IMPACT OF COVID-19 RESTRICTIVE MEASURES ON THE MENTAL HEALTH OF IN-SCHOOL ADOLESCENTS IN OHAJI/EGBEMA/OGUTA LOCAL GOVERNMENT AREA OF IMO STATE

CHARLES N. UGWUEGBULAM, Ph.D[1], NAHEED IBRAHIM, Ph.D[2], VERA NWADINOBI, Ph.D[3], CHIOMA P. UNEZEH, Ph.D[4]

1 & 4, Faculty of Education, Dept. of Educational psychology/Counselling; Alvan Ikoku Federal University of Education, Owerri, Imo State
2 Dept. of Science Education, Kano State University of Education, Wudi, Kano State, Nigeria.
3 Faculty of Education, Dept. of Counsellor Education, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

Abstract
The study investigated the impact of Covid-19 restrictive measures on the mental health of in-school adolescents in Ohaji/Egbema/Oguta Local Government Area of Imo State. A descriptive survey research design was adopted. Four research questions guided the study. A sample of 186 in-school adolescents in Ohaji/Egbema/Oguta Local Government Area of Imo State participated in the study. The study utilized a validated 18 items researchers' developed questionnaire structured on 4 point likert scale mean rating scores were used to analyze the data. Findings of the study indicated that Covid-19 restrictive measures affected in-school adolescents interactions with their peers, their daily routines and face to face contacts with their friends. These restrictive measures negatively affected their mental health. Therefore, the paper urges more efforts to promote adolescents mental health on emergence situations such as Covid-19.
Keywords: Covid-19, Lockdown, Facemask, Mental Health, in-school adolescents, Isolation, Social distancing, Physical Distancing.

Introduction
The Covid-19 pandemic is one of the recent pandemics that has impacted our lifestyle. Covid-19 is in the family of severe acute respiratory syndrome (WHO 2020). Covid-19 is not just a medical or health crisis but a general pandemic that has dramatically and systematically resulted in massive upheaval in the economic, social and emotional lives of the populace. As described by Nigeria Centre for Disease Control (NCDC) (2020), typical signs and symptoms of Covid-19 include fever, dry cough, shortness of breath, headache and soar throat, etc.

Aboyomi, Olusolo & Rotimi (2020) noted that rapid human to human transmission of covid-19 resulted in the enforcement of certain restrictive measures such as lockdown, isolation, physical/social distancing, closure of educational institutions and work places, entertainment centres which confined people to stay in their homes to check the spike of transmission (NCDC 2020).

For the purpose of this work emphasis will be focused on the impact of lockdown and closure of educational institutions on the mental health of adolescents. There are more than 2.2 billion school-age adolescents in the world that constitute approximately 28% of the world population (UNICEF: 2019). Those aged between 10, to 19 years make up 16% of the world population (UNICEF: 2019). In Nigeria, the population is estimated to be 191, 835, 936 with 22.3% adolescents.

Adolescence is a unique and formative time of multiple physical, emotional and social changes, including exposure to poverty, abuse or violence which can make adolescents vulnerable to mental health problems. Promoting psychological wellbeing and protecting adults from adverse experiences and risk factors that may impact their potentials to strive are crucial for the their wellbeing during adolescence and for their physical and mental health in adulthood. The consequences of not addressing adolescents mental

health conditions extends to adulthood, impairing both physical and mental health and limiting opportunities to live fulfilling lives as adults.

