# INHABITANTS' ATTITUDE TO ENVIRONMENTAL EDUCATION AND MANAGEMENT THROUGH RADIO JINGLES IN BENIN METROPOLIS

<sup>1</sup> Patrick I. Akpoghiran (pidamah@gmail.com) +2348037794099 <sup>2</sup> Ferdinand Eloke Okoro (<u>ferdinandeokoro@gmail.com</u>) +2348063364800

#### Abstract

Radio jingles is one of the many ways to inform, educate and enlighten people on various social issues. Government, non-governmental and corporate bodies adopt radio jingles for the promotion of products, service and ideas. However, attention has not been drawn to environmental education and management. This study examines inhabitants' attitudes to environmental education and management through radio jingles in Benin metropolis under Oredo Local Government Area of Edo state. The study was anchored on the theory of value change, which explains that attitude towards the environment should be predicated on a person's value of life and beliefs. In order to ascertain inhabitants' attitudes to environmental jingles, questionnaire was used as instrument for data collection. The sample size of was 384 adopted, however, 377 copies were retrieved. The environmental education and management through radio jingles specifically focused on indiscriminate solid waste disposal, stagnant waters on gutters, uncontrollable bush burning, oil spills, floods and tree falling. Results showed that while there are radio jingles on environmental education and management, indiscriminate solid waste disposal was the most jingled. The overall result showed that there were poor radio jingles on environmental education and management. Reasons were based on dearth of sponsorship and dearth of environmental-social responsibility on the part of the mass media. Sponsorship and environmental-social responsibility were therefore recommended.

**Keywords:** Attitude; Environmental Education and Management; Inhabitants; Radio Jingles/Messages

## 1. Introduction

The need to educate people, protect and manage natural resources through environmental education has been accepted in many countries as a global necessity. In the past, environmental problems were considered as technical and economic problems; but in the recent times, the social dimensions of environmental problems such as public attention and people's attitudes towards environment have become one of the areas of environmental education, environmental sociology and environmental psychology (Kalantari & Asadi, 2009).

Environmental education through the mass media is very essential for attitudinal change in the area of environmental management. Santra (2011) says environmental education deals with the knowledge, values, attitude, change and participation in finding solutions to environmental problems. Environmental education leads to positive changes in attitudes, commitments and civic actions, ethical values and responsibilities with respect to the protection and improvement

<sup>&</sup>lt;sup>1</sup> Department of Mass Communication, Western Delta University, Oghara, Delta State, Nigeria. <sup>2</sup>Department of Mass Communication, Delta State Polytechnic, Otefe-Oghara, Delta State

of the environment with due consideration given to future generations (Santra, 2011). On the other hand, poor environmental education leads to health related problems.

Health related problems are directly related to poor environmental education and management. Perhaps, high level of poverty, illiteracy and poor enlightenment campaigns on environmental responsible behaviour in Nigeria could be linked to poor environmental education and management. Generally, environmental education had not been given the adequate campaigns in mass media except on global climate change. In addition, the average masses are often more interested in 'stomach-infrastructure' and other issues related to their daily survival than environmental management. This lack of interest and awareness on environmental education and management often lead to irresponsible environmental behaviour which in turn breeds more environmental problems. Environmental problems lead to high risk health related illness namely: lasar fever, typhoid, cholera, river blindness and guinea worm. Babalola, Babalola and Okhale (2010) noted that the major public health problems associated with poor environmental sanitation and exposure to communicable diseases is poor personal hygiene compounded by malnutrition which reduces resistance to diseases especially among vulnerable groups like children, pregnant women and nursing mothers and the aged.

