

Owerri Residents' Perception of Television for Effective Reporting of Science, Technology and Innovations for Sustainable Development

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Abstract

Television play a role peoples' perception of science and technology in general. However, this perception vary from place to place. This study assessed the television in relation to effective reporting of science, technology and innovations for sustainable development with particular focus on Owerri residents. Owerri is one of the populated metropolitan areas in south east Nigeria. The objectives of the study are ascertaining the level of knowledge, perception and challenges of Owerri residents about science, technology and innovations on television. Survey method was adopted with a sample size of 385 arrived at using Australian online sample size calculator and derived from a population of 945,000. Multi-stage sampling technique was employed with the questionnaire as the data collection instrument. Data analysis was analysed descriptively. Findings revealed that majority (93%) of the respondents are exposed to science, technology and innovations through various television channels available in the area. Also, 93% strongly agreed and agreed that television facilitates understanding of scientific and technological innovations. 76% believe that television provides credibility for implementation of scientific and technological innovations. Inaccuracies and inadequate televised science, technology and innovations and a relative influence on respondents among others were indicated. The study concluded that there Owerri residents understand science through television and that they have positive perception of science on television. The study recommended for stronger collaboration among scientists, innovators and television journalists.

Keywords: Reporting, Science/Technology and Innovations, Sustainable Development, Television.

Introduction

Science, technology and innovations play important role in the development of the society in the sense that the breakthroughs and discoveries therein shape the society to a large extent (Nwabueze, 2011 in (Nwafor, 2014). The persistent scientific and technological innovations as a predisposing factor for sustainable economic development in the society deserve the public's attention. This implies that gathering and disseminating information about new inventions, innovations, discoveries or issues in the field of science and technology should be the concern of the mass media. Reporting Science, technology and innovations involves the adoption of the

appropriate media and journalism principles in communicating knowledge, new ideas, skills, objects, devices, new inventions, breakthroughs, discoveries, etc. aimed at ensuring sustainable development in the society. Effective reporting implies effective communication which entails that information, ideas or messages be efficiently and successfully packaged, disseminated, received and understood. Effective reporting is achievable, according to Professional Academy (2022), by adopting the principles of clarity, conciseness, concreteness, accuracy, completeness, coherence and courteousness.

Considering the role of science and technology in development, there is need for effective reporting in the area. Therefore, this is where the television comes into play. Buttressing this, Ashwell, (2014) posited that, the television play a crucial role in informing the public about scientific and technological developments. This is because has the advantage of audio and video which makes it popular among audiences all over. Besides, Lafollette (2002) explained that a number of excellent television programmes have demonstrated that science and technology can be successfully interpreted and understood on television. Television possesses attributes that drive effective reporting of developmental initiatives and innovations in various sectors including science and technology field. These attributes include:

1. Audio visual capacity: this has to do with the ability of the television medium to use sound and picture in its programming which implies appealing to the sense of hearing and sight.
2. Multimedia capacity: television combines different content forms which include, text, audio, video, animations, graphics or illustrations to transmit messages to the audience (Onabajo, 2006).
3. Multichannel attribute: this implies the production, transmission and reception of television signals or programmes using various channel or platform such as terrestrial, satellite, cable, webcasting or new media handles (Campbell, 2006).
4. Multi-format programming: the television adopts various format in presenting its programmes such as straight news, documentary, interview, talk show, cartoon, commentary, print review, reality show etc. (Lafollette 2002 and Campbell, 2016)
5. Multi-lingual liberty: this is a situation that allows different languages to be employed in various programmes.

Moreover, television promotes the display, demonstration and explanation of difficult technical concepts, it permits proper illustration of the impact of scientific advances and can also make the reportage of science and technology innovations entertaining, interesting or

appealing (Andrea, 2018). According to Lafollette (2002) it allows for creative production approach for proper understanding of science and technology innovations and their consequent adoption by the public. For science, technology and innovations to play the role attributed to them as a prerequisite for sustainable development in the society the emerging breakthroughs or innovations in the area must be effectively communicated (Dickson, 2004).

