DISASTER PREPAREDNESS AND RESPONSE CAPACITY TO INCIDENTS OF FIRE AMONG RESIDENTIAL BUILDINGS IN SELECTED AREAS IN LAGOS AND AKWA-IBOM

ABSTRACT

Background: In Nigeria, fire incidents have grown to be a recurring issue. As such, its occurrence has been a key cause for concern for built environment stakeholders. The devastation brought forth by a fire disaster is multifaceted and can have effects that are just as intricate as the economy.

Research Objective: The study evaluated residential building disaster preparedness and firefighting capability in selected areas of Lagos and Akwa-Ibom State.

Methodology: The current research methodology was based on the research onion framework developed. The research philosophy, research approach, research strategy, methodological choice, time horizon, and technique/procedure layer are the six levels that make up the framework. The methodology chosen includes the positivist philosophy, the deductive approach, survey research technique, and quantitative research. Because of the nature of the research and the time constraints, the cross-sectional temporal horizon was chosen in this study. Convenience was used in the selection of a sample size of one hundred and fifty (150) people from both Lagos and Akwa-Ibom. A well-structured self-administered questionnaire was used to gather the data. The goodness-of-fit of the sociodemographic variables was tested using Chi-Square. For descriptive statistical analysis, the mean and median (cut-off point) were employed, whereas linear correlation was employed for testing hypotheses**.**

Result: There is no positive correlation between knowledge and attitude regarding fire disaster preparedness. Respondents have a good attitude toward fire events and fire safety; participants were unprepared for a fire disaster in terms of available and installed fire safety equipment, materials, and escape plan. The study recommended that the Nigerian government should first mandate all households to install certain firefighting equipment in their homes in order to ensure that individuals are equipped to combat fire.

Keywords: Emergency Preparedness, Response Capacity, Fire Disaster and Residential Buildings**.**

Introduction

The ability and understanding that governments, professional response groups, communities, and people have established to foresee and successfully respond to the consequences of likely, imminent, or current hazard events or situations is known as disaster preparedness. A disaster can be any incident, whether man-made or natural, that results in damage that cannot be repaired without help (Mukhwana et al., 2017). Even though readiness levels can be raised, natural disasters can still occur (Coppola, 2015). In contrast to natural disasters, there is a good chance that communities will be able to respond to harm brought on by human activity. However, being unprepared could put lives at danger and prevent damages from being recovered[56-58]. Burning is the process known as fire, or combustion for short(Koka et al., 2018). A material mixes with