Scholars in the fields of health and social environmental studies have advocated for mass media enlightenment campaigns on environmental management for behavioural change. However, the adoption of radio jingles for public environmental education and management have not been sufficiently researched upon in Nigeria. Nonetheless, studies on radio jingle for environmental and health related campaigns exist (Akpoghiran, 2014). There are studies to show that public environmental education through radio jingles is significant for fostering awareness about sociopolitical and ecological value and attitude to improve the environment, provision of opportunities to acquire the knowledge, and the creation of new patterns of behaviour of individuals towards the environment (Ibimilua, 2015). Radio jingle had been found to be significant for environmental education campaigns (Olusola, 2007). Olusola (2007) for instance, had examined the adoption of indigenous language in environmental campaign using Radio Lagos 107.5 FM as a reference point. His study revealed that indigenous language is significant for environmental communication, because it gives good understanding and better meaning of radio messages for the listeners.

The nature and characteristics of radio perhaps, explains why radio jingles have been adopted by individuals, governments, profit organisations and non-profit organisations as strategy for Public Environmental Education (PEE) on health and environmental related issues. Environmental education through media enlightenment campaigns namely radio, as Ibimilua (2015) sees it, is aimed at increasing public knowledge and awareness about environmental issues and to provide opinions or the skills to make rational decisions and implement actions in the environment.

Nonetheless, there are numerous studies on environmental and health related issues. However, in broader perspective, this study intends to add to the existing studies or knowledge on environmental communication, but specifically, it seeks to: determine the existence of radio jingles or messages on environmental management in radio stations in Benin City; and ascertain whether radio jingles have enhanced inhabitants' attitude towards environmental management.

Conceptually, the scope of the study is inhabitants' attitude to environmental education and management through radio jingles. Geographically, Benin metropolis was adopted because the city has more radio stations when compared to neighbouring states like Delta and Bayelsa. Demographically, it was limited to inhabitants' from eighteen (18) years who reside in Benin City, the capital of Edo State.

### 2. Literature Review

Environmental Education (EE) is a life-long learning process. This is why Ibimilua (2015) believes that environmental education is a useful tool for the enhancement of good quality of life. It is a major instrument for the achievement of sustainable development. It is on this note that Anil and Arnab (2014) see environmental education as the transfer of knowledge and skills about the environment and its allied problems. It is the people's education which holds the key to environmental management and good quality of life. To Aina (1990), environmental education is that which aims at developing a world population that is aware of and concerned about the environment and its associated problems, and which has the knowledge, skills, attitudes and motivations collectively directed towards the solution of current problems and the prevention of new ones. In this wise, environmental education, is aimed at creating awareness for environmental behaviour or management. It is therefore environmental concerned (Aina, 1990; Anil & Arnab, 2014, as cited in Ibimilua, 2015).

There are possible ways to promote environmental education. The promotion of environmental education, as Ibimulia (2015) noted include trainings, public campaigns, open forum public meetings, indigenous education, radio jingles, visual displays, discussions and citizen participation in planning as well as the mass media. Also, curricular of schools and colleges are included. The social media platforms are very crucial for the promotion of environmental education especially in this age of the social media.

Radio stations are capable of transmitting signals within and beyond its immediate locations, and as such, capable of "shaping social norms and values, influence people's decisions in manners that promote a more environmentally sustainable society" (Nwabueze, 2007). In a study of environmental conservation and management, Ojo and Kadri (2001) found that media houses in Oyo state took to putting slogans, jingles and publishing articles on environmental management. Their study showed that environmental illiteracy and ignorance on the part of the people was high. In an appraisal of the contributions of the print and electronic media to environmental education and consciousness; Agbola, Olurin and Mabawonku (2007) found that the mass media are of limited relevance to city residents in their perception, knowledge and finding solution to their environmental problems in Ibadan.

A study had showed that environmental awareness relates to the recognition by the public on environmental issues and values, and the implications they have in relation to economic issues and social standards of living (Chaineux & Charlier, 1999) while Wood (1994) believes that environmental awareness is best produced and developed by personal exploration and discovery of people's surroundings. In his study, Talero (2014) argues that public environmental awareness and participation is vital to the goal of achieving a sustainable future. Allen (2001) had shown that public environmental education and applied communications are the key tools for expansion and effective delivery of awareness campaigns to different types of audiences.