Mental health refers to cognitive, behavioural and emotional wellbeing. It is all about how people think, feel and behave. Mental health can affect daily living, relationships and physical health. Brownridge (2020) citing the American Psychological Association states that mental health is a state of mind characterized by emotional wellness, good behavioural adjustment and relative freedom from anxiety and disabling symptoms. It also includes the ability to deal with life's demands and maintaining productive relationship ties. Adolescence is a crucial period for developing and maintaining social/emotional habits important for mental wellbeing. These include: adopting healthy sleep patterns, taking regular exercise, developing coping strategies, problem solving and interpersonal skills and learning to manage emotions. Supportive environment in the family, at school and in the wider communities are also important. Covid-19 has impacted the lives of these adolescents in an unpredictable manner. Throughout the world an essential method, of preventing Covid-19 infections according to World Health Organization (2020) has been the introduction of preventive measures such as national lock downs, physical distancing, use of facemask, isolation among others. (Shen, 2020). As of March 2020, countries all over the world including Nigeria implemented these national restrictive measures, one of the principal measures taken during this lockdown was closure of educational institutions, thereby making teaching and learning moved from the traditional face to face interaction to online teaching (NCDC, 2020).

Various studies such as Adeleke (2020), Stien (2020), Claster and Lamnosis (2020) and Shen (2020) observed that the extent of impact of Covid-19; national lockdown and closure of educational institutions on in-school adolescents depends on many vulnerability factors such as developmental age. These intolerable circumstances which are beyond human experiences in collaboration with lockdown undoubtedly brought about a sense of fear, anxiety, misinformation, disturbed sleep, uncertainty and a feeling of unhappiness which has imparted the globe in an unpredictable manner with long and short term mental wellness issues on the adolescents (Shen, 2020). Though adolescents may appear to be less at risk of severe Covid-19 symptoms, but the pandemic may have to a great extent impacted on their psychological and mental wellbeing. Billow (2020), and Zandefer (2020) opined that closure of schools, staying at home with parents, not associating with friends among others will have long lasting negative impact and a set back on their autonomy, development and emerging adulthood.

Accordingly, Otuya (2020) highlighted that going to school is the best public tool available to develop skills and potentials in adolescents. The nationwide closure of schools and lockdown have resulted in home confinement of adolescents which is associated with anxiety, depression, parental conflict, among others. The school provides structure and routine to the in-school adolescents' lifestyle. Going through the routine of waking up, morning activities, going to classes, assembly periods, break time, co-curricular activities, and coming back home at a certain time provide a sense of socialization, belongingness, connectedness, association and normalcy in the adolescents life. The above are associated with long lasting mental health impact.

Statement of the Problem

Covid-19 is one of the recent pandemics that had impacted our life styles. It had resulted in the introduction of certain restrictive measures such as national lock down, use of face mask among others, NCDC (2020) highlighted that the introduction of these restrictive measures is to prevent the physical and social effects of Covid-19. The effects of these restrictive measures on the mental health of the general public especially in-school adolescents seem not considered. The in-school adolescents are paramount here because of educational institutions' lockdown and their stressful developmental stage. The problem of this study put in question form therefore is: what are the impacts of Covid-19 restrictive measures on in-school adolescents mental health?

Objectives of the Study

The main objective of the study is to ascertain the impact of Covid-19 on in-school adolescents' mental health. Specifically, the objectives are to:

1. ascertain the impact of school closure on adolescents' interaction with friends
2. ascertain the impact of lockdown on adolescents' daily routine
3. ascertain the impact of physical distancing on adolescents' connectedness
4. ascertain the impact of school closure on adolescents mental health development.

Research Questions

Four research questions guided the study, thus:
1. To what extent did Covid-19 impact on in-school adolescents' interaction with their peers?
2. To what extent did Covid-19 affect in-school adolescents' daily routine?
3. To what extent did the Covid-19 restrictions affect in-school adolescents' connectedness with friends and peers?
4. To what extent did Covid-19 restrictions affect in-school adolescents' mental health and development?