oxygen in the air to undergo a chemical reaction that is started by heat and is accompanied by the release of energy in the form of heat. Any building must have a steady supply of heat, fuel, and oxygen to start up fire. As a result, focus needs to be on these three elements: heat energy, combustible material, and the constant and common supply of oxygen from the atmosphere. A fire incident is an unforeseen or unplanned occurrence in the built environment (Obasa et al., 2020). Building fires can originate from a variety of reasons, including human mistake and the usage of malfunctioning electrical appliances. Although fire is a necessary resource for human survival, it can be dangerous when it erupts in unneeded places. The devastation brought forth by a fire disaster is multifaceted and can have effects that are just as intricate as the economy.Abdulsalam et al. (2016) state that when the population grows, there is a corresponding rise in fire incidents in a variety of situations that appear to be directly related to human negligence, such as unauthorized electrical connections, house fire use, and fuel storage, among other things. The devastation brought forth by a fire disaster is multifaceted and can have effects that are just as intricate as the economy. IFSEC (2023) states that fire causes are constantly changing. In the past and in many cases even now, electric blankets, space heaters, malfunctioning white goods, and culinary equipment have been major causes of fires. But it seems that lithium-ion batteries are posing a novel and worrisome risk to the fire industry. Fire tragedies result in many fatalities, serious injuries, and significant property damage to homes and businesses. Adekunle et al. (2018) state that the earliest recorded fire disaster was in 587 B.C., when the city of Jerusalem and its temple were completely destroyed by fire. Both lives and property were lost as a result of the unfortunate event. Another notable fire episode from 1906 is the earthquake and fire in San Francisco. No other modern imperial metropolis has suffered such total destruction in history. The episode involving the fire destroyed San Francisco.According to Mukhwana et al. (2017), the United States and Canada have the greatest fire-related mortality tolls worldwide, with fatality rates typically two to four times higher than those of Europe. According to Coppola (2015), the US has one of the highest per capita fire loss rates. Almost every Sub-Saharan nation in Africa has had a fire disaster, severely impacting a number of important economic sectors (Mukhwana et al., 2017). These fires could be brought on by man-made disasters, such as carelessness or mistakes, or by natural forces known as "natural disasters." According to Mukhwana et al. (2017), fire damage, like the majority of other natural disasters, is typically made worse by human activity; as a result, natural fire threats frequently become disasters as a result of human acts or inactions. The majority of man-made calamities, including fire outbreaks, are brought on by human activity, while they can be avoided or managed (Coppola, 2015). The frequency of fires breaking out in commercial buildings has grown to be a serious risk to the security of building owners, inhabitants, and properties therein, especially in areas where flammable materials are frequently employed. As such, its occurrence has been a key cause for concern for built environment stakeholders. In Nigeria, fire incidents have grown to be a recurring issue. This is concerning, for sure. Fires are often started by a single fuel source. A smoke plume carries the smoke from the burning object and gathers in the top part of the room as a layer. The fire's heat is also carried into the smoke layer by the smoke plume, raising the temperature and depth of the smoke layer. The majority of the events have been attributed to dry weather; other contributing factors to fire outbreaks include the storage of gasoline in homes and marketplaces, tainted fuel, power surges, electric sparks, irresponsible cigarette stub disposal, and unauthorized electricity connections. A fire incident was reported by Lawal (2024) in the Mandilas building located on Broad Street, Lagos Island. While no lives were lost, millions of dollars' worth of assets were reportedly destroyed.Residential buildings

must be protected from fires since they are vital infrastructure that affects people's lives. When dealing with fire crises, understanding how to use installed facilities is crucial. If not, ignorance may make it difficult to avoid fire threats and may hinder efforts to stop the development of fires in their early stages, rendering their installations useless (Obasa et al., 2020). On Christmas Eve, a house fire in Uyo, Akwa-Ibom State, claimed the lives of two people. On December 24, 2023, late in the evening, a fire incident took place (Ugwu, 2023). Especially if the persons at danger are sleeping, a home fire can spread quickly and quickly become a life-threatening situation. It is obvious that informing residents of any fire as soon as possible is crucial. Thankfully, household smoke detectors have gotten more affordable and widely accessible in recent years. In an effort to lower the number of fire fatalities, a large number of fire fighters in the state aggressively promote the use of smoke detectors in homes. Based on this background, the study will be assessing the disaster preparedness and response capacity to incidents of fire among residential buildings in selected areas in Lagos and Akwa-Ibom State. To achieve the aim of the study, the study purposes to actualize the following specific research objectives:

1. To assess the fire disaster preparedness of the residents of the selected areas in Lagos and Akwa-Ibom State in terms of available and installed fire safety equipment, materials and escape plan.
2. To examine the knowledge of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness.
3. To investigate the attitudes of the residents of the selected areas in Lagos and Akwa-Ibom to fire event and fire safety.
4. To assess whether there is a positive relationship between knowledge and attitude of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness.

Hypothesis of research

Null Hypothesis(H_0): There is no a positive relationship between knowledge and attitude of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness.

Literature Review

Conceptual Clarification

Disaster Preparedness: According to WHO (2008), disasters are significant disturbances to the regular operations of a community or society that result in extensive losses of people, property, money, and the environment that are more than what the impacted community or society can reasonably recover from on its own. A variety of actions are included in disaster preparedness and response to safeguard people, property, and the environment (Koka et al., 2018). According to Adeleye et al. (2020), having firefighting equipment on hand, residents knowing how to use it, and being aware of the local fire department are all components of being prepared for a fire disaster.