On the connection between scientists and television journalists, Nwafor (2014), posits that scientists and research institutions are important sources of information or knowledge for improvement of livelihood but he argued that it is only an effectively disseminated or well understood information that can be useful to the individuals, the policy makers or the community.

Science and technology reporting connects the public to scientific and technological breakthroughs and facilitates public understanding of new inventions or innovations and their subsequent adoption by the public in order to enhance and sustain economic development (Texas A&M, 2021 and Lugalambi *et al.*, 2011). On the other hand, poor reporting of science and technology is attributed to lack of communication skills on the part of the scientist and poor knowledge of science on the part of the journalists. Both groups according to Scott (2012) and Jen (2013) have often accused each other for the scarcity of science programming on television. Scott (2012) in his analysis on science communication revealed that science fans expressed disappointment in television when geographic and discovery channels could not serve their interest in programming. In spite of this, Lafollerte (2002) believes that, 'television opened windows onto the world of science' whereas Lal and Ahamad (2014) maintained that the unrivaled potentials of the television for disseminating technological information to the audience remains indisputable.

This study was conducted in Owerri, Imo State, Nigeria. Owerri is the capital city of Imo state in South East, Nigeria, and the state that prides itself as the heartland of South East. The study was carried out in Owerri, Nigeria, the capital of Imo State, which is one of the nine states in the South Eastern part of Nigeria. Owerri has an estimated population of nearly a million people (983,352) according to World Population Review (2023) and is inhabited largely by Ibos, one of the three major ethnic groups in Nigeria. Until 1976 when the Imo State was created, Owerri was a typical sleepy rural town made up of five indigenous villages. With the creation of Imo State and its choice as the capital, the population mushroomed due to the influx of public servants and businessmen from other parts of the state. The socio-economic

activity revolves around the government and hospitality sector. It is however highly favoured educationally as it boasts of two universities, a polytechnic, a college of education among others. Owerri has two TV stations and has total GSM coverage in the three local governments that make up the city; Owerri Municipal, Owerri West and Owerri North. Apart from the two terrestrial TV stations, many residents of the city also access satellite TV through the various satellite channels, mobile phones, etc. Although the selection of Owerri for this study is based on convenience, the result even though cannot be generalized to all cities in Nigeria, provides insights into perception of dwellers on the role of television in covering science, technology and innovation. What then are potentials of television towards popularizing science, technology, innovations and issues associated towards sustainable economic development in Owerri?

Given the critical role that science, technology and innovations play in the development of the society, researchers and scientists have shown growing concern about the quality, quantity and the state of science, technology and innovations in the Mass Media (Okaka, 2009) and Jen (2013) indicated that scientists and engineers are particularly displeased with the inaccuracies and senselessness that characterise science programmes on television while Lafollette (2012) cited in Jen (2013), was said to be disheartened because of observed over simplification and commercialization of science on television. Lafollette (2012) explains that television that was expected to perform exceptionally well in disseminating science and technology information to a large audience became a disappointment.

In Scott (2012), the television was referred to as a vast wasteland as a result of its alleged inhospitality to science. In fact, many things have been observed about the reportage of scientific and technological innovations on the television. Nevertheless, it is not clear if these challenges about televised science are true or the same in many places. Meanwhile studies on televised science and technology are mostly about foreign countries. The implication of this is that very few studies exist on this subject in relation to local Nigerians' experiences on the issue. Based on the foregoing, this study examined television audiences in relation to effective reportage of science, technology and innovations with a focus on residents in Owerri, Nigeria.

This study has the following specific objectives. They are to:

1. ascertain the level of knowledge of Owerri residents about science, technology and innovations on television.

2. find out the perception of Owerri residents about science, technology and innovation reports on television.
3. identify the weaknesses observed by Owerri residents about televised science, technology and innovations.
4. determine the extent of influence of televised science, technology and innovations on Owerri residents.