Allen believes that campaigns and programmes should be designed in a sustainable way to assist target groups with the acquisition of knowledge, skills, and attitudes that are necessary to solve actual and local environmental problems (Wood, 1994; Chaineux& Charlier, 1999; Allen, 2001, as cited in Talero, 2014).

Attitude towards environmental management can be influenced through consistent environment education from the mass media. Environmental behaviour is as a result of consistent awareness and knowledge put into practice. Environmental attitude determines the level of environmental management. In their study; Kaiser, Woffing and Fuhrer (1991) believe that environmental attitude is a powerful predictor of ecological behaviour.

All the studies imply that environmental jingles aimed at improving environmental attitude and management.

## Theoretical Framework

The value change theory was drawn from Dewey's theory of valuation in 1903by different scholars and theorists like Debreu in 1972, Detmer in 1988 and others writers like Max Weber, Talcott Parsons and Jurgen Habermas depending on their fields. This theorystates that rather than simply inform people about the harmful or beneficial effects of certain kinds of behaviour, methods based on value change theory challenge the people to test their own values against others, which are presumed to be socially more acceptable. Value change theory examines how, why and to what degree human value things whether the object or subject. It is concerned with personal values which are popularly held by a community and how thosevalues might change under particular conditions. The postulation is that since values underlie attitudes, which in turn underlie behaviour, it is assumed that a change in value will lead to corresponding changes in attitude and behaviour. Importantly, the individual has to have clear information on the ranking of his present value. Harmful attitudes of individual to the environment do not add value to the environment but could be seen as value-action gap, rather a gap in environmental management. Generally, it is the difference between what people say and what they do, in this case, environmental management.

The application or justification of this theory to the study is that attitudinal change and value for the worth of the environment will definitely lead to a better environmental behaviour. The extent of value we placed on environment determines our attitude to environmental management. Our attitude to the environment is measured by the value we hold about the environment. The theory is more of moral and natural values. Therefore, we should direct our moral and natural values to the environment. Inhabitants should adopt actions and values that are in conformity with environmental values, and avoid actions that are harmful to the environment. In other words, self-consciousness for the worth of the environment is the first step towards environmental management. Enlightenment campaigns on solid waste management of the broadcast media can help to change people's values or promote environmental values. In other words, consistent environmental jingles on radio are capable of changing people's values towards the environment. This is where the functions of the broadcast media in terms of information and education are imperative. The broadcast media for example, are expected to inform or educate the general public of their behaviours that may be harmful to the environment. The value change theory can be applied to issues on attitudinal change. The value for the worth of the environment will definitely lead to a better environmental behaviour.

Our moral values should be directed towards environmental management especially in the area of solid waste.

## 3. Methodology

Data were collected through primary and secondary sources. The primary source of data collected was through the administration of questionnaire to targeted respondents while the secondary source of materials were books and academic journals consulted. The population of the study was Benin City. The population of Benin City as at the 2006 National Population Census was 1, 495,800. This was according to the National Bureau of Statistics but by projection of 2.3 growth rate, the population in 2019 is 1,749,316. Theare as that make up parts of Benin metropolis were Aduwawa; Ekenwa; G.R.A; Ikpoba hill; Oko/Airport road; Ugbowo; and Upper Sakpoba area. The respondents were inhabitants drawn from these areas listed above. The demographic population was limited to respondents from the age of eighteen (18) years who lives in these areas listed above, and who received programmes from radio stations in Benin metropolis through their radio sets or mobile phones.

The reason for adopting Benin City in Edo state is that it has a lot of radio stations among the south-south states. Some of the radio stations in the metropolis for example but not limited are: Bronze FM (of FRCN); Edo Broadcasting Service (Radio); Independent Radio; KU FM 92.7; Raypower FM; Rhythm(Silverbird) FM 93.7; Speed FM 96.9; Vibes FM 97.3. There were eight (8) radio stations as at the time of the study. In order to determine the sample size for the study, the Krejcie Robert and Morgan Daryle sample size was adopted. The sample size was developed in 1970. It has been used by many researchers over the years. For example, if the population ('N') is 270 the sample size ('S') is 159. Even if the population is above a hundred thousand (100,000) to a million or millions, the sample size remains 384. Therefore, three hundred and eighty four (384) was the sample size for the study. Seven (7) research assistants who lives in Benin City and know these areas very well were purposively selected as Research Assistants for the administration of the questionnaire. The purposive sampling technique was used. The instrument for data collection was purposively administered to adult respondents.

