



Significance of Radio and Television Learning Programmes on the Academic Achievement of Learners during COVID-19 Lockdown in Maiduguri, Borno State, Nigeria

Y. Shettima¹ A. W. Makinta² and S.M. Tomsu³

¹Department of Biological Sciences, University of Maiduguri, Borno State, Nigeria

²Department of Education, University of Maiduguri, Borno State, Nigeria

³Department of Continuing Education and Extension Services, University of Maiduguri, Borno State, Nigeria

ABSTRACT

This study examines the significance of Radio and Television learning programmes on the academic achievement of learners during the COVID-19 lockdown in Maiduguri, Borno State, Nigeria. There are three research questions and one null hypothesis formulated for the study. Using Krejcie and Morgan (1970) statistical table, a population of 217 respondents were drawn from a sample size 500 as the sample for the study. The research questions were answered using percentages and the null hypothesis was tested using Chi-Square (X^2) at 5% level of significance. The findings of research questions one show that, Radio and Television Learning programmes have significant impact on the academic achievement of learners ($X^2=16.43$; $P>0.05$). Similarly, analysis of research question two shows that, learners have interest in listening or viewing on the Radio and Television learning programmes ($X^2=23.41$; $P>0.05$). Furthermore, findings of research question three indicated that Radio and Television learning programmes were up to educational standard which are easily understood by the learners ($X^2=38.16$; $P>0.05$). In conclusion, Radio and Television learning programmes have impacted positively on the academic achievement of learners in nursery, primary and secondary schools. These educational learning programmes may help in mitigating idleness and non-study of learners during the COVID-19 lockdown in the country.

Keywords: Significance, Radio, Television, Learners, COVID-19

INTRODUCTION

The Novel Corona Virus (a.k.a. COVID-19) pandemic has caused unimaginable situations which led to closures of educational institutions, manufacturing industries, aviation industries as well as the government ministries and parastatals. The pandemic has disrupted academic activities and has affected about 1.6 billion children and youths globally (UNHCR, 2020). Governments all over the world, despite fighting the pandemic medically are propounding solutions for continual teaching and learning of students who stayed at home in the period of lockdown (Bailaila and Kvavadze, 2020). Lockdown during emergencies are known to have serious negative effects on the studies of pupils and students. Many students and pupils spend more time watching cable T.V programmes such as drama series, cartoons and movies than revising the notes books and this has impacted negatively on the academic achievement (Oyinyole and Adeleye, 2010).

The implementation of distance learning programmes which are aired on the television and radio networks as well as the internet through social networks and video conferencing as a strategy for continued education at all levels of education (Ullah *et al.*, 2014). In Nigeria, the ministry of education in

collaboration with radio and television stations have designed programmes for teaching pupils and students of nursery, primary and secondary levels which are broadcasted over the network (Shuaibu and Muhammad, 2018). These educational programmes are instructed by experienced tutors who deliver the lessons on media channels and broadcasted over the network that would reach wider audience across major cities, towns and villages across the country (Ocharo and Karani, 2015).

Radio interventions used for school education are used to teach core subjects such as English language, mathematics and civic education. This has led to the development of Interactive Radio Instruction (IRI) which has assisted with higher levels of academic achievement of children and youths (Ho and Thural, 2009). Several research studies have also shown that radio learning programmes can reach a wide area as well as hard-to-reach places and this has proved to produce positive results in developing countries (Isola, 2010).

In recent times, the interest in television as an educational medium has increased for several reasons which may include enhancing literacy development of children and adults (Centre for Children and Technology, 1996). Television learning programmes like Sesame Street and Dora the Explorer just to mention a few have been successful in teaching children how to read, calculate, identify objectives and colours (Elliot and Lashley, 2017).

Private sector involvement and with the support of Non-governmental organizations have diversified mass media technologies by using specialized equipment used for the production of television and radio programmes which can be watched and listened to as well as downloading the contents for further reviewing (Ullah *et al.*, 2014). Furthermore, interactive radio and television instructions are employed where lessons are done live on air and recorded which could be repeated at certain time within the day or other days (Elliot and Lashley, 2017). According to Nwabueze and Igboamauchey (2014) the broadcast media serves as important channel for improving the academic performance of senior secondary school students who are preparing for the final SSCE examinations.

