
**AREA OF SPECIALIZATION AND EXPERIENCE AS
PREDICTORS OF TEACHERS' ATTITUDE TOWARDS
COVID-19 PREVENTIVE MEASURES
IN SECONDARY SCHOOLS INSOUTH-SOUTH, NIGERIA**

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Abstract

This paper investigated secondary school teachers' attitude towards COVID-19 preventive measures in two South-South states, Nigeria. The study adopted the correlational survey research design. The population of this study comprised all the 1,457 and 708 teachers in all the 35 and 15 public secondary schools in Yenagoa and Port Harcourt Local Government Areas of Bayelsa and Rivers States in South-South, Nigeria respectively. The sample of this study comprises of all the 290 teachers in the selected 18 and 8 public secondary schools in Yenagoa and Port Harcourt. Multi stage sampling technique was utilized for the study. Two research questions were raised, one answered and the other was hypothesized and tested. The Teachers' Attitude towards COVID-19 Preventive Measures Questionnaire (TACPMQ) instrument comprising of 10-items was used to collect data for the study. The instrument was validated by experts in the Department of Curriculum and Instructional Technology,

Faculty of Education, University of Benin. The TACPMQ instrument was trial tested on 20 teachers outside the sample area. Split half reliability technique was used and the Cronbach Alpha statistic was deployed to obtain a reliability co-efficient of 0.789. The data collected were analyzed using mean and multiple regression at 0.05 level of significance. It was found among others that teachers have positive attitude towards COVID-19 preventive measures/protocols in South-South, Nigeria. It was recommended among others that teachers should be encouraged to continue to observe COVID-19 preventive measures/protocols in secondary schools to prevent further spread of the virus.

Keywords: Area of Specialization, Experience, Attitude, COVID 19 Preventive Measures

Introduction

Today, both developed and developing nations of the world are gradually coming to term with the novel coronavirus popularly known as COVID-19 pandemic. Since its outbreak in November 2019, it has become a concept of interest to individual households, families, nations and up to the continental levels. This is as a result of its devastating nature in terms of spread, mortality and cost of treatment. The devastating nature of COVID-19 was manifested in the eventual shut down of all sectors of the economies of more than 150 countries ranging from closures of schools, markets, transportation, hotels, religious institutions and gatherings, banks and other public places. The schools as institutions of learning in Nigeria and beyond were not left out, as primary, secondary and tertiary institutions of learning were closed for over eight months in 2020. To mitigate the effect and spread of COVID-19, the Federal Government of Nigeria came up with certain preventive measures that include social distancing between individuals, compulsory wearing of nose masks in public places, out-right ban on churches, mosques and other social gatherings, ban on inter and intra-state movement/travels,

temporary closure of businesses, constant washing of hands and other hygienic practices among others (Nnebedum, Obuegbe & Nwafor, 2021). In spite of the numerous efforts by the Federal and State governments to reduce the spread of COVID-19 in Nigeria, the virus has continued to spread to the nook and crannies, especially at the secondary school level.

COVID-19 is a code name for the Coronavirus disease that plagued the world in 2019 and is caused by the novel severe acute respiratory syndrome coronavirus-2 (SARS-COV-2) (Wiersinga, Rhodes, Cheng, Peacock & Prescottte, 2020). According to Guo et al (2020), the name coronavirus disease 2019 (COVID-19) was given by the World Health Organization (WHO) while the Coronavirus Study Group (CSG) of the International Committee proposed to name the new coronavirus as SARS-COV-2, with both institutions issuing statements to that effect on the 11th day of February, 2020. As a pandemic on global scale, COVID-19 is distinct from other diseases that have existed in the past, and is also different from other types or forms of corona viruses and is spreading to nations of the world like wild fire (Akporehe & Asiyai, 2010). COVID-19 is a contagious disease of global health importance that forbids and discourages close physical contacts as it is one of the modes of transmission of the virus from infected persons to healthy segments of the population (Amzat et al, 2020). To Wiersinga et al (2020), coronaviruses are large, enclosed, single-stranded ribonucleic acid (RNA) viruses that are found in humans and other mammals such as monkeys, dogs, cats, chickens, cattle, pigs, and birds that have the ability to cause respiratory gastrointestinal and neurological diseases in them.