Items considered for environmental education and management aired as radio jingles or message within the frame of this study were: Indiscriminate solid waste disposal, stagnant waters on gutters, uncontrollable bush burning, oil spills in the Delta, floods, and tree falling

The questionnaire was the instrument for data collection from the targeted respondents in those areas listed above. The copies of the questionnaire (384) were equally shared among the 7 Research Assistants, 54 each, except the Research Assistant assigned to the University of Benin, Ugbowo campus, who had 60 copies of the questionnaire. This was because of the huge numbers of students. The questionnaire has both open-ended and closed-ended questions. It also has two options scale and Likert scale. The copies (384) of the questionnaire were administered to adult respondents who live in Benin City.

### 4. Results

The three hundred and eighty four (384) sample size for the study was administered but three hundred and seventy-seven (377) copies were returned. This represented 98.2%. The data collected through the questionnaire were pooled and analysed using descriptive statistics of frequency counts, percentage, mean and standard deviation.

The sample size returned (377) consisted of 148 of the respondents representing 39.2% males and 229 of the respondents representing 60.7% females. In the age ranges, ages between 18-24 were 102 (27.1%) respondents, between 25-34 were 136 (36.1%), those between 35-44 were 77 (20.4%) respondents, and those from 45 above were 62 (16.4%) respondents. There were 253 respondents representing 67.1% that were singles and 124 representing 32.8% that were married. The data also showed that there were 254 (67.4%) students while 123 respondents representing 32.6% were in other occupations namely traders; teachers; artisans; health workers as indicated in the retrieved questionnaire. On educational level, 291 (77.2%) of the respondents had higher education while 86 (22.8%) had primary education.

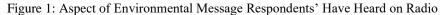
Table 1: Determination of Radio Jingles on Environmental Management

S/N	Questions		Total		
		Sure	Not sure	Not at all	_
1.	Do you listen to any radio station	253	98 (25.9%)	26	377
	services?	(67.1%)		(6.89%)	(100%)
2.	Have you heard of any environmental	281	71 (18.8%)	25 (6.63)	377
	message on radio?	(74.5%)			(100%)
3.	Had there been radio jingles on	188	175 (46.4%)	14	377
	environmental education and management	(49.8%)		(3.71%)	(100%)
	on the station you listened to?				
4.	Does the radio jingle come on air often?	Often	Not often	93	377
		(5.57%)	263 (69.7%)	(24.6%)	(100%)
5.	Do you consider radio jingles effective for	291	72 (19.09%)	14	377
	environmental management?	(77.1%)		(3.71%)	(100%)
6.	Rate the level of environmental jingles on	Good 35	Fair/Average	Poor 69	377
	radio stations in Benin?	(9.28%)	273 (72.4%)	(18.3%)	(100%)
7.	How had your response or attitude to	Good 22	Fair/Average	Poor	377
	environmental management through radio	(5.83%)	87 (23.1%)	268	(100%)
	jingles been?			(71.1%)	

Author's field work, 2017

Table 2: Aspect of Environmental Message Respondents' Have Heard on Radio

S/N	Categories	Frequency	Percentage
8.	Problem of solid waste management	93	24.6%
9.	Oil spills in lands, farmlands and waters in the	31	8.2%
	Delta		
10.	Floods caused by gutters filled with dirt	201	53.3%
11.	Tree falling	52	13.7%
Total		377	100%