Response Capacity: Emergency capacity according to Anthony et al. (2019), is activity performed in an effort to lessen the impact of dangerous or unexpected events on people or the environment. Emergency response was described by HM Government Emergency Response and Recovery (2023) as including all choices and activities made to address an emergency's immediate effects. It is the choices and acts made in line with the operational, tactical, and

strategic goals established by emergency responders. These will primarily be to safeguard human life, confine and lessen the effects of the emergency, and establish the framework for things to return to normal. In order to be prepared for a fire, a building's occupants must have access to fire extinguishing equipment, such as smoke detectors, fire alarms, sprinklers, and fire extinguishers, as well as the technical know-how to operate the equipment and sound the alarm. The presence of readily accessible fire exits for evacuation in the case of a fire is typically seen as a building's safety signal (Adeleye, 2020).

Incidents of Fire: In the exothermic chemical process of combustion, fire is the quick oxidation of a material that releases heat, light, and a variety of reaction products (Umanah et al., 2018). When flammable and/or combustible materials are exposed to heat sources or ambient temperatures above the fuel's flash point and can sustain a rate of rapid oxidation that triggers a chain reaction, they can catch fire. This can happen when the materials are combined with an adequate amount of an oxidizer, such as oxygen gas or another oxygen-rich compound (Olagbade, 2012). This is referred to as the fire tetrahedron in general. Without oxygen, heat, and fuel in the proper quantities, fire cannot occur.

Residential Buildings: A building is classified as residential if more than half of its floor area is used for habitation. Put differently, a residential building offers sleeping quarters with or without a kitchen or dining area, or both (Meka, 2021). Systems for preventing fires from spreading to other areas of a building and safeguarding the establishment are known as fire protection systems. In order to maintain their functionality, fire protection facilities require continuous maintenance, testing, and inspection (Kironji, 2015). A building's design, construction, and post-construction phases should all take fire safety into account (Kironji, 2015). The location of buildings too close together and with insufficient air circulation, electrical short circuits, malfunctioning fire extinguishers and hydrants, inadequate routes for fire engines, obstacles in the way of firefighters' access, and malfunctioning fire protection equipment, such as APAR and hydrant, are some of the common causes of fire incidents in buildings (Sari and Noorratri, 2023).

Evacuation: In order to escape a life-threatening scenario, evacuation involves exiting a building through designated exits that are always clear from one area of the building to the outside (Olanipekun and Nunayon, 2017). Preserving the lives of the building's occupants is the main objective during evacuation. According to Zhang et al (2019), the following elements affect evacuation: the number of inhabitants, their speed, the evacuation route, the evacuation journey distance, and their density—that is, the number of people per square meter. According to Dube and Orodho (2016), building occupants must be informed of fire disaster preparedness. Unskilled and insufficient knowledge on FDP has led to fire mishaps. When building inhabitants are informed, they recognize hazards and take prompt action to mitigate them, so preventing a catastrophic fire (Zhou, 2017). An essential component in developing readiness is knowledge. Numerous natural disasters teach us the value of disaster information and help us develop the proper mindset while making decisions (Marantika et al., 2021). Additionally, attitudes are shaped by knowledge, which heightens awareness of impending environmental disasters (Lisnasari 2018).

