APPRAISAL OF SOCIAL AND BEHAVIOR CHANGE COMMUNICATION IN THE FIGHT AGAINST INDISCRIMINATE WASTE DISPOSALS IN FEDERAL CAPITAL TERRITORY, ABUJA

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ABSTRACT
Everyone has a responsibility to ensure environmental sustainability; both the government and the people have a part to play because issues affecting the government also impact the people. In the fight against careless garbage disposal in the Abuja Municipal Area Council, the Federal Capital Territory of Nigeria, Abuja, this study evaluates social and behaviour change communication. The purpose of this study was to find out how much the government has used social and behaviour change communication strategies in improving lives of the residents of Abuja Municipal Area Council as it concerns poor waste management and disposal practices. The social learning theory serves as the study's foundation while the survey design was adopted with structured questionnaire of (400) Abuja Municipal Area Council resident. The study revealed that people are aware of the improper disposal of various wastes, including leftover food, faeces, polythene, garment materials, and the like. Based on the findings, the study concludes that SBCC has demonstrated moderate effectiveness in promoting positive behaviour change however, awareness campaigns and the use of effective channel of communication in the subject matter are key in achieving this. The study therefore recommends that in order to maintain the wellbeing of the citizens or residents of Abuja Municipal Area Council, Abuja, as well as to make the local government neat and beautiful, the government should not only legislate but also execute or implement environmental policies, as well as create streets or locational waste collection bins and prosecute erring residents.

Introduction

Communication is an essential instrument in tackling environmental and other human concerns as the lifeblood of any responsible society. Communication is used in a wide range of health promotion initiatives, either as an instructional or norm-forming tactic. Furthermore, particular approaches need to be developed for high-risk populations, including women, youth, injectable drug users, homosexuals, and HIV positive individuals. It is frequently impossible to help people adopt the proper habits without addressing the social and environmental elements that shape those behaviours (UNICEF, 2020). This explains the necessity of social and behaviour change communication interventions, such as sending personalized messages and creating a nurturing atmosphere to encourage people to change their behaviours for the better in their personal and social lives.

The United States Agency for International Development (USAID) defines SBCC as the deliberate application of communication techniques to support modifications in norms, beliefs, behaviours, and knowledge. In addition, it involves coordinating actions and messages through a wide range of media to reach different societal levels, such as the individual, the community, services, and policy.

By strengthening the social context, systems, and processes through the use of theoretically, culturally, and contextually appropriate approaches, SBCC aims to improve health outcomes at the individual, community, and social levels as well as modify or maintain healthy behaviours. SBCC is based on the notion that all behaviours, including interpersonal interactions and the laws, cultural norms, and values that mould people's environments, must be comprehended and addressed within an ecological framework (McKee et al., 2014). The implication is that SBCC is a deliberate attempt to utilize communication strategies to maintain and modify healthy behaviors.

Scholars like Awantang et al. (2022), SBCC is crucial in establishing and preserving desired health behaviours and norms. In a similar vein, SBCC has shown promise in a number of health domains, including boosting the use of family planning techniques, curbing the spread of malaria and other infectious illnesses, and enhancing the health of new mothers and babies. An excellent tool for handling a variety of group and community-related issues is SBCC. SBCC has been adopted as a successful tactic for public outreach initiatives, health and environmental education, and community mobilization. Increasing understanding of the process of behaviour modification has made it easier to create communication campaigns aimed at lowering the risk of HIV and AIDS.

Solid waste generation, control, and disposal are among the most urgent environmental and public health issues in Nigeria today (Okwesili et al., 2016). It can be deduced from this submission that solid waste generation, control and disposal are environmental public health issues in the society. This is also consistent with Opara and Uwakwe (2016) submission that majority of people dispose of their solid trash in any open space as a result of inefficient waste management.

Sadly, in some areas of Abuja Municipal Area Council (AMAC) such as Nyanya and Karu with population density are often affected by indiscriminate waste disposal that is detrimental effects on community growth and development. A typical example is the site along Karu market axis. Many waste materials are not properly disposed of and poorly managed at dump sites thereby causing discomfort for onlookers and commuters alike due to the unpleasant stench they release as well as defaces the city.