The study therefore has the following research questions:

1. What is the level of knowledge of Owerri residents in relation to science, technology and innovations reported on television?
2. What is the perception of Owerri residents about televised science, technology and innovations?
3. What are the weaknesses observed by Owerri residents about televised science, technology and innovations?
4. To what extent are Owerri residents influenced by science, technology and innovations reported on television?

Effective Reporting of Science, Technology and Innovations on Television

The impact of science, technology and innovations on development is achievable through proper and effective communication (Nwafor, 2014). Some of the contribution of science and technology reporting for development as highlighted in Nwafor (2014) include facilitating socio-economic transformation, enhancing local technology, safeguarding the society from impending danger, advocacy roles and promoting education.

Though scientist and research institutions are important source of information and knowledge. The science communicator is a gate-keeper standing in between the scientist and beneficiaries of his research and development result and also policy makers who determine the sustenance of the innovation. Through science and technology reporting the public is connected to scientific and technological innovations and discoveries, adoption of which improves their standard of living and brings societal advancement (Texas A&M, 2011). Besides, Lugalambi *et al.* (2011) noted that effective communication of science and technology facilitates public understanding of new inventions, discoveries or issues which brings about their adoption for socio-economic development. However, poor reporting of science and technology as pointed out in

(experts, stakeholders challenge, 2012) cited in (Nwafor, 2014) is the consequent of lack of scientific knowledge on the part of the journalists.

Although television can be effectively used for reporting scientific and technological discoveries, yet it has been observed that there are manipulative tendencies associated with its programming and presentations (Collin 1987) Metcafe and Gascoigne, 1995 and Lafollette, 2002) cited in (Bucchi and Trench, 2008). The authors also noted in their analysis of a set of documentary the unwarranted level of certainty attributed to science. According to Lafollette (2002) the nature and features of the television makes it suitable for production and transmission of research results directly from their point of origination. He added that scientists have continued to produce new findings in their various fields that have been colorfully demonstrated in public broadcast programmes which is an evidence that television can be adapted successfully for effective science and technology reporting.

Science and technology information on television as observed in Bucchi and Trench (2008) and Verhoeven (2008) can be said to be lopsided in the sense that medicine/health dominates television science reports. Meanwhile, the issue of referring to the television as a vast waste land, the failed attempts to engage the professional scientists and the television executives, and the presumed inhospitality of television to science led to the conclusion that the culture of these two entities are bound to conflict (Scott,2012). Nwabueze (2009:324) cited in Nwafor (2014) defines science and technology reporting as the application of journalistic principles in conveying information about science and technology issues, topic and innovations to the public through the mass media. It involves the process of gathering newsworthy information about happenings in science and technology world as well as processing the raw information and disseminating it to the public using appropriate formats and platforms. Through the television these innovations are reported in order to satisfy the public interest or their eagerness to know about the latest scientific and technological development as well as how they would impact on their lives (Nwabueze, 2011) cited in Nwafor (2014). Hence, Scott (2012) position that the television is too essential to be ignored in science communication.

The mass media, according to McQuail (2000) cited in Onwubere (n.d), contribute in the dissemination and adoption of many technical and social innovations for the purpose of societal improvement. However, the internet has improved the way information is televised by introducing varied platforms for distributing and receiving messages such as the social media platforms. There is also the emergence of satellite and cable television (Dominick, 2002 cited in Nwammuo, 2011).

The television as described in Aririguzo (2011:138) is a wholesale distributor of images and the most common environment for learning with the potential for influencing the behaviour of its viewers.

Studies on Science Communication on Television

Boy, Bucher and Christ (2020) conducted a study on audiovisual science communication on TV and Youtube; how recipients understand and evaluate science videos. The objective of the study include to investigate how internet users receive Youtube videos for information, knowledge transfer and its effect on the society. 400 German Science videos were used on types of audiovisual science communication – presentation films, expert films, animation films and narrative explanatory films. The study used a discourse analysis, multi-level reception study and online survey method. The findings revealed that science video has relevant impact on both knowledge transfer and social interaction mindset of the respondents. It indicated an inter relationship among the videos gaze guidance, the recipients allocation of attention and the result of knowledge testing. The correlation of data based on eye tracking and the knowledge tests indicated in principle that the improved score in the multiple choice and concept mapping tests was determined by the similarities of the gaze patterns of the recipients.