Empirical Review

Fire Disaster Preparedness of the Residents

The level of readiness among inhabitants in Parakin, Ife Central Local Government Area, Osun State, Nigeria, for fire disasters in residential buildings was determined by Valentine and Bolaji (2021). Chi-square tests showed no statistically significant relationship between respondents' age and readiness, house ownership and readiness, education and readiness, or sex and readiness. It has been determined that there is very little fire preparedness. The research area's fire disaster preparedness is extremely low, according to the findings, as evidenced by the respondents' lack of awareness, training, and access to firefighting equipment and facilities. Rathnayake et al (2020) conducted an assessment of the elements that influence building fire incidence globally. A thorough examination of the literature was conducted in order to investigate the behaviour of building fires, fire safety hardware and software measures, models for evaluating the impact of fires, worldwide fire incidents in various buildings, and factors influencing building fire incidents. Factors influencing building fire events were found, including building design elements, refurbishment methods, human behavior, fire rules, policies, and building codes, firefighting gear and tactics, and the perspectives of architects and fire protection engineers. The present level of disaster planning and response capability among Tanzanian regional hospitals was evaluated by(Koka et al., 2018). Between May 2012 and December 2012, this descriptive cross-sectional study was carried out at in all Tanzanian regional hospitals. A systematic questionnaire based on the National Health Sector Emergency Preparedness and Response Tool from the World Health Organization was used to prospectively gather data. In every institution, medical professionals with training performed both direct observations and organized interviews. According to the report, Tanzanian hospitals are not yet well-prepared for disasters, and there are significant chances to improve regional hospitals' readiness. Adeleye et al. (2020) investigated the state of public building fire readiness in the Ibadan Metropolis, Nigeria, in the event of a fire disaster. The overall picture showed that, while administrative, educational, and religious buildings are ill-equipped to handle fire outbreaks, only banks, recreational, and health-related public buildings were adequately prepared in the event of a fire disaster. This was demonstrated by their dedication to providing and maintaining fire safety equipment. The analysis conducted by Chan et al. (2018) showed that knowledge of how to put out electrical fires without using water, unplugging unused appliances, using a fire blanket, and dialing the correct emergency number improved right away following the intervention. Additionally, the respondents demonstrated a 17-month sustained awareness of the fact that fire blankets may put out a fire when applied properly (Chan et al., 2018). The building can be equipped with the newest extinguishing and fire prevention equipment. Assume, however, that residents choose not to heed the warning signals, are ignorant of the preferred behavior model, and lack technical know-how to operate these devices, putting them in even greater risk. Under such circumstances, even cutting-edge technology will be useless and ineffective in a fire (Nyankuru, Omuterema, &Nyandiko, 2017).

Knowledge of Residents on Fire Disaster Preparedness.

In a cross-sectional study conducted byOridota et al. (2015) which evaluated the knowledge and preparedness of individuals for emergency circumstances. A multistage sample procedure was used to choose 395 respondents, who then completed pre-tested semi-structured questionnaires. In general, the bulk of responders practiced inadequate emergency preparedness. The age and educational attainment of the respondents were factors linked to the practice of emergency preparation. The respondents' understanding of and disposition toward disaster preparedness was favorable. In a similar vein, Akanmu and Arokoyo (2023) investigated residents' fire hazard

readiness and response in the council area as well as their awareness of what to do in the event of a fire. According to the study, most respondents did not take the subject of fire safety in the examined area seriously, and as a result, the majority of area council members have very low fire safety knowledge. The outcomes also demonstrated that no bylaw pertaining to fire catastrophe preparedness is inspected by the area council. Ayabei (2016) investigated the level of fire disaster awareness in buildings located in the Nairobi Central Business District. She discovered that while 26.8% of tenants would prefer to yell or scream, call the fire brigade, or take any other available action in the event of a fire, 50.5% of tenants who were never trained in fire safety are also ignorant of how to react in such a situation. In the meantime, Sari and Noorratri (2023) ascertained the connection between Gedongan Village's level of community knowledge and readiness for a fire disaster. A quantitative approach using a correlational study methodology is employed. 3,961 people made up the study's population. The study's bivariate analysis results indicate that there is a substantial correlation between the knowledge and preparedness variables in Gedongan Village, with a p value of 0.000 and a coefficient of 0.771.

Attitudes of the Residents on Fire Event and Fire Safety

Residential building fire safety behaviour was studied by Cvetkovi et al. (2022). The results of the multivariate regression analysis indicated that gender, followed by age, was the most significant predictor of individual preparedness, personal security, and perceptions of fire danger. The findings indicated that the primary reasons people did not take preventive action were because of the costly expense of the equipment, their ignorance of the precise steps to take, their conviction that the emergency services would help them, their lack of time, etc. Nasruddin et al. (2023) used a Knowledge, Attitude, and Practice (KAP) analysis to look at the relationship between the fire risk elements and the total evacuation time. Most of the children knew the fire evacuation protocol inside and out. In actuality, the majority of students can be classified as having only a fair attitude and experience, even though the majority of them thought that attitude and practice were essential to a safe evacuation. While there was a large and strong association between practice and attitude, there was no significant correlation between the knowledge component and either of them. The 2 percent variance in the total evacuation time may be explained by the knowledge gap, even if there was minimal association between the expected and actual numbers. Every additional point of knowledge would result in a 20.52 second reduction in the overall evacuation time. Women frequently feel more susceptible to potential loss and have fewer resources available for the home thus have physical vulnerability and diminished capacity to respond to calamities (Holgersson et al., 2016) which heighten awareness and concern. However, male victims of disasters believed that they were less likely to be life threatening and to result in larger financial losses. According to Fernandez et al. (2018), women are more worried about the possibility of fire endangering their lives. The elderly are most vulnerable because of their limited mobility, quick weariness, disorientation, and low vision or hearing. Furthermore, elderly persons frequently object to evacuation. People who have experienced fire risk scenarios (as victims or firefighters) have a fairly simple assessment of possible fire dangers (Hahm et al., 2016). The efficiency of fire protection measures and the identification of fire dangers, however, did not imply that installing safety devices—which require training to operate—will prevent fires. Oloke (2022) focused on residential buildings when examining the fire disaster that occurred in the Arepo community in Obafemi-Owode Local Government Area of Ogun State. 210 of the neighborhood's adult residents received questionnaires. Tables and charts were used to present the results. Out of the six

