# International Journal of Arts and Humanities (IJAH)

# Bahir Dar-Ethiopia

Vol. 5(1), S/No 16, January, 2016:28-44 ISSN: 2225-8590 (Print) ISSN 2227-5452 (Online)

DOI: http://dx.doi.org/10.4314/ijah.v5i1.3

# **Graphic Communication for Development in Africa: Target Audience Perception and Response**

# Ebigbagha, Zifegha Sylvester, Ph.D.

Department of Fine and Applied Arts Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria

E-mail: ebigbaghazsylvester@vahoo.com +2348033205662

#### **Abstract**

Achieving desired response from target audience is the overall goal for graphic communication in support of development initiatives. However, in Africa, responses to development messages, which are largely determined by target audience perception, are predominantly far from being desired. Therefore, this paper focuses on eliciting desired target audience response that is pivotal for realising sustainable development. It utilised qualitative approach that employed the Critical-Historical-Analytical Examination, and Content Analysis. It started with the need for understanding target audience perception when using graphic messages for development communication. Furthermore, it examined the perception process of graphic messages using the Aaker and Myers Model. Moreover, it looked at the making of graphic messages based on audience and stimulus conditions. And it discussed audience responses to graphic messages in Egypt and Nigeria. The paper found that the neglect of target audience conditions often results in the production of ineffective stimulus conditions and communication failure. The paper ended with recommendation that communication actors should be conversant with the conditions that determine responses to development messages; and embed the graphic encoder and target audience in the communication development process in order to generate stimulus that elicit desired response from target audience.

Key words: Graphic Communication, Development, Perception, Desired Response, Stimulus/Target Audience Conditions.

#### Introduction

Achieving desired response from target audience is the primary objective for graphic communication campaigns. These campaigns often employ graphic language to share prime messages and supporting information about development. The response to these graphic messages is largely determined by the way the messages are created and channelled. Accordingly, Baran (2009), states that the media is the message. This is because both form and content attributes produce emotional reactions that could be transferred to behaviour (Ebigbagha, 2010, citing Garland, 2005). So, a positive or negative response to messages, largely depend on reactions elicited by the form and content of graphic messages.

A media generation process that neglects audience conditions usually fail to elicit desired response from audience. This often have grave consequences. In 2005, for example, a 'Dress Code Campaign' of Ahmadu Bello University, Zaria Nigeria produced Posters and pamphlets, which warned against dress styles that revealed specified portions of the body. However, the content attributes of some of the posters provoked violent reactions, which led to closure of the University on 18 March 2006. These posters were rejected and destroyed by the audience. This would have been prevented had target audience conditions been considered through pre-test for instance.

A thorough consideration of target audience conditions is indispensable to creating appropriate, accurate and vivid stimulus. It helps the graphic encoder to satisfactorily resolve uncertainties, which are bound to occur as development ideas are encoded into graphic messages (Ebigbagha, 2011). These uncertainties (Technical, Semantic, Syntactic, Arousal/Aesthetic and Response), which could pose formidable barriers to effective communication, would be discussed later (see Making the Stimulus Conditions of Graphic Messages - Considerations of Stimulus Conditions in Making the Stimulus).

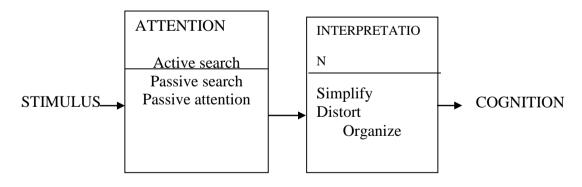
The above uncertainties are ruinous if not resolved satisfactorily. Towards this end, the Aaker and Myers model of the perception process was examined. Also, considered are variables for generating graphic messages with particular focus on target audience conditions and the making of stimulus conditions that permeates attention, interpretation and cognition. And target audience responses to graphic communication campaigns that considered or neglected target audience perception during the media production process were examined.

#### The Perception Process of Graphic Messages

The way receivers perceive graphic messages is lucidly described/prescribed in the Aaker and Myers(1981) model of the perception process (figure 1). The model shows how stimulus flow through attention and interpretation to cognition. It also suggests how this flow of stimulus is determined by two major factors: stimulus, and audience conditions.