Furthermore, the radio and television channels in Borno State have put in place learning programmes especially for SS3 students as a strategy in helping them to revise their subjects. This has proved to be useful to the students as it would assist them greatly to prepare for the SSCE examination. This will also distance them from contracting the disease as all educational institutions are closed by the government (UNHCR, 2020). In addition to that, the Nigeria Education Emergencies Working Group (EiEWG) with State Universal Basic Education Board (SUBEB) and other international partners are working together to curtail morbidity and mortality due to COVID-19 among pupils, students, teachers and stakeholders in the state and the North-Eastern States (EiEWG, 2020). The Borno State Universal Basic Education Board and Borno State Ministry of Education have design radio and television learning programmes for pupils and students. Yet the effectiveness of these education programmes cannot be assessed because fewer programmes are broadcasted on the local radio and television stations in the state and these lessons are produced live or recorded and aired at odd times which the learners find difficult to stick to the lesson time-table.

Despite all the intervention in the education sector to improve academic performance of children and youths, the impact of these television and radio learning programmes becomes difficult to be assessed. According to Kakamad and Fatah (2018) students who watch T.V programmes less than 3 hours a day perform better academically than those who spend over 3 hours watching television programmes in a day. Contrary to that Hoffreth (2010) opined that television can improve students' and pupils' academic achievement if properly supervised by the parents. However, television is a medium which serve as education resource center when children and adolescence informative programmes to them (Ul-Amin, 2013). The aim of the study is to determine the significance of radio and television learning programmes in promoting academic achievement of students during COVID-19 lockdown.

Objectives of the Study

The objectives of this research study are:

- i. to assess the impact of radio and television learning programmes on the learners' performance
- ii. to determine the preference of radio and television learners' performance

iii. to assess the quality of radio and television programmes on learners' performance

Research Questions

1. Do radio and television learning programmes influence the academic performance of learners?
2. Do learners show interest in radio and television learning programmes?
3. Do the quality of radio and television programmes meet up to education teaching standard?

Hypothesis

H₀ = Radio and television learning programmes have no impact on academic performance of students and pupils during COVID-19 lockdown

H₁ = Radio and television learning programmes have impact on academic performance of students and pupils during COVID-19 lockdown

RESEARCH METHODOLOGY

This study adopted the survey research design. The population of the study was drawn from teachers, facilitators, students, parents, civil servants, etc. The Study targeted five hundred (500) respondents out of which two hundred and seventeen (217) were selected using Krejcie and Morgan (1970) table for determining the sample size.

Data Collection

A well-structured questionnaire was used for data collection which consists of demographic information of the respondents and fifteen (15) items which were based on the research questions and were presented on a Likert-Scale.

Statistical analysis

That data generated were subjected to statistical analysis by computing percentages, mean and Standard deviation. Furthermore, Chi-square (χ^2) at 5% level of significance (P<0.05) was used to test the hypothesis.

RESULTS

Research Question 1: *Do radio and television programmes influence the academic performance of learners?*

Table 1: Responses on influence of radio and television programmes on the academic performance of learners

S/N	Item	SA	A	SD	D
1	Radio and T.V learning programmes are well structured and easily understood by the learners	98 (45.2%)	74 (31.4%)	31 (14.3%)	14 (6.4%)
2	Radio and T.V learning programmes engage learners to carry out their assignments	81 (37.3%)	90 (41.5%)	28 (12.9%)	18 (8.3%)
3	Learning programmes taught in English and local languages are better understood by learners	76 (35%)	92 (42.4%)	41 (18.9%)	8 (3.7%)
4	Radio and T.V programmes should be aired on live broadcast	106 (48.8%)	62 (28.6%)	29 (13.4%)	20 (9.2%)
5	Radio and T.V learning programmes should be broadcasted in the early hours before noon	117 (53.9%)	54 (24.9%)	36 (16.6%)	10 (4.6%)