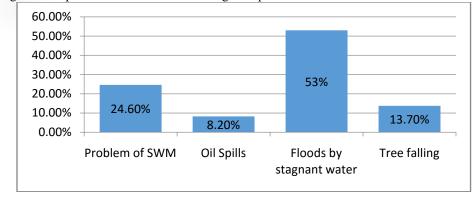


Table 3: Most Frequent Aspect of Environmental Message Respondents' Have Heard as Radio Jingles

S/N	Categories	Frequency	Percentage
8.	Problem of solid waste management	193	51.6%
9.	Oil spills in lands, farmlands and waters in the Delta	59	15.6%
10.	Floods caused by gutters filled with dirt	113	29.9%
11.	Tree falling	12	3.18%
Total	-	377	100%

Figure 2: Most Frequent Aspect of Environmental Message Respondents' Have Heard as Radio Jingles

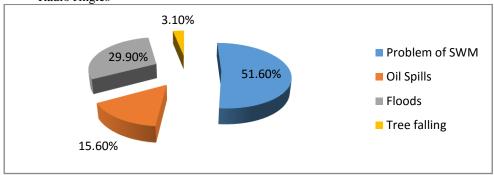


Table 4: Respondents' Attitudes to environmental management through radio jingles on how respondents Perceive Inhabitants' Attitudes to Environmental Management through Radio Jingles. Had their Response/Attitude Been.....?

S/N	Items	Yes	No
a.	Encouraging to environmental issues	276 (73.2%)	101 (26.7%)
b.	Proactive to environmental management	80 (21.2%)	297 (78.7%)
c.	Environmentally responsible	239 (63.3%)	138 (36.6%)
d.	Very poor	281 (74.5%)	96 (25.4%)
e.	Too busy with other important things in life	298 (79.0%)	79 (20.9%)

Figure 3: Respondents' Attitudes to environmental management

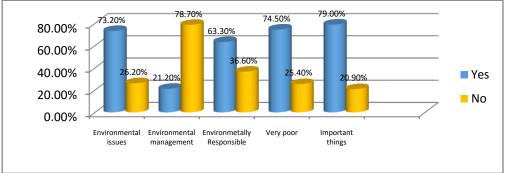


Table 5: Assessment of Respondents' Level of Worries about Environmental Problems on Radio Jingles

S/N	Rate how much you are worried	Very	Worried	Not so	Not worried
	about environmental problems	worried		worried	at all
	you heard on radio jingles?				
a.	Indiscriminate solid waste dumping	61.8%	38.1%	0	0
b.	Stagnant waters on gutters causing mosquitoes	79.8%	20.1%	0	0
c.	Uncontrollable bush burning	18.8%	23.8%	56.4%	0.79%
d.	Oil spills on waters and farmlands	77.1%	22.8%	0	0
e.	Floods	72.9%	27.1%	0	0
f.	Indiscriminate and unauthorized falling of trees	0	30.7%	69.2%	0

Table 6: No: 14: Attitude of Respondents to Environmental Radio Jingles/Messages

S/N	Items	SA	A	UD	D	SD	Mean	STD
1.	Environmental radio jingles/messages are not effective for the promotion of environmental education and management.	12	71	3	201	90	2.24	0.76
2.	Consistent environmental radio jingles can bring about responsible environmental behaviour.	213	94	5	41	24	4.14	-1.14
3.	Environmental radio jingles in this radio station have been inadequate for environmental education and management.	81	288	8	0	0	4.19	-1.19
4.	My perceptions of environmental issues have improved as a result of environmental campaigns on radio.	77	103	13	98	86	2.96	0.04
5.	Environmental jingles and campaigns on radio have not made impact on me.	21	49	5	111	191	1.93	1.07

Mean and standard deviation analyses at 3.00 and 0.50 respectively.