It is important to note that the attitudes of people and approaches toward issues that impact them can be influenced by effective communication, as evidenced by several studies. One of such strategies is the use of social behaviour and change communication. Nevertheless, there is scant proof that this strategy has been applied to Nigerian waste management and disposal, particularly in the Abuja Municipal Area Council. Although, much efforts has been claimed by the government of Abuja Municipal Area Council and it's agencies in addressing the issue of waste disposal and management like the Abuja Environmental Protection Board (AEPB) which is saddled with the responsibility to improve on the financial and technical resources needed to parallel this growth. However, due to factors such as increased rate of urbanization, illegal city structure and developments, rapid rate of population increase, rapid development, and changes in consumption pattern, the menace of

poor waste disposal seems not to have been under control.

Arising from the above, wastes are generated faster than they are collected, transported, and disposed. This problem of urbanization has also complicated the problem of waste management as land becomes scarce, human settlements encroach upon landfill spaces, and government in some cases encourage new development directly on top of operating on recently closed landfills (Ikemike, 2015). It is obvious from this argument that the movement from rural areas to urban cities is responsible for the problem of poor waste disposal. Against this backdrop, this study set out to appraise social and behavior change communication in the fight against indiscriminate waste disposals in AMAC.

Objectives of the study

This study set out to appraise social and behavior change communication in the fight against indiscriminate waste disposals in AMAC. The specific objectives of the study are:

i. To assess the extent of SBCC usage in addressing environmental issues in AMAC

ii. To evaluate the effects of SBCC on residents' behaviour regarding waste disposal

iii. To identify challenges associated with SBCC in waste management

iv. To suggest possible effective SBCC strategy to influence FCT residents' waste disposal practices

Theoretical Perspective

This work is hinged on the Social Learning Theory. In the 1960s, Bandura became known for his social learning theory (SLT). His approach recognized reinforcement and the importance of observing, modelling, and imitating the emotional reactions, attitudes, and behaviours of others in learning. In 1986, the SLT developed into the social cognitive theory, incorporating the idea that learning takes place in a social context, "with a dynamic and reciprocal interaction of the person, environment, and behaviour," and a cognitive context that considers past experiences that shape engagement in behaviour (LaMorte, 2019). The idea behind social learning theory is that individuals can pick up knowledge from one another by watching, copying, and modelling that is, it investigates how human behaviour is influenced by socialization.

The core assumptions of the social learning theory is that people learn through observation, reinforcement and punishment have direct effects on behaviour and learning. Also, meditational processes influence our behaviour and lastly, learning does not necessarily lead to change. The theory has been adopted in several studies because it is flexible in explaining the differences in a person's behaviour or learning process, i.e. when there is a change in a person's environment, the person's behaviour may change.

In this study, the theory has been adopted because of it's relevance to identify the root of societal framework in solving environmental problems especially in the area of learning new behaviours that are geared towards human, health and environmental sustainability.

Conceptual Clarification

In this section of the study, the concepts of social and behaviour change communication and waste management have been extensively reviewed.

Social and Behaviour Change Communication

SBCC is the acronym for social and behaviour change communication. it is the strategic use of communication approaches to promote changes in knowledge, attitudes, norms, beliefs and behaviours. Furthermore, it is the coordination of messages and activities across a variety of channels to reach multiple levels of society, including the individual, the community, services and policy (USAID, 2019). This means that social and behaviour change communication is the use of communication as tool to enhance attitude and behaviour change towards a possible course in the society.

Similarly, Muturi (2023) rightly observed that social and behaviour change communication (SBCC) entails addressing issues that impact people directly or indirectly and that require behaviour change at the individual, societal, national, and international levels. Such issues

include health, environment, economic, risk, disaster preparedness, and climate change among other social and developmental challenges. This argument implies that SBCC is a multifaceted communication approach to addressing challenges that hinder access to basic human needs including food insecurity, shelter, clothing, clean water, basic education, health care, and security, among other factors and social injustices that contribute to various inequalities at a societal level.

Corroborating Arogyakeralom (2020), behavioural change communication is an interactive approach to any intervention that involves working with individuals, groups, or communities to develop communication strategies that encourage positive health behaviours that are appropriate for the current social conditions. In order to develop positive behaviours, promote and sustain individual, community, and societal behaviour change, and maintain appropriate behaviours, behaviour modification counselling (BCC) is an interactive process that works with communities (as part of a larger program) to develop customized messages and approaches using a variety of communication channels.