Table 1 shows that a major part of the respondents 98 (45.2%) strongly agree that radio and T.V programmes are well-structured and easily understood by the learners. Similarly, 74 (31.4%) of the respondents also agree with the statement. However, 31 (14.3%) and 14 (6.4%) of the respondents disagree with the fact that radio and T.V learning programmes are well structured and understood by the learners. Furthermore, 81 (37.3%) of the respondents strongly agree that radio and TV programmes do engage student to do their assignments while 90 (41.5%) do affirmed that Radio and T.V learning programmes engage students are pupils to carry out their assignments. About 28 (12.9%) of the

respondents strongly disagree to the statement and while 18 (8.3%) also disagree that Radio and T.V learning programmes engage students are pupils to carry out their assignments. In addition to that, about 76 (35%) of the respondents have strongly agreed that learning programmes taught in English and local languages are better understood by learners and 90 (41.5%) of the respondents also agreed that learning programmes taught in English and local languages are better understood by learners. Contrary to that, 28 (12.9%) and 18 (8.3%) of the respondents disagreed that learning programmes taught in English and local languages are better understood by learners. About 106 (48.8%) strongly accede to the fact that Radio and T.V programmes should be aired on live broadcast while 62 (28.6%) also agree to statement. However, 29 (13.4%) and 20 (9.2%) strongly differ that learning programmes taught in English and local languages are better understood by learners. A major part of the respondents 117 (53.9%) strongly agree that, Radio and T.V learning programmes should be broadcasted in the morning hours likewise 54 (24.9%) also agree that these programmes should be broadcast in the morning. About 36 (16.6%) and 10 (4.6%) of the respondents have opposed the statement that radio and T.V programmes should be broadcasted in the morning hours before noon.

Table 2: Chi-square analysis on research questions one

Research questions	Df	$X^2_{\text{calculated}}$	X^2_{table}	Decision
Do radio and television programmes influence the academic performance of learners?	8	16.43	15.51	Significant

The Chi-square analysis of Table 2 shows that radio and television programmes have significant impact on the academic performance of learners ($P > 0.05$) and therefore the null hypothesis is rejected.

Research Question 2: Do learners show interest in Radio and Television learning programmes?

Table 3: Responses on learners' interest in Radio and Television learning programmes

S/N	Item	SA	A	SD	D
1	Learners prefer watching foreign learning programmes than the indigenous Radio and T.V learning programmes	101 (46.6%)	62 (28.6%)	33 (15.3%)	21 (9.6%)
2	The subject tutors are well-experienced teachers who deliver their lessons expertly	96 (44.2%)	73 (33.6%)	29 (13.4%)	19 (8.8%)
3	Learners stayed tuned to the Radio and T.V programmes ready with their study materials	88 (40.6%)	72 (33.1%)	48 (22.1%)	9 (4.2%)
4	Learners find it difficult to change switch channels of movies or music to educational learning programmes	109 (50.2%)	41 (18.9%)	42 (19.4%)	25 (11.5%)
5	Core subjects like Maths, English Language and Civic Education lessons are produced more than any other subject on the Radio and T.V network	117 (53.9%)	54 (24.9%)	34 (15.7%)	10 (5.5%)

Table 3 shows that a major part of the respondents 101 (46.6%) agreed that learners prefer viewing foreign learning programmes than national learning programmes. Similarly, 62 (28.6%) also assent to this view. However, 33 (15.3%) strongly differ on this view while 21 (9.6%) also disagree that learners prefer watching foreign radio and TV learning programmes than indigenous learning programmes. Furthermore, 96 (44.2%) respondents strongly believed that subject tutors are well experienced and can deliver their

lessons well and 73 (33.6%) of the respondents also believe with this view. In addition to that, about 29 (13.4%) strongly disagree on this view and 9 (8.8%) also disagree that subject tutors and well-experience and can deliver their lessons perfectly. A total of 109 (50.2%) respondents strongly agreed that learners always attend to the radio and TV programmes ready with their learning materials while 41 (18.9%) do agree with this view. Some 42 (19.4%) however disagree with the statement as well as 25 (11.5%) also disagree that learners stay-tuned to the learnings programmes with the study materials. Also, a major part of the respondents 117 (53.9%) strongly believe that core subjects learning programmes were produced more than any subjects while 54 (24.9%) do agree to the statement. However, 34 (15.7%) and 12 (5.5%) of the respondents disagree with the view.