According to Akporehe and Asiyai (2020), the novel Corona Virus Disease (COVID-19) is a global pandemic whose outbreak has brought about trouble to the world to the extent of near helplessness. COVID-19 patients are clinically presented with symptoms such as cough, joint pain, congestion, fever, and chills (Jansen et al, 2020). While adding their voices to the discussion on the symptoms of COVID-19, Osikomaiya et al (2021) opine that if symptomatic, patients may present with fever, dry cough,

anosmia, fatigue as common symptoms amongst others, while most infected people develop mild to moderate illnesses and may also recover without requiring hospitalization, others become sick enough to be hospitalized. Others are sore throat, dyspnea, diarrhea, aches, nausea, vomiting, congestion, chills, conjunctivitis, head ache, skin rashes or discoloration, abdominal pains, respiratory tract infection, vomiting, fatigue, myalgia, loss of taste/smell, and so on (Anyanwu, Festus, Nwobi, Jaja & Oguttu, 2020).

In addition, the Nigeria Centre for Disease Control (NCDC, 2020) opined shortness of breath or difficulty in breathing and stated that infected persons that are old, have weak immune systems as a result of long-term conditions such as cancer, diabetes, lung diseases are likely to experience more severer symptoms. The COVID-19 virus also varies from those that will not show symptoms (asymptomatic) to those that will show severe symptoms, which implies that not every infected person will show symptoms, and a severe acute respiratory infection is not likely to be associated with every infected patient (Mbagwu, Olajugba, James-Okoro & Obidike, 2021). This situation in the words of Wiersinga et al (2020) means that infected persons may or may not present clinically with symptoms such as mild symptoms of upper respiratory tract infection and life-threatening sepsis. The COVID-19 disease can be easily transmitted through mediums like hand shake, sneezing leading to emission of droplets from nose and mouth of an infected patient, and infected surfaces like door handles, car handles, keys, hand rails and so on (Akporehe & Asiyai, 2020).

Persons infected with COVID-19 disease transmission progresses through three stages which according to the World Health Organization (WHO, 2020) are the symptomatic, pre-symptomatic and asymptomatic transmissions. A symptomatic transmission refers to cases that have developed signs and symptoms compatible with COVID-19 virus infection that is transferred from an infected person with symptoms or symptomatic people to others as a result of one-on-one contact through respiratory droplets, direct contact with infected persons

or by contact with contaminated objects and surfaces. The pre-symptomatic stage refers to the incubation period of the virus (i.e becoming infected) and an average period of 5 – 6 days which is the onset of manifestation of symptoms. Transmission of COVID-19 virus can take place before the infected person begins to manifest symptoms and even test positive. Transmission can still take place through droplets from carriers or contact with contaminated objects and surfaces. The asymptomatic stage has to do with a person who is infected with the COVID-19 virus but do not manifest symptoms.

The attitude of teachers in secondary schools and beyond towards COVID-19 goes a long way to determine the spread and containment of the virus. In the words of Umo and Offong (2014), attitude is associated with behavior through a set of beliefs, values and expectances. It has intuitive appeal as explanation for behavior. To Hussaini, Foong and Kamar (2015), attitude could be moving towards, away or neutral position maintained in favor or against a situation, place, object or person. They further added that any concept that specifies an individual's feeling of like or dislike to anything is considered his/her attitude towards that item. While thinking in this direction, Alafiatayo, Anyanwu and Salau (2016), sees attitude as an evaluative response to an object where people display acts of love and hate, accept and reject, agreeing and disagreeing. It is a central part of human identity because everyday people love, hate, like, dislike, favour, oppose, agree, disagree, argue and persuade one another (Opara, Magnus-Arewa & Nwaukwu, 2017). It is an individual's inclination towards an object, institution or idea that could be developed and gotten from members of a family, teachers or friends (Gbore & Daramole, 2013).