From medical science perspective, Verhoeven (2008) carried out a study explored the development of medical television using content analysis method. Result of the study showed that health issues and medical science receive a lot of attention on television. The European public is most interested in medicine and they use television as their main source of information on science. Empirical research into the development of televised science was observed to be scarce. It also indicated fewer references to science sources and domination of emotion and tension instrumentalized by laypeople. The findings suggested demarcation of scientific, journalistic and lay periods of medical television and more concentration on patients reports against the doctors' instrumentalized and representative (symbolized) of medical account was observed.

Lafollette (2002) carried out a survey of science content in U.S television broadcasting, 1940 through 1950s. The study revealed that serious programs could also be entertaining; it showed that early developers of science took advantage of televisions ability to dramatize. It also indicated that television combines facts and fictions, mixing real life footage of scientists and animated cartoon characters. The study found that pioneering broadcasters played important role in the development of innovative programming and also contributed to the techniques seen in

notable contemporary science communication. Number of topics that need more enquiry by science communication expert and historians were identified and by implication recommended for research.

Coming down to specific television genre, the documentary, Payne (2013) examined the effectiveness of using documentary film from the aspect of target audience first and information second geared towards reaching new and unreceptive audiences in relation to climate change in New Zealand. The study showed that new audience are being attracted by documentary as an entertainment programme. Documentaries coupled with the internet, according to the study, has changed the means of learning and interacting with television documentaries. The study recommended for further exploration of this approach and encouraging the educating aspects of science documentary film in television programme.

Lugalambi *et al.* (2011) conducted a study on media coverage of science and technology in Africa. The study used a combination of qualitative and quantitative approach. The quantitative was based on content analysis of articles coded on a number of variables while the qualitative was based on in-depth interviews. The data were analyzed using frequency tables. Then, the result of the study showed that the dearth of science and technology information in the media is as a result of challenges ranging from lack of knowledge and skills on the part of science and technology journalists, attitude of the scientists, nature of the production process of the mass media content among others.

Similarly, Russel (2006) did a study on covering controversial science: improving reporting on science and public policy. The study examined the availability of specialised science reporters, the types of science and policy reports that receive the highest coverage and how media coverage affect public understanding of current scientific discussions. The challenges of rendering spot news, and providing background information in science and technology coverage were observed. The study revealed that television remains the major source of science and technology information and that this area is one of the most complicated but important beats for journalists. It was therefore recommended that both the mainstream and new media should provide deep knowledge and background information to help position science and technology innovations for crucial debates.

Another study in Ashwell (2014) explored science journalism in the highly commercialized media market of New Zealand. Using semi structured interviews, data were collected from scientists, science communication advisors and journalists. Based on the data

collected it was found that most media report science and technology poorly, secondly restructuring of information and shortage of staff is one of the challenges faced by journalists. While metropolitan newspapers cautiously uses press releases smaller newspapers publish these materials verbatim.

Bucchi and Trench (2008) in an analysis of health stories from a representative sample of fifty (50) US media markets found that although local television stations give significant airtime to health stories, the majority of the topics emphasized a particular health issue while ignoring those health problems most likely to afflict viewers. According to the researchers, the television still holds pride of place in America and Europe as the major source of science news. The study also supported the Pew Centre survey (2006) which indicated that 41% of Americans said they got most of their science news and information on the television. It was also found that television science and technology specialist reporters are relatively few resulting in excess work load as well as inadequate coverage of innovations in the area.

Joe (n.d) in a study on the apathetic behavior of Nigerian journalists to science and technology reporting, investigated whether the journalists believe that their readers, viewers and listeners have low interest in science and technology stories. The study adopted survey research method with the study selected through the simple random sampling. Quantitative data was collected using the questionnaire instrument which was administered to a sample of practicing journalists in the south-Eastern Nigeria. Data for the study was analyzed using chi-square and percentage. However, the findings of the study revealed that science and technology reporting is generally unpopular among Nigerian journalists and that media managers have not done much to encourage science in their respective media.