The model identifies four elements in the perception process, these are: (i) Stimulus - the content of the communication message the target audience is exposed to in a given environment. (ii) Attention - the careful notice focussed on a given stimulus, which essentially controls the amount of information the target audience processes at any given time, whether he/she engages in Active search, Passive search, or Passive attention. (iii) Interpretation - the explanation and meaning the target audience makes of the content of any given stimulus, which he/she could Simplify, Distort, or Organise; and (iv), Cognition - how target audience see, recognise and understand a given stimulus.

In addition, the model also identifies two principal types of variables that determine the attention and interpretation of a given stimulus, these are: (i) Stimulus conditions, which are all the things that could affect or make up the stimulus itself, these include: Intensity, Size, Message, Novelty, Position, and Context. (ii) Audience conditions are all the things that could affect the state of being of the target audience, these include: Information needs, Attitude, Values, Interests, Confidence, Social context, and Cognitive style.



# Some Suggestive Determinants of the Perception Process

Stimulus Conditions Audience Conditions

Intensity, Size, Message, Information needs, Attitudes

Novelty, Position and Context Values, Interests, Confidence and

Cognitive style

**Figure 1:** A model of the Perception Process, influenced by two principal types of variables: stimulus and audience conditions (Aaker and Myers, 1981).

The model shows the information seeking pattern of target audience. It holds that information provided by a given stimulus are first screened at the attention stage, whereby attention, which acts as a filter, controls the amount of information the receiver processes; whether he/she is involved in active search, passive search or passive attention. This screened amount of information is then organised into explanations/meanings the receiver could make out of it, which conforms to his/her image of reality. At this stage, the target audience could simplify, distort or organise the content of the stimulus into a suitable cognition. All these activities are influenced by stimulus conditions and audience conditions.

The stimulus and audience conditions that determine attention and interpretation target audience give to graphic messages are of prime importance in communication development process. This is particularly salient in our society, where mass production and distribution of information have flooded the environment and create problems for the individual who desires to sort out or seek for relevant information to meet his or her needs.

More importantly is the awareness and necessary application of these stimulus conditions in the creation of graphic messages, bearing in mind target audience perception. It is important to know that there are attention filters, which determine the amount of information processed, and affect the attention given to a particular message when target audience are exposed to it. So, unnecessary information/content in the stimulus must be eliminated.

In addition to the above, the element of interpretation is essential. It shows that target audience match information to their image of reality. As a result, when encoding graphic messages, all that concern the audience should be considered.

Therefore, the intensity of colours, the size of design elements, what need be emphasised, the syntax, and the novelty should be planned. Also, where the message would be mounted in relation with other messages displayed, and the context should

be taken into account. And the information needs, attitude, values, interests, cognitive style and the socio-cultural environment of the target audience should be considered.

## Making the Stimulus Conditions of Graphic Messages

Many variables of the target audience need be considered when making the stimulus for desired response. Some aspects of these (Attention and Interpretation) have been discussed but some, need more light to be shed. Also, the making of the stimulus involves problem-solving and form-generation processes that need be stated in addition to the stimulus conditions already discussed.

# Consideration of Target Audience Conditions in Making the Stimulus

Eiembi (1989), identifies nine variables that should be considered in graphic communication concerning the target audience. These are: Language, Detection, Attention, Perception, Comprehension, Interpretation, Memory, Usage and Response.

Language affects target audience understanding of a message. Receivers are limited by their culture and their level of understanding of the different ways graphic communication have been practised. So, the graphic language should be appropriate to receivers' language skills.

Detection concerns how receivers notice information. Should distribution outlets be planned by the source, or target audience should search for it, or through inter-personal communication, or through all the means mentioned? This is important for the graphic encoder to strategically place graphic and typographic elements to take advantage of whatever position is arrived at to aid detection by target audience.

Attention is how to attract the receiver using typographic and graphic elements. This is necessary because many information in the environment competes for attention.