Attitude has three basic components known as the cognitive, affective and behavioural. The cognitive component refers to the mental process of perception, conceptions and beliefs about attitudinal objects (Garcia-Santillan, Moreno-Garcia, Carlos-Castro, Zamudio-Abdala & Garduno-Trejo, 2012). The affective components entail an individual's feelings and emotions towards

an individual, object or place. While the behavioural component deal with past events and experiences of the individual (Opara et al, 2017). It has to do with the information available to the individual based on his or her past events and life experiences that affect his present behavior towards an individual, idea, place, object, and situation. An attitude therefore, refers to an individual's disposition or behavior that can be measured in terms of his like, dislike, positive or negative reaction towards or away from something, a situation, idea, person or place.

Although, COVID-19 has been considered a virus of public emergency by countries of the world that have come up with various modalities to contain its further spread to public places, the virus has continued to spread to the nook and crannies of Nigeria over the years. In fact, as at 24th April, 2022 the Nigeria Television Authority in its ten O'clock network news bar reported that Nigeria have experienced 255,685 total confirmed cases, 249,890 discharged cases and 3,143 death cases and still counting since the index case was reported in Lagos, Nigeria. Several factors such as teachers' perception and attitude towards COVID-19, years of experience, students' nonchalant attitude, government lack of commitment, refusal to obey COVID-19 protocols by teachers and students, poor infrastructure, and so on could be responsible for this situation

Several studies have been carried out to ascertain the relationship between attitude, COVID-19 and other variables in Nigeria and beyond. For instance, Afolabi (2009) found a significant association between the attitude of teachers and the academic performance of students, and also that pupils taught by male and female teachers differ significantly in their performance respectively. Also, Memon et al (2015), found a positive attitude being demonstrated towards diabetes and complications arising from treatment procedures. In a similar study, Filgona and Sakiyo (2020) found that students' attitude to Geography was not significantly predicted by the academic qualification of the teachers that taught them. It was also found that the achievement of students in Geography was significantly predicted by the

academic qualification of the teachers that taught them. In another study, Gbore and Daramola (2013) also concluded that a moderate and positive significant relationship exists between teachers' variables (teachers' attitude and qualification) and students' grades in Biology. It was also concluded that teachers' workload and teachers' experiences exhibited low significant relationship with students' grades in Biology. However, none of the above studies highlighted have been carried out in Yenagoa and Port Harcourt in a single study. Also, none of these studies have considered teachers' variables of specialization and experience along with their attitude in a single relationship study. It is on this note, that this study investigated teachers' specialization and experience as predictors of their attitude towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria.

Objectives of the Study

The purpose of this study is to determine teachers' area of specialization and experience as predictors of their attitude towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria. Specifically, this study is to:

- i. ascertain teachers' attitude towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria.
- ii. investigate how well teachers' subject area of specialization and years of experience predict their attitude towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria.

Research Questions

- i. What is the attitude of teachers towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria?
- ii. Do teachers' subject area of specialization and years of experience predict their attitude towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria?

Hypothesis

H₀1: Teachers' subject area of specialization and years of experience do not significantly predict their attitude towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria.

Methods

This study utilized the correlational survey research design. The population of this study is made up of all 2,165 teachers comprising 1,457 and 708 teachers in all the 35 and 16 public secondary schools in Yenagoa and Port Harcourt Local Government Areas of Bayelsa and Rivers States respectively in South-South, Nigeria. The multi stage sampling procedure was utilized in this study. First, the purposive sampling technique was used to select Bayelsa and Rivers States and their capital cities. Second, the proportionate stratified sampling technique was further used to sample fifty percent of the total number of secondary schools in each of the capitals of the sampled states. Third, all the available and willing teachers in the sampled secondary schools were randomly sampled for the study making the sample size a total of 290 teachers. Teachers' Attitude towards COVID-19 Preventive Measures Questionnaire (TACPMQ) comprising of 10 items was developed and utilized for data collection in this study. The instrument was validated by experts in the Department of Curriculum and Instructional Technology, Faculty of Education, University of Benin, Edo State and a reliability was ascertained using the split half reliability technique and the Cronbach Alpha statistic was used to obtain a reliability coefficient index of 0.789 before it was put to use.