Source: Author's field work (2017)

## Discussion of Findings

There are possible ways to promote environmental education. One of such ways is the strategy of radio jingles, which help to enlighten, educate and inform listeners on environmental and health management. As to radio stations that have aired campaigns/messages on environmental management, respondents who filled the unstructured questionnaire indicated that only four (4) stations have jingle or message on environmental education. They were Edo Broadcasting Service (Radio); Bronze FM; Independent Radio and Speed FM. Speed. This finding corresponded with that of Ojo and Kadri (2001) that media houses in Oyo state were engaged in environmental slogans and jingles. Aspects of environmental message campaigned on were: regular cleaning of market places by traders and flood in residential houses caused by stagnant waters filled with dirt. Regular cleaning of market places by traders is a weekly environmental exercise imposed by the Edo State Government as a policy to clean market places and shops every Monday. Speed FM, Edo Broadcasting Service (Radio arm) and Independent Radio carry out a weekly campaign on solid waste management. Speed FM runs a daily reminder to their listeners on their news bulletin to clean their environment. There is also a drama jingle by Speed FM on the need by inhabitants to clear their gutters to prevent flood in residential houses caused by stagnant waters filled with dirt. This was during the rainy season between August to September, 2018 while campaigns on weekly cleaning of market places and shops have been a regular reminder on air for some years.

The above findings provided answer to objective 1 of the study which was to determine the existence of radio jingles or messages on environmental management in Benin City. By implication, environmental jingle on radio in Benin had been on the average scale. This finding

was in conformity with the result obtained in item 6 of Table 1 where 72.4% of the respondents rated environmental radio campaigns in Benin City as average.

Results from the data collected and analysed in Table1, using percentage analysis showed that 74.5% of the respondents have heard of environmental message on radio. In line with this, Banjo, Adebambo and Dairo (2009) result on inhabitants' perception on domestic waste disposal in Ijebu Ode, Southwest Nigeria, showed that radio and television were the most available (93% and 96% respectively), the most easily accessed (70% and 73% respectively) and the most effective sources of environmental information (61% and 64% respectively). Their study showed the effectiveness of the mass media, particularly the radio and television in creating awareness about public health and environmental issues. Though, no specific radio station was stated, 49.8% of the respondents were in the affirmative that there been radio jingles on environmental education and management on the station they listened to. Talero (2004) had observed that the lack of adequate environmental knowledge had been a big obstacle towards achieving a sustainable future for humankind at both global and local scales. Talero believes that proper media education and awareness campaigns regarding the importance of environmental health were vital to enhance the protection and well use of natural resources, and to reach a sustainable future in any community. This means that radio jingles on environmental education and management have been aired. How often the message came on air within the period of study was asked. The answer to this showed 69.7% of the respondents indicated that environmental radio jingles do not come on air often. Reasons for this could be dearth of sponsorship and the lack of interest by the appropriate authorities. These reasons were obtained orally from some of the respondents by the Research Assistants.

The effectiveness of radio jingles for environmental education and management was ascertained. 77.1% of the respondents considered radio jingles as effective for environmental management. This 'effectiveness' was not attitudinal change of respondents but the level they appreciated environmental jingles. This implies why 72.4% of the respondents rated environmental jingles on radio stations in Benin City as average. However, respondents' response or attitude towards environmental education and management through radio jingles and messages as the study showed was poor. 71.1% of the respondents responded to this. This simply means that inhabitants' attitude towards environmental management through radio jingles was poor and not encouraging to environmental management. This result corresponds with the result in Table 4, where 74.5% of the respondents were honest to admit that their attitudes towards environmental management through radio jingles have been very poor.

Aspect of environmental message respondents' have heard on radio jingles (flood, solid waste, oil spills etc) and the most aired aspect were obtained. As shown in the study, 53.3% of the respondents indicated flood as the aspect of environmental message they have heard on radio. Flooding was not only as a result of torrential rainfall but mainly as a result of stagnant water in drainage channels filled with dirt, and the lack of urban planning among other human factors. In the same vein, problem of solid waste management was the most frequent aired on radio in the radio stations under the period studied. The result to this was affirmed by 51.6% of the respondents. It is taken therefore, that solid waste problem and flood were the most aired environmental jingles on radio, and as such, most discussed environmental issues on air and most concerned or worried environmental issues by the inhabitants.