Theoretical Framework

Diffusion of innovation theory underpins this study. The theory was popularized by Everett Rogers in 1962. According to Onwubere (n.d) diffusion of innovation has to do with communicating a new idea, practice, or object through appropriate channel of communication among members of a social system within a given time. Rogers innovation-decision process includes knowledge, persuasion, decision, implementation and confirmation (Ismail, 2006). The fact that the television as a mass medium has the capacity to disseminate information or knowledge to a large audience at a relative speed buttresses the aptness of the diffusion of innovation theory to this study. Hence, the television engages in the production and distribution of information about

science, technology and innovations through strategic planning and packaging of relevant programmes. It selects and structures its programmes in such a manner as to persuade the target audience to make a decision towards the adoption of an innovation that will bring about improvement, or transformation of a social system.

Besides, through television broadcasting, opinion leaders can communicate science, technology and innovations to their subjects for the purpose of influencing them to adopt an innovation or understand science and technology. This is possible when television producers deliberately plan programmes such as interviews, discussions, conversations or phone-ins in which opinion leaders play the role of guest speakers in order to address their followers on important scientific and technological innovations or discoveries thereby using the avenue to persuade the audience to accept and adopt the innovation for the purpose of improving their livelihood. The theory was used to analyse and interpret the data.

Method

This study employed the survey method. The rationale for using the survey method is because the study involves the collection of data on perception, opinion and attitude of the variables of the study (Obayi, Anorue and Onyebuchi, 2016). The population of the study consists of the Owerri residents put at the estimate of 945,000 (Macrotrend, 2022). The Australian sample size calculator was used to arrive at the sample size of 385 with a confidence interval of 0.05 and relative standard error of 5.10. The study adopted multi-stage cluster sampling technique which enabled the researcher to select participants among the existing LGAs and communities that formed the clusters.

In stage one, the three (3) local government areas that make up Owerri metropolis were selected; Owerri Municipal, Owerri West and Owerri North. In stage two, four communities were selected from each of the three local government areas using purposive sampling technique. The communities selected for Owerri municipal are Amawom, Umuonyeche, Umuororonjo and Umuoyima. For Owerri north: Naze, Amakohia, Orji and Egbu were selected. While, Nekede, Ihiagwa, Irete and Avu were selected for Owerri West.

So, 385 was divided by 12 which is 32.08. Based on this 32 respondents were selected from each selected community using purposive sampling technique, bringing the total number to 384 participants. Additional three (3) participants were selected from each of the three Local Government Areas to take care of the remaining one (1) participant whereas the extra 2 will cater

for the ones that might not be returned. The test instrument used for the study is structured questionnaire. Frequency distribution table and simple percentage were used for presentation and analysis of data.

Result

385 copies of questionnaire were distributed i. However 383 were properly filled and returned. Therefore, data presentation and analysis was based on 383 respondents.

Level of knowledge of Owerri residents about science, technology and innovation reported on television

Table 1: *Television channels on which respondents receive information about science, technology and innovations*

Response option	Frequency	Percentage
Over-the –air terrestrial channels	43	11%
Satellite and cable channels	160	42%
Internet or online channels	152	40%
None of the above	28	7%
Total	383	100%

Source: field survey, 2022

Analysis in Table 1 above showed that the majority 160(42%) of the respondents view science, technology and innovation information on satellite and cable channels.

Table2: *Field of science, technology and innovation mostly reported about on television.*

Response option	Frequency	Percentage
Agriculture, environment and industry	152	40%
Health/medicine, communication and atmosphere	157	41%
Space, biodiversity and others	51	13%
All of the above	23	6%
Total	383	100%

Source: field survey, 2022

Analysis in the above table indicated that 157(41%) being the majority of the respondents are mostly exposed to health or medicine, communication and atmospheric sciences, technology and innovations on television.