Perception is how the receiver would particularly think about or understand the development messages. This could be seen from two points of departure, which are:

- 1. Psychological, the receiver only perceives what he/she subconsciously wants to perceive (MacDonald and Hearle, 1997). The mental 'screens' in human allows a person to reject and not to see/hear unwanted information (Selective perception). This can be based on interest, socio-cultural, emotional factors etc. Therefore, how to take advantage of receivers' selective perception by considering the interest, emotions and so on is needful.
- Visual literacy is how the receiver understands visual images. Given the neglect of visual perception skills in developing countries and the high level of illiteracy, it becomes necessary to make visuals simple and realistic to reflect target audience realities. So, the graphic encoder should consider this

component of the receiver. In order to avoid confusion, unnecessary details, abstract symbols to receivers should be avoided.

Comprehension is how receivers would understand aspects of the development messages and the measures to achieve this. Comprehension of the message is important for target audience to response appropriately.

Interpretation concerns how the target audience interprets graphic messages. Whether or not the interpretation given to development messages is the intended. Difference in interpretation is possible because meanings are not in the message but in the interpretation of it.

Memory has to do with the ability of the receiver to store and recall development messages. The need for this cannot be over-emphasised. What visual images can be employed to aid memory and facilitate recall of messages at the time it is required is essential.

Usage concerns how receiver will use a given development message. Where the receiver will use it, what it would be used for and so on, would affect the design process and the design.

Response is the reaction of the target audience to the development message, in the light of all we have discussed above, whether or not the target audience would response to the message as desired.

In addition to the above, feedback need be considered in the process of communication development. This is necessary in order to know whether or not the message sent by the source gets to the target audience, interpreted as intended, and produced the desired effect.

And equally important is the Socio-cultural environment in which the target audience lives. The way a person thinks and behaves is greatly influenced by the society.

# Consideration of Stimulus Conditions in Making the Stimulus

The stimulus (poster, pamphlet, Stickers and television spots, to mention a few), and its conditions (Intensity, Size, Message, Novelty, Position, and Context) are established in the process of determining messages, media plans and resolving graphic tasks. This is a function of the media team in general and the graphic encoder in particular (Hollis, 1994). However, as the graphic encoder transforms development messages into graphic language, Technical, Semantic, Syntactic, Arousal/Aesthetic, and Response uncertainties are bound to occur. This requires careful consideration of graphic encoding choices in a way that should afford the realities of target audience and minimize its occurrence.

Technical Uncertainty is about what was sent. Shannon and Weaver, (1949), state that this is an important problem that is usually reflected in (i) The receivers' error rate or misreading; and (ii) The decoding time or reading speed.

Semantic Uncertainty is a problem about what was meant. The sent code was received as it was transmitted, but not decoded correctly (Shannon and Weaver, 1949). Two elements are important here, these are (a) Connotative Congruence, the content and treatment of the message frequently imply certain connotations; and (b) The graphic encoder in his/her encoding capacity could make choices that affect these connotations by providing reinforcement, new, neutral, and conflicting ones.

Syntactic Uncertainty occurs in complex messages that permit more than one decoding sequence. It is symbol-to-symbol organisation, which has to do with how one could get from the beginning to the end of a given stimulus condition. In a complex layout, typography could be used to guide, emphasise and organise a decoding sequence.

Arousal and Aesthetic Response Uncertainty is a problem. Watt (1979) suggested that arousal can be stimulated by patterns that are unique, complex, conflicting, colourful and intense, to mention a few. Arousal is related to pleasurable experiences at the core of the aesthetic response 'I like it.' Usually this is a function of pleasant associations from the past based on appropriate organisation of elements.

Response Uncertainty is an uncertainty of what could be the appropriate response. In one sense, it is at the fringes of the decoding process and less under the control of the individual's psychological state and socio-cultural environment. Through meta-communication, the receiver could be directed on how to interpret the message, and by inference how to respond. In another sense, a message may contain explicit instructions. In a more subtle sense, a magazine may use specific typographic treatment for one type of article or feature, so that the reader might 'turn in' again another time to the right place'.

Having considered uncertainties, it is pertinent to examine the process of making the stimulus draft.

Making the stimulus is critical to producing favourable conditions for desired response. This involves problem-solving and form generation.