Research Methodology

The study adopted descriptive survey research design to investigate the impact of Covid-19 restrictions on in-school adolescents' mental health development. The population for the study was the SS 3 students in the secondary schools in Ohaji/Egbema/Oguta L.G.A totaling 1,860 (Secondary Education Management Board, Owerri, 2021). A simple random sampling with no replacement technique was used to select a sample of one hundred and eighty six (186) students which is 10% of the population. Instrument for data collection was an eighteen-item questionnaire tagged "Covid-19 Restrictive Measures on Mental Health Questionnaire" (C19RMMHQ). The questionnaire consisted of two sections, section A which requested for background information of the respondents while section B dealt with questionnaire items in relation to the respective research questions. The respondents were to indicate their level of agreement to the items by ticking against any of the responses of Very High Extent (VHE) - 4 points, High Extent (HE) - 3 points, Low Extent (LE) - 2 points and Very Low Extent (VLE)- 1 point developed by the researchers. This gave a total of 10 points, statistically shown below:

$$\frac{4 + 3 + 2 + 1}{4} = \frac{10}{4} = 2.5$$

The criteria mean score of 2.5 was set for decisions, this means that mean score of 2.5 and above indicates acceptance while mean score below 2.5 indicates rejection. The instrument was subjected to face and content validation by three experts in guidance and counselling and measurement and evaluation. The resulting data was analyzed using mean score.

Results

Table 1: Showing the number of male and female secondary school students in Ohaji Egbema.

S/N	Names of Schools	Male	Female	Total	Sample	
1	Mmahu Secondary School, Egbema	205	265	470	10%	47
2	Ohuba Comprehensive Secondary School, Ohaji	163	172	335	10%	33
3	Umuapu Secondary School, Ohaji	192	228	420	10%	42
4	Egbema Secondary School	163	155	318	10%	32
5	Obosima Secondary Technical School	127	190	317	10%	32
	Total			**1,860**		**186**

Source: *Secondary Education Management Board (SEMB) Owerri Zone (2021)*

Research Question 1: To what extent did Covid-19 restrictive measures affect the in-school adolescent interaction with their peers?

Table 2: Mean rating on the extent Covid-19 restrictions affect in-school adolescents' interaction with their peers.

S/N	Questionnaire Items	4 VHE	3 HE	2 LE	1 VLE	Total	Mean Score	Decision
1	Limited my association with friends	78	51	36	21	186		
		312	153	72	21	558	3.0	Accepted
2	Got stucked with parents at home	59	81	42	4	186		
		239	243	84	4	567	3.0	Accepted
3	Cut off from my peers	62	69	33	22	186		
		248	207	66	22	543	2.9	Accepted
4	Thought the world had come to an end	55	73	44	14	186		
		220	219	88	14	541	2.9	Accepted
	Total Means						**11.8**	
	Mean of Means						**2.95**	

Table two above shows data in response of research question one which sought to ascertain the extent to which Covid-19 restrictions affected in-school, adolescents' interactions with their peers. The table indicated a mean of average mean of 2.95 which is greater than the criteria mean of 2.50 and falls within the scale range of high extent signifying that Covid-19 to a high extent affected in-school adolescents' interactions with their peers.

Research Question Two: To what extent did Covid-19 restrictions affect in-school adolescents' daily routine?

Table 3: Mean rating on the extent Covid-19 restriction affect adolescents daily routine

S/N	Questionnaire Items	4 VHE	3 HE	2 LE	1 VLE	Total	Mean Score	Decision
5	Could not go to school	50	49	38	19	186		
		320	147	76	19	562	3.0	Accepted
6	Could not attend my usual social activities	79	50	37	20	186		
		316	150	74	20	560	3.0	Accepted
7	Life become empty and lost meaning	50	46	45	45	186		
		200	138	90	45	473	2.5	Accepted
8	Got tired of staying at home	85	60	30	11	186		
		340	180	60	11	591	3.1	Accepted
	Total Mean						**11.6**	
	Mean of Means						**2.9**	

Table three shows the extent of restrictions on in-school adolescents' daily routine.

Analysis in the table above shows that mean rating on the extent of Covid-19 restrictions on in-school adolescents' daily routine during Covid-19. It shows a criteria mean of 2.9 which indicates that the daily routine of these in-school adolescents such as not going to school, church and staying at home were affected by the Covid-19 restrictions.