Table3: *Format of programme adopted in televised science, techn-ology and innovations*

Response option	Frequency	Percentage
News, documentary, interview	163	43%

Discussion /conversation and magazines	104	27%
Cartoons, reality shows and others	61	16%
All of the above	42	11%
Can't say	13	03%
Total	383	100%

Source: field survey, 2022

The above finding showed the majority (43%) of the respondents view televised science, technology and innovation in news, documentary and interview programmes

Table 4: *The extent to which respondents understand science, technology and innovation on television.*

Response option	Frequency	Percentage
To low extent	56	15%
To moderate extent	148	39%
To large extent	162	42%
Can't say	17	04%
Total	383	100%

Source: field survey, 2022

The finding in the above table is an indication that 42% being the majority of the respondents understand televised science, technology and innovation to a large extent.

Perception of Owerri residents about science technology and innovations on television

Table 5: *Television does not report solution or remedies for science, technology and innovation issues or problems.*

Response option	Frequency	Percentage
Strongly agree	25	06%
Agree	48	13%
Neutral	24	06%
Disagree	137	36%
Strongly disagree	149	39%
Total	383	100%

Source: field survey, 2022

Analysis in table 5 shows that majority (39%) strongly disagree that television does not report solutions and remedies for problems in science technology and innovations.

Table 6: *Television facilitates viewer understanding of science, technology and innovations*

Response option	Frequency	Percentage
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Strongly agree	168	44%
Agree	187	49%
Neutral	14	04%
Disagree	09	02%
Strongly disagree	05	01%
Total	383	100%

Source: field survey, 2022

The above analysis on table 6 show that the majority (49%) of the respondents agreed that television facilitate viewers understanding of science, technology and innovations.

Table 7: *Reporting science, technology and innovations on television provides relatively high credibility that motivation acceptance and adaption by the public.*

Response option	Frequency	Percentage
Strongly agree	139	33%
Agree	152	40%
Neutral	23	06%
Disagree	39	10%
Strongly disagree	30	08%
Total	383	100%

Source: field survey, 2022

Data in the table 7 above implies that 152 (40%) being the majority believe that televised science, technology and innovation provides relatively high credibility for acceptance and adoption by the public.

Challenges observed by Owerri resident in televised science, technology and innovations

Table 8: *Pitfalls Observed in televised science, technology and innovations*

Response option	Frequency	Percentage
Ambiguity and over certainty	84	22%
Inaccurate information and lack of relevant background information	91	24%
Commercialization and over simplification of fact	93	24%
None of the above	98	24%
Can't say	17	4%
Total	383	100%

Source: field survey, 2022

Finding in table 8 indicated a marginal difference between those who have observed certain pith fails and those who responded otherwise. The implication is that there are observed pith fails in the reportage of science, technology and innovation television.

Table 9: *Science, technology and innovations is not reported on television as much as it is expected.*

Response option	Frequency	Percentage
Strongly agree	96	25%
Agree	152	40%
Neutral	49	3%
Disagree	44	11%
Strongly disagree	42	11%
Total	383	100%

Source: field survey, 2022

The data in the above table is an indication that most of the respondents agree that television has not been reporting science, technology and innovation as much as required.

The extent to which Owerri residents are influenced by science, technology and innovations reports on television

Table 10: *The extent televised STIs influence respondents.*

Response option	Frequency	Percentage
To low extent	44	12%
To moderate extent	94	25%
To large extent	81	21%
Relatively large extent	143	37%
Can't say	21	05%
Total	383	100%

Source: field survey, 2022

The findings in table 10 showed that STI on television influence most of the respondents in a relatively large extent.