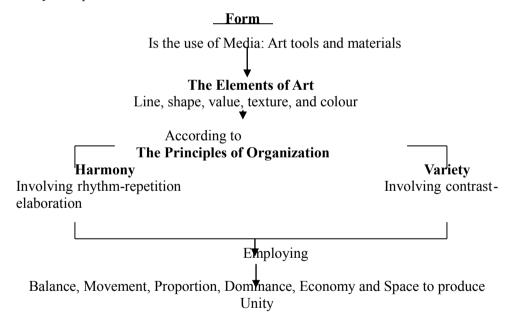
The process of problem-solving is described in Wallschlaeger and Busic-Snyder Models (see figure 2).



**Figure 2:** The Problem-Solving model showing steps involved in solving problems of design (after Wallschlaeger and Busic-Snyder, 1992)

In solving design tasks, six steps are identified: (i) Define the problem; (ii) Analyse, the problem; (iii) Ideate/ generated ideas from analyses (iv) Select suitable ideas (v) Implement selected ideas into new form; and (vi) Evaluate outcomes.

Furthermore, making the stimulus requires generation of form. This process is prescribed in Wallschlaeger and Busic-Snyder Model (see Figure 3) as follows: Form, is the use of art materials and tools, to combine the line, shape, value, texture and colour according to the Principles of organisation. This could either be in Harmony, involving rhythm-repetition or Variety involving contrast elaboration with Balance, Movement, Proportion, Dominance, Economy and Space, to produce Unity/Composition.



**Figure 3:** The form Generation Model showing elements of Art, Principles of Organisation and steps involved in generating visual form (AfterWallschlaeger and Busic-Snyder, 1992).

From the above, the form, which is the stimulus, could be created by combining the elements of art/design into a pleasing, unified whole following the principles of organisation. During the process, many typographic and graphic variables, present options from which choices are made. Examples include the following: what typefaces would be suitable – Serif or Sans-Serif, Condensed or Extended, Bold or Light? What would be the relationship between Image and Background, Negative and Positive space; Iconic and Digital symbols, and size of Sub headings and Copy? Would the image be Abstract or Realistic, Illustrations or Photographs? Which layout would be appropriate, Mondrian, Ayers, or Circus layout? Which combination of colours would be effective for a given task?

### Target Audience Responses to Graphic Messages

Responses to graphic messages are determined by conditions of the stimulus presented. A diligent consideration or careless neglect of audience conditions during communication development process would either produce stimulus conditions that afford or hinder desired response respectively. This is evident in examination of the Information, Education and Communication (IEC) materials produced/used in three nationwide campaigns: The ORT Campaign in Egypt, The Delayed Sexual Debut Campaign, and The Use Condom Campaign in Nigeria.

# The ORT Campaign in Egypt

The ORT Campaign in Egypt (Ebigbagha, 2010; citing World Health Organisation, 1987), is an example of media production that elicited desired response. It emphasises the need for draft of stimulus to be adequately pre-tested with target audience before final production is made. This is salient to avoid rash decision-making and the production of ineffective graphic messages.

The first Executive Director of the ORT Project was to decide on and adopt a logo for the project. Having examined many logo ideas submitted, he liked one more than the others (see Plate I). The director was tempted to adopt the particular logo he liked for the project without further deliberation. However, he decided to withhold his opinion until all logos were tested.







**Plate I**: Logos Pre-tested for ORT Campaign in Egypt, Showing how Test

# Improved Logo.

The logos were tested with the target audience, mothers. The result shows that the director's preferred logo was the least favoured by the pre-test respondents. Also, it shows that the logo chosen need be modified to be more effective. The respondents opined that the colour be modified and the mother pictured in the logo should put on a wedding ring.

The logo selected by the respondents was adopted. The experience so impressed the Director that he often recounted the story, to emphasise the need to pre-test draft with target audience for successful development communication.

Had the director adopted the logo he liked without audience involvement through pre-test, the important improvements made on the logo, would have been missed. The introduction of a wedding ring on the hand of the pictured mother in the logo is significant and instructive. It is a staple on the socio-cultural influence on the interpretation of graphic language. It points to the societal interpretation of motherhood as a product of legal marriage, which is symbolised by the wearing of a wedding ring.