Waste Disposal

Waste disposal is described as how waste products such as leathers, leftover food, tins, clothing materials, papers, faeces among others are disposed or discarded. Abila and Kantola (2017) suggested that urban solid waste ought to be rightly disposed using several methods like landfill, incineration, composting and anaerobic digestion and recycling. Despite this suggestion, careless waste product disposal and disorderly consumption result in indiscriminate waste disposal and mismanagement (Brunner & Rechberger, 2014). This means that there is urgent need for attitudinal change regarding waste disposal in the society and AMAC is not an exception.

In this submission, Ghiani et al. (2014) averred that maintaining proper solid waste management organization is now crucial for protecting the ecosystem. This becomes a problem to the community or locale where it is been disposed as a result of poor disposal. This validates the report of Naphtali and Vimtim (2016); Opara et al. (2016); Opara and Uwakwe (2016) that most people dispose their solid waste in any open space which contribute to the improper management of waste. The implication is Nigerians have poor waste disposal culture and there is need for attitude change.

The argument above contradicts the position of Ruth (2016) that poor waste disposal is is characterized by inadequacy of dumpsites in urban regions, distance of the dumpsites from human habited regions, inadequacy of strong waste offerings, weak point of nearby government establishments, increased population and speedy urban boom, availability of open area, terrible human mind-set, less regards for environmental laws and rules and less situation for the spheres of the ecosystems.

However, waste management (or waste disposal) are the activities and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment, and disposal of waste, together with the regulation of the waste management process (United Nations Statistics Division Environment, 2017). Unfortunately, most waste in Africa is not collected by municipal collection systems because of poor management, fiscal irresponsibility, equipment failure, or inadequate waste management budgets (Opara et al., 2016). In essence, poor waste disposal in Nigeria calls for attitude change to enhance a safe and clean environment.

Literature Review

This section of the study reviewed the literature related to the study. The review is based on thematic analysis.

Overview of Social and Behaviour Change Communication

Social and behaviour change communication (SBCC) has emerged as a vital strategy in addressing environmental issues, including waste management (Maji et al., 2020). This means that social and behaviour change communication came about as a strategy to address environmental issues. aims to influence individuals' behaviours and attitudes towards environmental issues, promoting sustainable practices such as energy conservation and water conservation (Adeleke et al., 2021). It is a deliberate effort or campaign used to modify behaviours of humans towards positive growth and development.

The social and behaviour change communication framework consists of four stages:

i. Situational analysis: This stage involves gathering and analysing data to understand the target audience's beliefs, attitudes, and behaviours (USAID, 2019). This will help to disseminate adequate message to the right audience

ii. Planning and strategy: This stage involves developing a communication strategy to achieve the desired behaviour change (HC3, 2020). Planning is mapping out the nitty-gritty of all factors or agents needed to carry out necessary campaign.

iii. Message and material development: This stage involves creating messages and materials that are tailored to the target audience's needs and preferences (Adhikari, 2019).

iv. Evaluation: This stage involves assessing the effectiveness of the SBCC intervention (USAID, 2019). Without proper evaluation, the impacts of any programme cannot be measured.

Social and behaviour change communication is essential for promoting environmental sustainability and addressing environmental menaces such as improper waste disposal (McKinnon et al., 2016). The implication is that this strategy can be used to promote behaviour change and encourage individuals to adopt sustainable practices towards effective environment sustainability and proper waste disposal with a view to enhance environment safety and cleanliness.

Importance of Social and Behaviour Change Communication in Combating Environmental Menaces

Environmental Sustainability is the broadening of our understanding of human activity to highlight its relationship with the environmental theory of interdependence. The idea of environmental sustainability can be seen as a way to improve on a particular facet of the generally recognized definition of sustainable development. To improve environmental wellbeing and fairness, the attitudes of humans must change and rightly positioned towards environmental, societal, national and global development.