Table 4: Chi-square analysis on research questions two

Research questions	Df	$\chi^2_{\text{calculated}}$	χ^2_{table}	Decision
Do learners show interest in Radio and Television learning programmes?	8	23.41	15.51	Significant

The Chi-square analysis of Table 3 shows that learners show interest educational programmes aired on radio and television networks ($P > 0.05$) and therefore the null hypothesis is rejected.

Research Question 3: Do the quality of radio and television programmes meet up to education standard?

Table 5: Responses on whether the quality of radio and television programmes meet up to education standard

S/N	Item	SA	A	SD	D
1	Learners do understand the topics easily when teachers are explaining lessons on Radio and T.V channels	86 (39.6%)	42 (19.4%)	71 (32.7%)	18 (8.7%)
2	Parents encourage their wards to always stay-tuned to the Radio and T.V learning programmes	128 (58.9%)	51 (23.5%)	22 (10.2%)	16 (7.4%)
3	Radio and T.V learning are well guided and follow the curriculum	77 (30.9%)	44 (20.9%)	74 (34.1%)	32 (14.8%)
4	Time allowed for the radio and T.V learning programmes is satisfactory for lessons to be done	68 (31.4%)	71 (32.7%)	58 (26.7%)	20 (9.2%)
5	Learners find it difficult to carryout assignments at the end of the Radio and T.V lessons	82 (37.8%)	51 (23.5%)	49 (22.6%)	35 (16.1%)

Table 5 shows that a major part of the respondents 86 (39.6%) strongly agreed that learners do understand lessons aired on radio and TV programmes while 42 (19.4%) of the respondents do assent to that view. However, 71 (32.7%) of the respondents differ with the view and 18 (8.3%) also disagree with the view that learners do understand the topics easily when they are explained on radio and TV learning programmes. About 128 (58.9%) of the respondents are optimistic that parents do encourage their wards to view radio and TV programmes and 51 (23.5%) respondents to agree to that. On the contrary, 22 (10.2%) and 16 (7.4%) differ from the view. In addition to that, about 67 (30.9%) of the respondents strongly believe that radio and TV programmes are well guided and follow the curriculum while 44 (20.3%) respondents to assent to the same view. About 74 (34.1%) of the respondents strongly disagree to that view while 32 (14.8%) respondents also disagree with the view point. Furthermore, 68 (31.4%) and 71 (32.7%) of the respondents positively assent to the fact that the time allowed for radio and TV programmes were satisfactory for lessons to be done. While 58 (26.7%) and 20 (9.2%) disagree to this

view point. Furthermore, a high proportion of respondents 82 (37.8%) strongly agree that learners find it difficult to carryout assignment after the lesson aired on the broadcast network while 51 (23.5%) of the respondents agree to the view. However, 49 (22.6%) of the respondents strongly disagree on the view while 35 (16.1%) also disagree on the view point.

Table 6: Chi-square analysis on research questions three

Research questions	Df	$\chi^2_{\text{calculated}}$	χ^2_{table}	Decision
Do the quality of radio and television programmes are up to education standard?	8	38.414	15.51	Significant

The Chi-square analysis of Table 5 shows that radio and television programmes produced in broadcast media houses are up to educational standard ($P > 0.05$) and therefore the null hypothesis is rejected.

DISCUSSION

The findings of research question one revealed that radio and television learning programmes have influence on the academic performance of learners. This finding is in conformity with the study conducted by Nwabara and Nwammuo (2009) who affirmed that radio and television learning programmes have positive impact on learners' study. Research question two also revealed that learners are interested in listening and viewing educational learning programmes. According to Olumorin *et al.*, (2018) radio and television programmes captivates the minds of the learners and they make new discoveries as they listen or view the programmes. Furthermore, the findings of research question three shows that, the quality of radio and television learning programmes is of great educational standard and learners do attest to these learning programmes. According to Oliver and McLaughlin (1997), the learning programmes which are aired over the radio and television networks are produced according to the curriculum produced by ministry of education and the topics taught by the tutors are from the syllabus.