Also, it points to the fact that crucial idea could be omitted when making initial draft of the stimulus, which can be corrected during pre-test/evaluation process. The omissions, if not corrected could significantly thwart the realisation of desired response.

### The Delayed Sexual Debut Campaign in Nigeria

The Delayed Sexual Debut Campaign is another rare example of the production and use of target audience-based stimulus that produced desired responses (SFH Corporate Presentation 2006, Ebigbagha 2010, 2012a).

The stimulus produced include posters, pamphlets and stickers, to mention a few. An examination of its media production process showed high degree of collaboration and integrated planning between the media team and target audience in the media production process.

Of the stimulus materials that were produced, two billboard posters: "Sex is worth waiting for ZIP UP...", and "Yana Da Daraja KU KAMA KANKU (it is respectful to hold yourself)" (Plate IIa and Plate IIb) respectively, would suffice to relate how the graphic media produced elicited desired response.

IIb

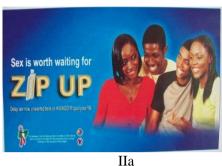




Plate IIa and IIb: (a) A billboard poster on Sex is worth waiting for 'ZIP UP' (b) Hausa Version: Yana Da Daraja KU KAMA KANKU (it is respectful to hold yourself). By the Society for Family Health.

The two billboard posters carried the same prime messages and supporting information in Pidgin/English, and Hausa but with different configuration based on cultural consideration, knowledge, aptitude and practice of target audience.

In the English version (Plate II a) "Sex is worth waiting for ZIP UP..." is the prime message. It is executed in white lettering on high intensity blue background. This makes it legible, even when juxtaposed with 'ZIP UP', which is emphasised in size and depicted in yellow hue. The letter 'l' in the 'ZIP' is the iconic sign of a zip, which reemphasised the main idea of the campaign. The supporting information 'Delay sex now, unwanted belle or HIV/AIDS fit spoil your life' appears in white but smaller in size in comparison with sex is worth waiting for', and in italics - an important warning slogan.

The pictorial element consists of two males and two females in alternate juxtaposition. Their captivating smiles attracts attention and arrest interest in the poster.

The relation in size and space between the typographic and graphic elements are well articulated. The colours in the poster in terms of hue, value and intensity are excellently ordered following the organisational principle of Harmony, which involves rhythm repetition.

In addition to the above, the colours employed have symbolic connotations that enhance the overall impact of the stimulus. The red and black colours seem to symbolise danger and death respectively, which could result from HIV/AIDS, other sexually transmitted diseases and unwanted pregnancy. The yellow could be said to depict the burning passion of youthful exuberance. While the blue background and the white lettering are symbolic of peace, and purity respectively. This seems to suggest that peace is certain should target audience adopt the development messages.

The spatial relationship in terms of surface division is a success. It follows the established principle of the 'golden mean', which produces a ratio of three to five (3:5). Also, this conforms to the Fibonacci theory of harmonious surface division.

Furthermore, the background is free of any distraction. The edges of the blue background seamlessly fuses into the figure, created by vignette at the bottom of the poster that allows for gradual and peaceful transition of view into the picture plane. This gives the impression of volume, which a hard edge demarcation would have destroyed. This permits the eye to move upward and remain within the picture frame.

In general, the design of the graphic language is superb. Literally and figuratively all the elements of design (typographic and graphic), and the principles of organisation, were employed, accurately, appropriately and vividly that presented effectively the prime messages and supporting information of the campaign.

The same considerations were given in the Hausa version but with slight variations in the use of pictorial images that show cultural sensitivity. The figures are separated and their heads covered appropriately in the manner and style accepted for both the male and the female in the North. The result of the graphic media produced was the same as that in the Pidgin/English version.

The Delayed Sexual Debut Campaign produced and employed suitable stimulus conditions that effectively elicited the desired responses from target audience. As a result, the campaign was a colossal success (Ebigbagha, 2010, 2012a; citing the Nigerbus Research Group evaluation in 2004; and the National HIV/AIDS Reproductive Health Survey - NARHS evaluation in 2005; as cited in SFH Corporate Presentation, 2006).