Research Question Three: To what extent did Covid-19 restrictions affect in-school adolescents' connectedness with friends?

Table 3: Mean rating on the extent Covid-19 affects physical and face to face contact with friends.

S/N	Questionnaire Items	4 VHE	3 HE	2 LE	1 VLE	Total	Mean Score	Decision
9	There was no moments to share information	62 248	56 168	32 64	36 36	186 516	2.7	Accepted
10	There was no moment to share jokes, laugh and feel happy	66 264	56 177	38 76	23 23	186 540	2.9	Accepted
11	Little or nothing was happening around the world worth discussing	58 232	67 201	29 58	32 32	186 523	2.8	Accepted
12	Lost contact with some close friends who had no mobile network, airtime etc to communicate	63 252	60 180	32 64	31 31	186 527	2.8	Accepted
	Total Mean						11.2	
	Mean of Means						2.8	

Table four above shows analysis of data obtained in favour of research question 3 which sought to ascertain the extent to which Covid-19 restriction rules negatively affected in-school adolescents' connectedness with friends. The table shows an average mean of 2.8, the average mean is greater than the criteria mean of 2.5 and falls within the scale range of high extent meaning that Covid-19 restrictions negatively affected in-school adolescents' connectedness with friends to a high extent.

Research Question 4: To what extent did Covid-19 restrictions affect in-school adolescents' mental health and development?

Table 5: Mean rating on the extent Covid-19 affected mental health and development of in-school adolescents.

S/N	Questionnaire Items	4 VHE	3 HE	2 LE	1 VLE	Total	Mean Score	Decision
13	I was afraid that everyday could die	79 316	48 144	40 80	19 19	186 559	3.0	Accepted
14	I felt depressed staying at home and doing nothing	80 320	50 150	30 60	26 26	186 556	2.99	Accepted
15	I was afraid that every member of my family could contact the disease	80 320	60 180	40 80	6 6	186 586	3.4	Accepted
16	Always having conflict with my parents and siblings	55 220	65 195	35 70	31 31	186 516	3.0	Accepted
	Total Mean						12.39	
	Mean of Means						3.09	

Table five above shows analysis of data in favour of research question 4 which sought to ascertain the extent to which Covid-19 restrictions affected in-school adolescents' mental health and development. The table shows grand mean of 3.09. The average mean is greater than the criteria mean of 2.5, and falls within the scale range of high extent, meaning that Covid-19 restrictions affected in-school adolescents' mental health and development to a high extent.

Discussion of Findings
The study investigated impact of Covid-19 restrictions on the mental health of in-school adolescents in state government owned secondary schools in Ohaji/ Egbema/Oguta local government area of Imo state. Four research questions guided the study. The result presented in table 2 for research question 1 showed that in the first research question, items listed showed that Covid-19 restrictions affected the in-school

adolescents interaction with their peers. This is evident in the items 1, 2, 3 and 4 with mean scores of 3.0, 3.0, 2.9 and 2.9, respectively that are all above criterion mean of 2.5 which affirms that Covid-19 restrictive measures affected peer interactions among in-school adolescents. This result collaborates with the findings of Shen (2020) and Adeleke (2020) which affirms that closure of educational institutions restricted peer interactions, association and assimilation.

Research question 2 is on the extent of Covid-19 restrictions on daily routine. The result in table 3 reveals that respondents were denied access to the daily routine of adolescents because of Covid-19. This is revealed through their responses to items 5,6,7, 8 and mean of mean of 2.9 respectively which affirms that their waking up in the morning, going to school, attending morning assembly were all restricted as a result of not going to school. This collaborates with the study of Cao, Fang & Hou (2020) which stated that visitation and normal lifestyles were restricted during Covid-19 and as such there's increase in symptoms of anxiety, depression or post traumatic stress.