CONCLUSION

Radio and television learning programmes have great influence on academic achievement of learners of nursery, primary and secondary school. The devastating effects of COVID-19 pandemic have shut down all educational institutions thorough out the world. The Governments of different nations of the world have put in place strategies that would allow continuous learning at home through the use mass media channels, social networks and the internet. In Nigeria, radio and television stations across the country broadcast learning programmes in collaboration with the Federal and State ministries of education so that learners could have the opportunity to study at home to prepare themselves for final examinations. This strategy will assist enormously for learners to acquire knowledge, helps in mitigating the spread of the diseases as well as saving them from the deadly disease.

REFERENCES

- Centre for Children and Technology (1996). Learning from television: A Research Review. *CCT Reports*. Issue No.11, October, 1996. pp 1-20.
- Educational in Emergencies Working Group (2020). Nigerian Education Sector COVID-19 Response Strategy North-East. pp 1-30.
- Elliot, V. and Lashley, L. (2017). The effectiveness of Interactive Radio Instruction (IRI) within selected primary schools in region number (4). *Social Science Learning Educational Journal* ISSN: 2408-2416.
- Ho, J and Thural, H. (2009). Tuned into student success: Assessing the impact of interactive Radio Instruction for the hardest to reach. *Journal for Education for International Development*. 4(2) pp 34-51.

- Hoffreth, S.L. (2010). Home Media and Children academic achievement and behaviour. *Child development* 81(5) pp 1598-1619.
- Isola, O.M. (2010). Effects of standardize and improved instructional materials on students' academic achievement in secondary school physics (M.Ed thesis, University of Ibadan) pp 55-70.
- Kakamad, K.K. and Fatah, A.H. (2018). The relationship between watching television and academic achievement in 9th Grader students. *Journal of Information Management and Business Review*. Vol 10 (1) pp 6-12.
- Krejcie, R.V. and Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement Journal*. 1970, 30: pp. 607-610.
- Nwabueze, C. and Igboamauchey, U. (2014). Analyzing the influence of 'Telematics' on academic performance of secondary school students in Anambra State. *JORIND*. ISSN 1596-8308. pp 257-263.
- Nwagbara, G.U. and Nwammuo, A.N. (2013). Instructional Television programmes and academic performance of senior secondary school students in Anambra State, Nigeria. *International Multidisciplinary Journal, Ethiopia*. ISSN 2070 0083 7(2) pp 329-349.
- Ocharo, M.C. and Karani, S.E. (2015). Effects of mass media on the academic development of children in primary schools in Kenya: A case study in St Alloys Junior Academy: *International Journal of Novel Research in Education and Learning* 2 (2) pp 11-18.
- Oliver, R. and McLaughlin, C. (1997). Interactive patterns in teaching and learning with Live Interactive Television. *Journal of Education Media*. March, Volume 3. pp 1-15.
- Olumorin, C.O., Aderoju, M.A. and Onojah, A.O. (2018). Students' awareness and utilization of education broadcast to learn in Ogbomoso, Oyo State, Nigeria. *Turkish Online Journal of Distance Education*. ISSN 1302-6488: 9 (3): pp 182-199.
- Oyinloye, G.O. and Adeleye, I.O. (2010). Impact of the media on the senior secondary school students' performance in speech work in English. *Academic leadership: Online journal* 8 (4) article 32.
- Oznacar, B. and Dagli, G. (2016). The impact of mass media tools on students of High School Level. *Anthropologist* 23 (1,2) pp 155-162.
- Shuaibu, S. and Muhyideen, M. (2018). Effects of Multimedia instructional strategies on academic performance of students in Radio and Television Electronic Work Trade in Technical Colleges in Kano State. *British Journal of Education*. 6 (9) pp 1-24.
- Solomon, S. and Sankey, S. (2020). Interactive Radio Instruction: A case Study. *Education for development division, Creative Associates International*. pp 1-36.
- Ul-Amin, S.N. (2013). Impact of television watching on academic achievement of adolescents with special reference to their socio-economic status. *Standard Journal of Education Research Essay*. 1 (1): pp 14-20.
- Ullah, S., Ali, M., Nasir, M., Farid, T., Ali, I. and Alam, S. (2014). The impacts of electronic media on academic performance of female students. *International Journal of Economics, Commerce and Management*. ISSN 2348-0386: 2(9) pp 1-22.
- UNHCR (2020). Supporting continued access to education during COVID-19: Emerging Promising Practice. *UNHCR Education Section/April, 2020*. pp 1-10.