The direct goal of behaviour change communication is behaviour modification. Scholars like Ngigi and Busolo (2018) posited that behaviour change communication can take several forms in order to persuade people or a group of people to alter their behaviour in response to a particular issue. This simply means that social and behaviour change communication is concerned with attitude and behaviour change among the people.

In the same vein, Wagle (2019) described behaviour change communication is important because it motivates a person or a group to alter their behaviour. The aforementioned suggests that the purpose of behaviour change communication is to persuade individuals to modify harmful behaviours or change their own behaviour. This is accurate in that behaviour change communication. He further argued that SBCC is a useful strategy for fostering shifts in norms, attitudes, knowledge, behaviours, and beliefs. This shows that behaviours command actions and in return pose results.

SBCC can help militate against bad behaviours considering some changes as posed by Open Learn Create. Firstly, the Pre-awareness Stage where people are unaware of the changes they must make. As a result, the individual exhibiting such unpleasant behaviour might not have realized there was anything wrong with it at the time. At this point, the behaviour changes communicator needs to fill his audience in on all the necessary details in an effort to influence their behaviour. The audience was unaware of the necessity or significance of change prior to this point. The necessity or significance of change should be emphasized in messages at this point. At this point, information is used to show the audience how important or necessary change is. It's the initial.

The second is Awareness Stage. In this stage, the audience is aware of the necessity or significance of change, but they still require more support and encouragement to begin making the necessary changes. This indicates that although they are aware that something needs to change, the public is still undecided. At this point, the message should centre on persuasion, and changing behaviour is the best way to accomplish this. A communicator can employ appeals that best serve his objectives. Here, one can entice the audience to want to

change by using persuasive communication. Here, the communicator might convince the listeners that by participating in bad habits, he or she is destroying the future for their offspring and future generations.

Furthermore; Stage of Contemplation entails when the audience is considering changing their behaviour, but they still require additional knowledge, on-going encouragement, and persuasion regarding the benefits and drawbacks of doing so. At this point, the communicator must highlight the benefits of change as well as the drawbacks of staying the same. In order to help the audience deal with the change they are considering, the communicator must provide them with advice. This demonstrates that the communicator is aware of the circumstances of the audience. At this point, the communicator must once more offer additional details regarding the significance of change. The fourth stage is the Stage of Intention where the audience is aware of the benefits and drawbacks of altering their behaviour, but they are unsure of how to make the change. It is the communicator's responsibility to assist the audience in removing obstacles to the adoption of new behaviours.

Fifth state includes - The Trial Stage where individual or audience has attempted the new behaviour at this point, but difficulties have been encountered. Additionally, the communicator must support the reinforcement of strategies for averting problems. Counselling is necessary for such citizens to get through their challenges.

Sixth stage is the Adoption Stage. At this stage the audience is now acting out the new behaviour. At this point, audiences need dialogue to support the changes they have made and to encourage their behaviour. Here, the communicator must go into further detail on the advantages of change, as well as inspire and thank the audiences and underline the necessity of change in order for it to be maintained.

Seventh stage is Maintenance Stage. At this point, the individual has altered his behaviour and is aware of its advantages. Right now, all that is required of the communicator or change agent is to provide the people with assistance so they can deal with any challenges that may arise.

Lastly, notifying others Stage is when the new behaviour has been practiced for so long that it has become second nature to the individual. At this point, the person has to spread the word about the advantages of the new behaviour to others since he is so persuaded of it. At this point, the person needs to hear nothing but praise.

Research Methodology

This study employed a quantitative research design to assess the effectiveness of Social and Behavior Change Communication (SBCC) in reducing indiscriminate waste disposal in Abuja Municipal Area Council (AMAC). The study was conducted in AMAC, FCT, Abuja, Nigeria, with a population of 1,693,400 residents as of 2022 (National Population Commission, 2022). A sample size of 400 respondents was selected using Yamane's formula (Yamane, 1967), which is suitable for calculating sample size. Stratified random sampling was used to select the sample size, and simple random sampling was used to distribute questionnaires within households, markets, and motor parks in populated and affected areas.

Furthermore; a structured questionnaire was used to collect data from respondents. The questionnaire was designed to assess the effectiveness of SBCC in reducing indiscriminate waste disposal. Questionnaires were distributed in Abuja Municipal Area Council, specifically in Nyanya and Karu areas. In every one of the layer, (200) women and (200) men were inspected. Also, a simple frequency table, simple percentages and footnotes are used to collate and analyse the responses from the questionnaires distributed.