Environmental problems are worrisome issues in the local, national and global environmental. Inhabitants' level of worries about environmental problems heard on radio as jingles were ascertained. Respondents' were asked to rate the extent they were worried about environmental problem. As obtained from the data, 61.8% of the respondents' indicated that they were very worried about solid waste management. It implies that indiscriminate and unapproved places for solid waste dumping worried majority of the respondents. Stagnant waters on gutters breed mosquitoes and other diseases. This explains why 79.8% of the respondents were very worried about stagnant waters on gutters. Also, data obtained showed that 77.1% of the respondents were very worried about oil spillage. Flood problems are caused by poor drainage system and wrong urban planning. Data analysed on this showed that 72.9% of the respondents were very worried about flood problem. This affirms that flood problems were not just caused by heavy rainfall but poor urban planning.

Respondents' attitudes to environmental radio jingles were also determined through Likert scaling method where mean and standard deviation were used to analysed the data. This was shown in Table 6. The mean-point or point of decision (acceptance or rejection) was 3.00 while at the point of standard deviation was 0.50. Using mean-point analysis, at the mean-point at 2.24 < 3.00, respondents' disagreed to the statement posed that environmental radio jingles were not effective for the promotion of environmental education and management. This implies that radio jingles were effective for the promotion of environmental education and management. At a mean-point at 4.14> 3.00, it was affirmed that consistent environmental radio jingles can bring about responsible environmental behaviour. However, respondents' in item 3 of the same Table 6, result showed that environmental radio jingles in many radio stations in Benin City have been inadequate for environmental education and management. The mean-point for this was 4.19> 3.00. Many radio stations as a matter of environmental-social responsibility do not carry out campaigns on environmental management without sponsorship or paid announcements. There were therefore, poor green campaigns by broadcast stations in Nigeria. This also could be responsible for the poor public attitude to environmental awareness and management.

The above results provided answer to objective 2 of the study which was to ascertain whether radio jingles/messages have enhanced inhabitants' attitude towards environmental management. The result presented implies that environmental messages on radio have not enhanced inhabitants' attitude towards environmental management as a result poor environmental campaigns on radio. This also explains why at the mean-point of 2.96, respondents' perceptions of environmental issues have not improved as a result of poor environmental campaigns on radio, and by implication, environmental jingles and campaigns on radio stations have not made impact on inhabitants (*Mean* 1.93<3.00). This shows that radio station's message on environmental management whether solid waste management; oil spills in lands, farmlands and waters have been inconsistent, and the import of this is poor attitude to environmental management.

In the light of this study, the theory (value change) adopted for the study is in line with the findings of the study. Attitudes towards the environment are contingent upon the value we attach to the environment. The study showed inhabitants' poor attitude or response to environmental education or management through radio jingles or messages are as a result of 'value-lost' or 'value-gap', which means that, there is a big gap between our values/attitude and

the environment. Radio stations for example, have the responsibility to inform and educate the public of the behaviours that may be harmful to the environment, and enlighten them on behavioural change or beneficial effects. Radio stations' campaigns on solid waste management, floods management, tree preservation or oil spillage control can come in the forms of radio jingles, television commercials in the main news bulletin, radio commentary, special report and so on. For example, a specific period can be devoted as advocacy campaigns on environmental management on various issues. The essence of environmental communication is for behavioural or attitudinal change. A value in the environment will lead to corresponding changes in attitude and behaviour. In all, the findings imply that environmental communication is very imperative for environmental management.

#### 5. Conclusion and Recommendation

Radio jingles are ways of informing, educating people of available products, services or ideas or as a social campaign. However, as shown in the study, radio jingles have not been directed towards environmental education and management. This study examines inhabitants' attitude to environmental education and management through radio jingles using eight radio stations in Benin metropolis in Oredo Local Government Area of Edo state. The central objectives were to determine whether radio jingles have been directed towards environmental education and management. Questionnaire was used as instrument for data collection. Results showed that only few stations in the study area, Benin City have radio jingles on environmental education, and this comes occasionally. Environmental radio jingles have been very poor especially in the areas of solid waste, oil spills, floods, cleaning of gutters. The poor radio campaigns on environmental education are insufficient and inadequate for environmental management or responsible environmental behaviour. The implication of the findings is that many Nigerians have not attached values to environmental management.