Results

Research Question One: What is the attitude of teachers towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria?

Table 1: Mean Scores of Teachers Attitude Towards COVID-19 Preventive Measures/Protocols in Secondary Schools in South-South (Bayelsa and Rivers States), Nigeria

S/No	Items	Bayelsa (N = 135)		Rivers (N = 155)	
		(\bar{X})	Decision	(\bar{X})	Decision
1.	I do not like the idea of compulsory wearing of face mask in public places	2.41	Disagree	2.33	Disagree
2.	I have taken my two doses of COVID-19 vaccination	2.06	Disagree	2.44	Disagree
3.	I like to wash my hands each time I return from public places to avoid contacting COVID-19 virus	3.11	Agree	2.95	Agree
4.	I always maintain social distancing in public places as a preventive measure to the spread of COVID-19 virus	2.71	Agree	2.84	Agree
5.	I use alcohol based hand sanitizer on daily basis to make sure I do not contact the COVID-19 virus	2.61	Agree	2.28	Disagree
6.	I make sure I wear my face mask before attending crowded burial ceremonies	2.54	Agree	2.86	Agree
7.	I wash my hands whenever I come to school in the morning before going to my office	2.68	Agree	2.97	Agree
8.	I like to maintain a distance of at least two feet whenever I go to church	2.36	Disagree	2.85	Agree
9.	I only use my face mask when I go to the bank where there is enforcement of compulsory wearing of face mask	2.98	Agree	3.04	Agree
10.	I do not like to have physical contact with people I do not know to avoid contacting COVID-19 virus	2.35	Disagree	2.28	Disagree
Grand Mean		2.58		2.68	

The results in Table 1 show the mean scores of teachers' attitude towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria. The data shows that in Bayelsa State, the participants are in agreement with items 3, 4, 5, 6, 7 and 9 with mean scores above the criterion mean score of 2.50 which indicate a demonstration of a positive attitude by the teachers. While items 1, 2, 8 and 10 got mean scores below the criterion mean which means negative attitude towards COVID-19. The grand mean of 2.58 is a further indication that the participants accepted majority of the items which is positive attitude towards COVID-19 in Bayelsa State. For Rivers State, the results indicate that the participants agreed with items 3, 4, 6, 7, 8 and 9 with mean scores above the criterion mean of 2.50 which is an indication of positive attitude towards COVID-19 while they disagreed with items 1, 2, 5 and 10 with mean scores less than the criterion mean which is an indication of negative attitude towards

COVID-19 by the participants. The grand mean of 2.68 is greater than the criterion mean and as such indicates a positive attitude towards COVID-19 by the participants in Rivers State.

H₀1: Teachers' subject area of specialization and years of experience do not significantly predict their attitude towards COVID-19 preventive measures/protocols in secondary schools in South-South, Nigeria.

Table 2: Model Summary Analysis of How Teachers Subject Area of Specialization and Years of Experience Predict Their Attitude Towards COVID-19 Preventive Measures/Protocols in South-South, Nigeria

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			
						F Change	df1	df2	Sig. F Change
1	.013 ^a	.000	-.007	3.776	.000	.023	2	287	.977

a. Predictors: (Constant), Years of Experience, Teaching Subject Area

Table 2 shows that the model (teachers' subject area of specialization and years of experience) do not significantly predict their attitude towards COVID-19 preventive measures/protocols as seen in $R = .013$. While the coefficient of determination (R^2) shows that there is no proportion of variance of attitude that is explained by the predictors as shown in .000% (0.000×100). The table also shows that 100% ($100 - .000\%$) of the variation is explained by factors other than the predictors included in the model.