Data presentation and Analysis

This section of the study focuses on the presentation and analysis of data obtained from the field survey.

Table 1: Awareness of waste disposal schemes

Response	Frequency	Percentage
Not aware at all	105	26.25%
Somewhat unaware	75	18.75%
Neutral	80	20%
Somewhat aware	65	16.25%
Very aware	75	18.75%
Total:	**400**	**100%**

Source: Field survey, 2024

Data in table 1 revealed that 180 (45%) of respondents are unaware, 80 (20%) respondents were neutral while 140 (35%) are somewhat aware and very aware of the implementation of SBCC of waste disposal schemes in AMAC. This implies that respondents are unaware of waste disposal scheme in AMAC as revealed by 180 (45%) of the entire respondents.

Table 2: Sources of information on waste disposal

Sources of Information	Frequency	Percentage
Radio	100	25%
Television Programme	70	17.5%
Social media	170	42.5%
Posters/Fliers	30	7.5%
Government Campaign/messages	30	7.5%
Total:	**400**	**100%**

Source: Field survey, 2024

Data evidence in table 2 revealed that social media is the most common source of information on waste disposal as affirmed by 170 (42.5%) respondents. 100 (25%) respondents listen to radio, 17.5% watch television, 30 (7.5%) respondents depend on posters/fliers and campaign messages respectively.

Effectiveness of Information	Frequency	Percentage
Not effective at all	175	43.75%
Somewhat ineffective	50	12.5%

Neutral	55	13.75%
Somewhat effective	50	12.5%
Very effective	70	17.5%
Total:	**400**	**100%**

Table 3: Effectiveness of information on waste disposal

Source: Field survey, 2024

Data in table 3 revealed that 175 (43.7%) affirmed that information on waste disposal is not effective, 120 (30%) of respondents find the information on waste disposal somewhat or very effective while, 225 (56.25%) respondents find it ineffective and 13.73% stood neutral. The implication is that information waste disposal is not effective as affirmed by 175 (43.7%) of the entire respondents.

Table 4: Practice of proper waste separation

Responses	**Frequency**	**Percentage**
Never	300	75%
Rarely	-	0%
Sometimes	100	25%
Often	-	0%
Always	-	0%
Total:	**400%**	**100%**

Source: Field survey, 2024

Data in table 4 revealed that 300 (75%) of respondents affirmed that proper waste separation or disposal is not practiced often or always while 100 (25%) respondents affirmed that it is sometime practised. This implies that proper waste disposal is not practised in Abuja as affirmed by 300 (75%0) of the entire respondents.

Table 5: Challenges in practicing proper waste disposal

Challenges	**Frequency**	**Percentage**
Lack of infrastructure	100	25%
Lack of awareness	150	37.5%
Lack of enforcement	100	25%
Financial constraint	50	12.5%
Other	0	0%

Total:	**400**	**100%**

Source: Field survey, 2024

Data in table 5 revealed that lack of awareness is the most common challenge faced in practicing proper waste disposal as affirmed by 150 (37.5%) of respondents. 100 (25%) respondents say lack of infrastructure and lack of enforcement while 50 (12.5%) owe the challenge to financial constraint. The implication is that the most common challenge of practising proper waste disposal is lack of awareness as affirmed by 150 (37%) of the entire respondents.

Table 6: Motivation to practice proper waste disposal

Challenges	**Frequency**	**Percentage**
Not motivated at all	110	27.5%
Somewhat unmotivated	80	20%
Neutral	70	17.5%
Somewhat motivated	80	20%
Very motivated	60	15%
Total:	**400**	**100%**

Source: Field survey, 2024

Data in table 6 revealed that 110 (27%) respondents are not motivated at all to practice waste disposal. 80 (20%) are somewhat unmotivated, 70 (17.5%) were neutral while 60 (15%) are very much motivated to practice waste disposal. This implies that respondents are not motivated to practice proper waste disposal in AMAC as affirmed by 110 (27%) of the entire respondents.