## The Use Condom Campaign in Nigeria

The Use Condom Campaign is one of the common examples of the prevalent production and use of ineffective graphic messages for development campaign in Nigeria. Its overall goal was to persuade audience to use condom as a preventive measure against HIV/AIDS. Stimulus produced includes posters, pamphlets and stickers, to mention a few. An examination of the media production process showed that there was low level of collaboration between the media team and the target audience in the media production process (Ebigbagha, 2010).

Of these stimulus materials that were produced, a poster: "No Condom No Sex" and a Sticker "Female Condom Does Not Promote Promiscuity Use It" (Plate IIIa and Plate IIIb) respectively, would suffice to relate whether or not the quality of the graphic media produced elicited desired response.





IIIa IIIb

Plates IIIa and IIIb: (a) A poster on "No Condom, No Sex" and (b)A sticker on "Female Condom Does Not Promote Promiscuity Use It" by Society For Women and Aids in Africa

The poster "No Condom, No Sex" (Plate IIIa), warns against unprotected sex. The emphasis was on the use of condom. It depicts a man approaching three ladies in front of a brothel. The man is in attire commonly worn by Western and Northern Nigerians. The three ladies, each in front of a door to a room wore seductive attires and seem to be communicating with the man.

The illustration in the poster is fair but contains elements that could destroy the essence of the campaign for semantic uncertainty. Some interpretations that could be inferred from it include the following: (i) only those who go to brothels are at risk to contracting HIV/AIDS and need use condom. (ii) Only those who patronise prostitutes are at risk to contracting HIV/AIDS and need use condom. (iii) Only those who are from the Western and Northern Nigeria are at risk to contracting HIV/AIDS and need use condom; and (IV) only those who want to prevent HIV/AIDS need use condom.

A consideration of these misleading interpretations would have been made at the draft stage, and proper decisions taken had the media draft been properly pre-tested with target audience. The attire of the man would have been revised because of the socio-cultural implication. Also the attention to brothels and prostitutes would have been revised because the most liable group to HIV/AIDS who are in the age group of fifteen to twenty-five years (SFH Corporate Presentation, 2006) are predominantly in the school and on the street. Today, prostitution along the street common and more fashionable than the brothels.

The Sticker, 'Female Condom Does Not Promote Promiscuity Use It' (Plate IIIb), is a potent example of a stimulus that woefully failed to elicit desired response from target audience (Ebigbagha, 2010).

The stimulus condition is a misleading misrepresentation of the message purported. The word 'Promiscuity' is emphasised with red colour and boldly written in capital letters. The prime message 'Female Condom' is de-emphasised with green colour though boldly written in capital and low letters. The supporting information 'Does not promote' and 'use it' are written in slim italics and further de-emphasised with black colour. The iconic image of the condom and the container are placed on both sides separately and down played with green colour in half tone. Each set of words are expressed in a different typeface and in all, there are four typefaces, which are too many for the given space.

On the whole, the haphazard placement of both the graphic and typographic elements defies any existing prescribed layout for the production of effective graphic language. At a distance, one is confronted with these three words 'Female Condom Promiscuity', which is against its real communication goal.

Besides, it is unattractive, uninteresting and loaded with uncertainties. So, audience asked for real representation to understand nor identify what it was.

The campaign was a huge failure. It was found that proper pre-testing with target audience was neglected; and as a result, the stimulus produced was unable to elicit desired response (Ebigbagha, 2010, 2012b, 2013).

#### **Findings**

Eliciting desired responses from target audience requires generating graphic messages that are target audience-based. A key way to achieving this is pre-testing media draft with target audience, as exemplified by The ORT Campaign in Egypt and The Delayed Sexual Debut Campaign in Nigeria. This provides needed knowledge of the two major determinants (Stimulus and Audience Conditions) of audience perception and response to graphic messages.

The pre-testing of media draft provides panacea for technical, semantic, syntactic, arousal/aesthetic, and response uncertainties that characterised most graphic communication campaigns in Nigeria, as shown in the Use Condom Campaign. Its neglect during the communication development process, usually result in the production of ineffective stimulus conditions that often leads to communication failure and create formidable barriers to effective graphic communication that is counterproductive to achieving desired target audience response.

