener, P., & Clemens, V. (2020). Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. Child and Adolescent Psychiatry and Mental Health, 14, 20 https://doi.org/10.1186/s13034-020-00329-3

[11] Giannopoulou, I., Efstathiou, V., Triantafyllou, G., Korkoliakou, P., & Douzenis, A. (2021). Adding Stress to the Stressed: Senior High School Students' Mental Health amidst the COVID-19 Nationwide Lockdown in Greece. Psychiatry Res., 295, 113560. doi:10.1016/j.psychres.2020.113560t

[12] Hou, T.Y., Mao, X. F., Dong, W., Cai, W.P., & Deng, G. H. (2020). Prevalence of and Factors Associated with Mental Health Problems and Suicidality Among Senior High School Students in Rural China During the COVID-19 Outbreak. Asian J. Psychiatry, 54, 102305. doi:10.1016/j.ajp.2020.102305

[13] Liang, L., Ren, H., Cao, R., Hu, Y., Qin, Z., Li, C., & Mei, S. (2020). The effect of COVID-19 on youth mental health. Psychiatric Quarterly. https://doi.org/10.1007/s11126-020-09744-3

[14] Marbot, O. (2020). Coronavirus Africa Map: Which Countries are Most at Risk? https://www.theafricareport.com/23948/coronavirus-africa-which-countriesare-most-at-risk/.

[15] Núñez-Peña, M. I., Suárez-Pellicioni, M., & Bono, R. (2016). Gender Differences in Test Anxiety and Their Impact on Higher Education Students' Academic Achievement. Procedia - Social and Behavioural Sciences, https://doi.org/10.1016/j.sbspro.2016.07.023

[16] Porter, C., Favara, M., Hittmeyer, A., Scott, D., Sánchez Jiménez, A., Ellanki, R., Woldehanna, T., Duc, T., Craske, M. G., & Stein, A. (2021). Impact of the COVID-19 pandemic on anxiety and depression symptoms of young people in the global south: evidence from a four-country cohort study. Mental Health Original Research, 11(4), DOI: 10.5255/UKDA-SN-8678-1

[17] Rakhmanov, O., Demir, A., & Dane, S. (2020). A brief communication: Anxiety and depression levels in the staff of a Nigerian private university during COVID 19 pandemic outbreak. J Res Med Dent Sci., 8, 118-122.

[18] Tandon, R. (2020). COVID-19 and Mental Health: Preserving Humanity, Maintaining Sanity, and Promoting Health. Asian J. Psychiatry, 51, 102256. doi:10.1016/j.ajp.2020.102256

[19] Xiang, Y. T., Yu, X., Ungvari, G. S., Correll, C. U., & Chiu, H. F. (2014). Outcomes of SARS Survivors in China: Not Only Physical and Psychiatric Co-morbidities. East. Asian Arch. Psychiatry, 24(1), 37–38.

[20] Xiang, Y., Yang, Y., Li, W., Zhang, L., Zhang, Q., Cheung, T., & Ng, C. H. (2020). Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. The Lancet Psychiatry, 7(3), 228–229. https://doi.org/10.1016/s2215-0366(20)30046-8

[21] Zhang, Y., Chen, Y. P., Wang, J., Deng, Y., Peng, D., & Zhao, L. (2020) Anxiety Status and Influencing Factors of Rural Residents in Hunan During the Coronavirus Disease 2019 Epidemic: A Web-Based Cross-Sectional Survey. Front. Psychiatry 11, 564745. doi: 10.3389/fpsyt.2020.564745

[22] Zhou, S. J., Zhang, L. G., Wang, L. L., Guo, Z. C., Wang, J. Q., Chen, J. C., et al. (2020). Prevalence and socio-demographic correlates of psychological health problems in Chinese adolescents during the outbreak of COVID-19. Eur Child Adolesc Psychiatry, 29, 749–758. doi: 10.1007/s00787-020-01541-4.