It is recommended that there should be regular radio jingles on environmental education and management by government at all levels. Individuals, group of individuals and corporate organizations should sponsored environmental jingles. The telecommunication service providers like MTN, GLO, AIRTEL and 9MOBILE and other telecommunication service providers should use their SMS to carry out environmental education and management campaigns. Environmental-social responsibility is therefore recommended. Individual should inculcate right environmental attitude always.

## References

- Akpoghiran, I. P. (2014). Broadcast media programme schedules on environmental management: A case of solid waste management. In M. Gujbawu (Ed.) *Maiduguri Journal of Arts and Social Sciences*. 11 (2), 36-35.
- Babalola, Y., Babalola, A., & Okhale, F. O. (2010). Awareness and accessibility of Environmental Information in Nigeria: Evidence from Delta State. *Library Philosophy* and Practice. In www.statcounter.com
- Banjo, A.D, Adebambo, A. A. R & Dairo, O. S, (2009). Inhabitants' perception on domestic waste disposal in Ijebu Ode, Southwest Nigeria. *African journal of basic & applied sciences 1* (3-4): 62-66. IDOS Publications.
- Gifford, R. & Sussman, R. (2012). *The oxford handbook of environmental conservation psychology*. Susan, D. Clayton (Ed).

- Ibimilua, A. F. (2015). The what, why and how of environmental education. *International journal of education and research* 3 (1), 25-38.In <a href="https://www.ijern.com">www.ijern.com</a>
- Ifegbesan, A. (2009). Exploring secondary school students' understanding and practices of waste management in Ogun State, Nigeria. *International journal ofenvironmental education*. 5(2), 201-215. <a href="https://www.ijese.com/">www.ijese.com/</a> 2010.
- Kalantari, K H. & Asadi, A. (2010). Designing a structural model for explaining environmental attitude and behavior of urban residents (Case of Tehran). *International journal of* environmental research 4(2):309-320.
- Kaiser, F. G; Woffing, S. & Fuhrer, U. (1991). Environmental attitude and ecological behaviour. *Journal of environmental psychology*. 19 (1), 1-19.
- Longe, E. O., Longe, O. O. & Ukpebor, E. F. (2009). People's perception on household solid waste management in Ojo local government area in Nigeria. *Iran journal of environment, health science and Engineering.* 6 (3), 201-208 209.
- National Population Commission, (2008). *Nigeria demographic and health survey*. Abuja: NPC Publications (See <a href="www.population.gov.ng">www.population.gov.ng</a> and <a href="www.nigerianstat.gov.ng">www.nigerianstat.gov.ng</a>).
- Nwabueze, C. (2007). Environmental communication: perspectives on green communication and information management. Enugu: Daisy Press.
- Raudsepp, M. (2001). Some socio-demographic and socio-psychological predictors of environmentalism. TRAMES, 5(4), 355-367.
- Olusola, O. (2007). Dynamics of indigenous language in environmental communication. *Lagos Papers in English Studies*. 1 (1), 228-235.
- Sandra, S. C. (2011). Environmental succour. London New Company Book.
- Smyth, J. C. (1995). Environment and education: a view of changing scene. *EnvironmentalEducation Research.* 1, (1). www.wikipedia.com Jingle
- Talero, G. (2014). Literature review on environmental education and public awareness. Retrieved from <a href="https://www.wikipedia.org">www.wikipedia.org</a>, 24<sup>th</sup> January, 2016.
- www.wikipedia.org 2013. Sample size By Krejcie, Robert V., Morgan, Daryle W in1970. Retrieved April 17<sup>th</sup>, 2015.
- www.wikipedia.org 2015. Theory of Value Change. Retrieved April 17<sup>th</sup>, 2015.
- www.wikipedia.org 2016. Meaning of Jingles. Retrieved June 1st, 2016.