#### Conclusion

Making graphic messages based on target audience conditions is the key to eliciting desired target audience response in development communication. So, a diligent consideration of the knowledge, aptitude and practice (KAP) of target audience is indispensable to generating stimulus that attracts attention, stimulates interest, correctly interpreted and easily committed to memory and recall.

A prerequisite of effective target audience-based stimulus is pre-test of stimulus draft. This requires integrated planning and the collaboration of all communication actors including the target audience. This facilitates proper use of the element of design according to the principles of organisation within the context of the target audience KAP. In addition, satisfactory resolutions of uncertainties are occasioned.

Therefore, target audience-based graphic messages usually produce desired target audience response. This is a sure strategy to mobilise, educate and persuade target audience to support development ideas; and fundamental to achieving development in Africa.

#### Recommendations

Based on the findings, the paper recommends the following:

- i. The media team and the target audience need be embedded in the communication development process. This would enabled all stakeholders to contribute to making the stimulus conditions produces desired response that afford development.
- ii. The media team should be conversant with target audience conditions by thorough consideration of receivers' knowledge, aptitude and practices. This would result in the making of effective graphic encoding choices/stimulus that conform with target audience realities; and
- iii. The communication development process need be evaluated. A pre-test of the stimulus draft with sample of the target audience before final production is invaluable. This often results in media communication outcome with salutary effect.

#### References

- Aaker, D. A. & Myers, J. G. (1982), Advertising management. Prentice-Hall Inc. Englewood Cliffs, N.J. U.S.A.
- Baran, S. J. (2009). Introduction to mass communication: Media literacy and culture. McGraw-Hill Companies, Inc. New York, U.S.A.
- Ebigbagha, S. Z. (2010). Graphic encoding choices in development communication identifying the several loops of graphic encoder/media team collaboration. Zaria, Nigeria. An unpublished Ph.D. Dissertation, Department of Industrial Design, Ahmadu Bello University.
- Ebigbagha, S. Z. (2011). Graphic communication in development programmes; uncertainties and graphic encoder's intervention in media production. Journal of Communication and Media Research Vol. 4 No 2pp. 145-156.
- Ebigbagha, S. Z. (2012a). The delayed sexual debut campaign: Implications for graphic communication in Nigeria. Journal of Communication and Media Research Vol. 4 No 2pp. 145-156.
- Ebigbagha, S. Z. (2012b). The use condom campaign and its implications for graphic communication in Nigeria. Mgbakoigba Journal of African Studies. Vol 1. No. 1 pp 92-105
- Ebigbagha, S. Z. (2013). Theorizing graphic encoder's intervention in development communication vis-a-vis action research model. AJOFAA Awka Journal of Fine and Applied Arts, Vol. 1. Pp 27 - 47
- Ejembi, E.A. (1989). Graphic communication in development programmes: models for communicators. An Unpublished Ph.D. Thesis, Department of Typography and Graphic Communication, University of Reading, England.
- Garland, S. (2005). Major trends in development communication. International Development Research Centre, http://www.google.ie Added: 2004-07-08 8:27 Modified: 2004-12-14 15:40 Refreshed: 2006-01-14 09:01 Retrieved 7/5/2006.
- Hollis, R. (1994). Graphic design, a concise history. Thames and Hudson Ltd., London, England.
- MacDonald, I. & Hearle, D. (1997). Communication skills for rural development. Evan Brother Limited London, UK.
- Shannon, C. & Weaver, W. (1949). A mathematical model of communication. University of Illinois Press, Urbana, Illinois, U.S.A.

- Society for Family Health, (2006). *Corporate presentation*. Abuja, Nigeria: Society for Family Health.
- Wallschlaeger, C. & Busic-Snyder, C. (1992). *Basic visual concepts and principles for artists, architects and designers*. Iowa, U.S.A.: Wmc Brown Publishers, Dubuque.
- Watt, J.H. (1979), Television Form, Content Attributes, and Viewer Behaviour. In Voigt, J.M., and Hanneman, J.G. (ed.). *Progress in Communication Sciences, Volume I*, Norwood, New Jersey, U.S.A: Ablex Publishing Corporation.
- World Health Organisation (1987). *Communication A guide for managers of national diarrhoeal disease control programmes*. World Health Organisation, Geneva, Switzerland.