Table 11: *Television supports the government in mobilizing and influencing the young individuals to embrace science and technology in the relevant subject and to develop their innovative capacity.*

Response option	Frequency	Percentage
Strongly agree	167	44%
Agree	207	54%
Neutral	0	0%
Disagree	09	02%
Strongly disagree	0	0%

Total	383	100%
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Source: field survey, 2022

The implication of the data in table 11 is that majority (54%) of the respondents agreed that television influence young individuals in the manner stated above

Discussion

Result of findings showed that majority (42%) receive information about science, technology and innovations on satellite and cable television, 40% receive on internet, 11% receive over – the air or terrestrial channels while 7% responded none of the mentioned channels. This finding is in line with the finding of Bucchi and Trench (2008) that the television still holds the pride of place in America and Europe as the major source of science news. The result also agrees with Russel (2008) that the television is still the major source of science and technology information.

The findings revealed that health, communication and atmosphere are the fields of science, technology and innovation mostly reported on television followed by 40% agriculture, environment and industry. In line with the above finding, Bucchi and Trench (2008) found that local television stations give significant airtime to health stories. Verhoeven (2008) confirmed that health issues and medical science receive a lot of attention on television. The implication is that television is not pluralistic in its reportage of science, technology and innovations. Also, findings indicate that majority (43%) view televised science, technology and innovations in news, documentary and interview and that majority (42%) understand the subject matter in a large extent. The findings conform to the assertion by Okaka (2009) that noted that television science journalists engage in writing news and features in addition to documentaries. The nature of television and its programming by implication could be said to be instrumental to the large extent to which respondents understand televised STI which was also confirmed in Andrea (2018). The finding also similar to that of Payne (2013) which showed that new audience in addition to the old were attracted by documentary science programmes.

These findings confirm Lafollette (2002) position that the television wields enormous power for popularization of science. The finding projects the diffusion of innovation theory that has to do with communicating new idea, practice or object through appropriate channel. The implication of the findings is that television has the potentials to effectively spread knowledge and persuade the

audience to take decision in favour of STI thereby galvanizing implementation of scientific and technological innovations.

Finding revealed that 26% responded that they have not observed either of the mentioned pitfalls in televised STI. But other responses showed marginal gap among those that observed certain weaknesses. Thus, 22%, 24% and another 24% respondents admitted that they have observed pitfalls ranging from ambiguity, over certainty, inaccurate information, lack of relevant background information, commercialization to over simplification of facts. Further findings indicated that, majority (40%) of respondents agreed that there is inadequate reportage of STI on television, 25% strongly agreed to the same point, 13% were neutral, 11% disagreed and 11% too strongly disagreed. The findings corresponded with Jen's (2013) observation that scientists and engineers were displeased with the above pitfalls on televised science. Bucchi and Trench (2008) frowned at the anomalies while Russel (2006) described them as challenges facing televised STI. Perhaps, the reason for the anomaly is the use of non-expert sources in televised science (Verhoeven, 2008). Scott (2012) and Jen (2013) confirm the scarcity of quality science programming on television. Besides, Scott referred to the above anomalies as inhospitality of television to science. The implication of this is that it creates distrust between the scientist and television science reporter

Findings showed that televised STI influence the majority (37%) in a relatively large extent, 25% moderate, 21% large, 12% low extent and 05% responded can't say. 54% and 44% agreed and strongly agreed respectively that the television can influence the young individuals to embrace science and technology as well as influence them to develop their innovative capacity. The finding supports Aririguzo (2011) that described television as the most suitable environment for learning. It is also in line with the implementation stage of the theory of diffusion of innovation.

Conclusion and Recommendations

In conclusion, result of this study show that the majority of Owerri residents understand televised science, technology and innovations as well as have positive perception about the subject area. It is based on this that the researcher concluded that the distinct potentials of the television qualify it as an effective medium for communication of science, technology and innovations aimed at impacting on the sustainable socio-economic development of the state. Although Owerri residents in their responses observed certain pitfalls in televised STI, the strengths or positive influence were nevertheless acknowledged

Based on the findings of the study, the following recommendations are hereby proffered;

1. Given the findings that televised STI is lopsided in favour of health sciences and programme forms while ignoring the others, television managers and science journalists should ensure pluralism in their reportage both in fields and formats of STI.
2. Similar study should be conducted in other parts of Nigeria in order to find out the experiences of different people about televised science, technology and innovation.

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