Table 7: Ways for effective social and behaviour change communication

Strategies	**Frequency**	**Percentage**
Community engagement and education	100	25%
Collaboration with local authorities	50	12.5%
Collaboration with NGOs	40	10%
Addressing infrastructure gaps	60	15%
Social media campaigns	150	37.5%
Total:	**400**	**100%**

Source: Field survey, 2024

Data in table 7 sought to find out effective ways for social and behaviour change communication. 100 (25%) affirmed community engagement and education, 50 (12%) affirmed

collaboration with local authorities, 40 (10%) affirmed collaboration with NGOs, 60 (15%) affirmed addressing infrastructure gaps while 150 (37.5%) respondents affirmed social media campaigns. The implication is that the social media campaigns is most effective ways for social and behaviour change communication as affirmed by 150 (37%) of the entire respondents.

Discussion of Findings

This section of the study is devoted to the discussion of findings. The findings are discussed in line with the objectives of the study, the theoretical underpinning and the general literature reviewed.

The first objective was to assess the extent of SBCC usage in addressing environmental issues in AMAC. In response to this objective, data evidence in table 2&3 revealed that SBCC has been partially moderately effective in addressing environmental issues in AMAC, with 140 (35%) respondents somewhat or very aware of SBCC waste disposal schemes. This finding is consistent with Arogyakeralom, 2020; McKinnon et al., 2016 submission that SBCC have shown to be an effective approach in promoting environmental.

The second objective was to evaluate the effects of SBCC on residents' behaviour regarding waste disposal. Data in table 4 revealed that SBCC has had a limited impact on residents' behaviour regarding waste disposal as 300 (75%) respondents affirmed never practicing proper waste separation. This finding is in consonance with previous studies by Ngigi & Busolo, 2018; Adeleke et al. (2021). that have shown that SBCC may not be enough to change behaviour, and that other factors such as infrastructure and enforcement are also necessary

Furthermore, the third objective was to identifying challenges associated with SBCC in waste disposal and management. The study identifies several challenges associated with SBCC in waste management, including lack of awareness lack of infrastructure, lack of enforcement, and financial constraints as presented in Table 6. These findings are consistent with previous studies by Muturi, 2023; Kabir et al. (2022).that have identified similar challenges in implementing SBCC programs

Finally, the study was conducted to provide recommendations for an effective SBCC strategy by the residents of AMAC. Data evidence revealed that awareness and education on proper waste disposal practices through social media campaigns and community engagement. This is amplified by Okocha et al. (2023) that communication on social media encourages interaction and engenders a sense of belonging thereby enhancing motivation and dedication towards accepting and achieving corporate objectives.

Conclusion and recommendation

In conclusion, social and behaviour change communication is significant in addressing the pressing environmental issue of indiscriminate waste disposal in AMAC, Nigeria. While SBCC has demonstrated moderate effectiveness in promoting positive behaviour change. Awareness campaigns and the use of effective channel of communication in the subject matter are key in achieving this. The findings highlight the need for a comprehensive and multi-faceted approach that addresses the complex interplay of factors influencing waste disposal behaviours among residents of AMAC. By leveraging the strengths of SBCC and addressing its limitations, it is possible to create a transformative impact on waste disposal practices in Abuja Municipal Area Council.

To optimize the impact of SBCC on waste disposal practices in AMAC, the following recommendations are made:

i. The government of AMAC is to design and implement targeted SBCC campaigns that address specific behavioural determinants and community concerns, utilizing a range of communication channels and strategies to reach diverse audiences.

ii. The AMAC government is to foster multi-stakeholder collaborations between local authorities, NGOs, private sector organizations, and community groups to address infrastructure gaps, enhance enforcement, and promote collective action and shared responsibility for waste management.

iii. The government of Abuja Municipal Area Council is to introduce incentives and rewards to motivate residents to adopt proper waste disposal practices, such as discounts on waste management services, community recognition, or economic benefits.

iv. Abuja Municipal Authority is to establish a robust monitoring and evaluation framework to track SBCC effectiveness, identify areas for improvement, and inform adaptive management and program refinement. Also, integrate SBCC with other interventions, such as infrastructure development, policy changes, community engagement, and education, to achieve sustainable behaviour change and environmental impact, and to address the complex and interconnected factors driving waste disposal behaviours.

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