On research question 3 which investigated physical/face to face connectedness with in-school adolescents' friends in secondary schools in Ohaji/Egbema/Oguta L.G.A, the result in table 4 shows low level of connectedness. This is revealed by the responses to items 9,10,11 and12 that have mean scores of 2.7, 2.9, 2.8, & 2.8 respectively and a mean of mean of 2.8 which are above the criterion mean of 2.5. This implies that as a result of Covid-19 restrictions adolescents were deprived of face to face interaction with their friends. This agrees with the study of Abayomi, Olusolo & Rotimi (2020) which stated that people were forced to stay at home to check the spike of the transmission without consideration on the impact of such restrictions on their mental health.

Research question 4 which investigated the extent Covid-19 restrictions affected in-school adolescents' mental health and development. The result in table 5 slows that Covid-19 restrictions affected adolescents' mental health and their development. This is revealed by the responses in items 13, 14, 15 and 16 with mean scores of 3.0, 2.99, 3.4 and mean of mean of 3.09. The mean of mean is in the area of high extent in relation to the research question.

According to WHO (2020) adolescents with mental health conditions are particularly vulnerable to illnesses extending to adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives as adults.

Recommendations

Based on the findings, the following recommendations where made;
i. There is need for conscious efforts to promote the adolescent's mental health under such emergence situations as the Covid-19.
ii. There is also need to come up with evidence based intervention strategies aimed to strengthen the adolescents' capacity to regulate emotions, enhance alternatives to risk-taking behaviour, build resilience for difficult situations and adversities and promote supportive social environment and social networks. The time to do it is now through early direction and treatment.
iii. It is crucial to address the needs of adolescents with defined mental health conditions arising or exacerbated by the Covid-19 restrictive measures and associated problems.
iv. It is recommended that institutionalization and over medicalization be avoided in favour of non-pharmacological approaches such as psychological interventions.

Conclusion

The results of this study showed that the use of certain restrictive measures to curtail the spread of Covid-19 failed to consider the impact of those restrictive measures on the mental health of the individual's especially the in-school adolescents because of their developmental stage. Some of the issues pointed out here revealed the impact of Covid-19 restrictive measures on adolescents' mental health and subsequent healthy adulthood. These measures exposed adolescents with experiences of high level of emotional disorders such as anxiety, depression, excessive irritability, frustration, anger and emotional outburst among others.

References

Abayomi, O. O., Olusolo, S. A., Rotimi, O. (2020). Psychological distress experiences of Nigeria during Covid-19 pandemic, the gender difference.

Adeleke, I. S. (2020). Corona virus and Nigerian education system: Impacts, management, responses and way forward. Doi 10.31058 l)ed.2020 34029.

Brownridge, K. (2020). Seven Tips on how to improve mental health, betterhelp.com. 27th August, 2020.

Cao, W. Fany, Z. Hou, G. (2020). The psychological impact of the Covid-19 epidemic on college students in China Psychiatry Res 287.

Gloster, A. T. & Lamnsos, D. (2020). Impact of Covid-19 pandemic on mental health. An international study. Plos OnlE 15(12) ed 244809 doi:10:1371/journal pone 0244802.

National Center for Disease Control (NCDC, 2020). An update of Covid-19 in Nigeria.

Otuya, S. (2020) corona virus pandemic and survival of SMES in Nigeria. *The Nigeria account journal of the institute of charted accountant of Nigeria, 51-14- 19.*

Shen, M. (2020). Covid-19 and the environment: A critical review & research agenda science total environ doi: 01(1016) j scitoteny 14102/pmc tree article/pub med/ (Gross Ref).

UNICEF (2019)

WHO (2020). Warning on lockdown, mental health. E.U. observer (2020) httpps://euobserver.com/coronavirus/l 4/7903 accessed

World Health Organization (2020). Adolescents Mental Health, www.who.int 28th September, 2020.

Zandener, A. R. (2020). Iranian mental health during the Covid-19 epidemic. *Asian Journal psychiar, 51* 101990.