Table 3: Analysis of Variance (ANOVA) of How Teachers Years of Experience and Teaching Subject Area Predict Their Attitude Towards COVID-19 Preventive Measures/Protocols in South-South, Nigeria

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.649	2	.325	.023	.977 ^b
Residual	4091.847	287	14.257		
Total	4092.497	289			

a. Dependent Variable: Attitude

b. Predictors: (Constant), Years of Experience, Teaching Subject Area

The results in Table 3 indicated that the model (teachers' years of experience and teaching subject area) does not significantly predict teachers attitude as shown in $F_{(2, 287)} = .023$, $p (.977) > .05$ which means that the regression model does not significantly predict teachers' attitude towards COVID-19 preventive measures/protocols.

Table 4: Test of Significance of the Predictors (Teaching Subject Area and Years of Experience) on Teachers' Attitude Towards COVID-19 Preventive Measures/Protocols in South-South, Nigeria

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	26.150	.781		33.504	.000
Teaching Subject Area	.009	.206	.003	.044	.965
Years of Experience	.044	.217	.012	.202	.840

Table 4 shows the independent contributions of each of teaching subject area and years of experience to teachers' attitude towards COVID-19 preventive measures/protocols. The t-values and corresponding sig values of the predictors and dependent variable

show that teaching subject area is $p (.965)$ and years of experience is $p (.840) > .05$. Both predictors do not significantly predict teachers' attitude towards COVID-19 preventive measures/protocols. This means that the explanatory or predictor variables (model) do not add substantially to the prediction of teachers' attitude towards COVID-19 preventive measures/protocols in South-South, Nigeria.

Discussions

The results indicated that teachers in both Bayelsa and Rivers States demonstrated positive attitude towards COVID-19 preventive measures/protocols. This finding is in alignment with that of Memon et al (2015) who concluded that health practitioners have a positive attitude towards diabetes and its complications. The result also revealed that the predictor variables of teachers' subject area and years of experience do not significantly predict their attitude towards COVID-19 preventive measures/protocols in Bayelsa and Rivers States. This finding also confirms the finding of Filgona and Sakiyo (2020) that teachers' academic qualification did not significantly predict students' attitude to Geography and that academic qualification significantly predicted students' achievement in Geography. It was also revealed that 100% of the variance is explained by factors outside of the predictors in this study. This was further buttressed in the result that revealed that the model does not significantly predict teachers' attitude towards COVID-19 preventive measures in South-South, Nigeria. This was furthermore explained in the result which revealed that each of the explanatory or predictor variables (model) does not add substantially to the prediction of teachers' attitude towards COVID-19 preventive measures/protocols in South-South, Nigeria. These findings contradict the finding of Afolabi (2009) that teachers' attitude and pupils' performance have a significant relationship. The findings also contradict that of Memon et al (2015) that found a positive attitude towards diabetes and complications arising from patients. This difference in findings could be attributable to other factors not considered and controlled for in this study.

Conclusion

This study has shown that teachers have demonstrated more of positive attitude towards COVID-19 preventive measures/protocols contrary to reviewed literature. The study has also proved that teaching subject area and teachers' years of experience do not significantly predict the attitude of teachers' towards COVID-19 preventive measures/protocols in South-South, Nigeria. Also revealed by the findings is the fact that there are a lot of other factors that could predict the attitude of teachers towards COVID-19 preventive measures/protocols but were not considered as part of the model of this study.

Recommendations

The following recommendations are made based on the findings of this study. First, is the fact that since teachers already have a positive attitude towards COVID-19 preventive measures/protocols in South-South, it will not be out of place to encourage them to continue to observe the government prescribed COVID-19 preventive measures/protocols to further prevent the spread of the virus in our schools. Secondly, this study has shown that there are a lot of other variables that can influence the attitude of teachers towards COVID-19 preventive measures/protocols, therefore, teachers, school administrators, supervisors and researchers should endeavour to pay attention to other variables that could affect their attitude not considered in this study.

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