segments/objects of fire disasters that had happened in the community, the study discovered that residential fire disasters ranked second. Furthermore, it was noted that the majority of residential housing units in the community are ill-equipped to prevent fires from breaking out within the residential neighborhood, with faulty electrical appliances, negligence, and malfunctioning cooking appliances ranking first, second, and third among the causes of residential fire outbreak in the neighborhood. Joshua et al. (2020) assessed the safety precautions, attitude, and knowledge of cooking gas refill attendants in Zaria, Kaduna State, Nigeria. In January 2019, a cross-sectional study of cooking gas refill attendants was conducted using a checklist and a structured interviewer-administered survey. This population-wide study had 121 participants. While there were some inadequacies, most of the gas station attendants had excellent knowledge, attitudes, and safety protocols in place. Supervision and training are necessary to guarantee the usage of personal protective equipment and the replacement of fire extinguishers that have run out of life. The goal of Salmawati and Pertiwi (2022) is to ascertain how knowledge, attitudes, and behaviours affect the Palu Health Center's ability to manage a fire emergency. 81 workers at Palu City were sampled for the study using an observational and cross-sectional research approach. The findings demonstrated that while action and fire prevention preparedness were correlated at the Palu City Health Center, knowledge and attitude did not correlate with fire prevention preparedness.

Relationship between Knowledge and Attitude on Fire Disaster Preparedness

The effect of gas station employees' awareness level on their behaviour and attitude during a fire emergency was evaluated by Ekong and Ogunbanwo (2023). The research design used in the study was descriptive. Sixty management and non-management employees from five LPG stations in Ikotun, Lagos, made up the sample. Data was gathered through the use of questionnaires. Frequency and percentage are examples of descriptive statistics that were used to analyze the data; Chi Square and bivariate correlation are examples of inferential statistics. The outcome showed what was below: The attitude of gas station employees about emergencies is unrelated to their level of awareness; however, there is a correlation between their level of awareness and their actions in emergency situations.

Study Area: Lagos and Akwa Ibom are the research areas. Nigeria is made up of 36 states, including Akwa Ibom State. It is situated between latitudes 403' and 5032' North and longitudes 7025' and 8030' East in the southeast corner of Nigeria (Essien, 2022). For administrative purposes, the state is divided into 31 Local Government Areas (LGAs), with Uyo serving as the State Capital. The state borders several other states, including Abia state on the western side, Rivers state on the eastern side, Ebonyi state on the northern side, and Cross-River state on the eastern side. There are roughly 3, 920,208 people living in the state, according to the 2006 population census. consisting of the ethnic group Ibibio. 2,734 square miles, or 7,081 square kilometers, make up the state. The state is endowed with natural resources like lignite reserves and offshore oil fields. While they grow cocoa and palm oil as cash crops, the inhabitants in the grow rice, cowpeas, yam, cassava, and maize for subsistence. People benefit economically from deep fishing and from shrimp near the coast. The Oron, Ikot, and Ekpene highway is one of the main thoroughfares in the area.Akwa Ibom has three tiers of health care delivery for its medical services. The primary, secondary, and tertiary are these. Since primary health care (PHC) serves the majority of the grassroots population, it is the most widely dispersed of these three (Essien,

2018). Akwa Ibom's two designated areas were Uyo and Eket Local Government Area. These two were selected because they are the most densely populated locations in the state.

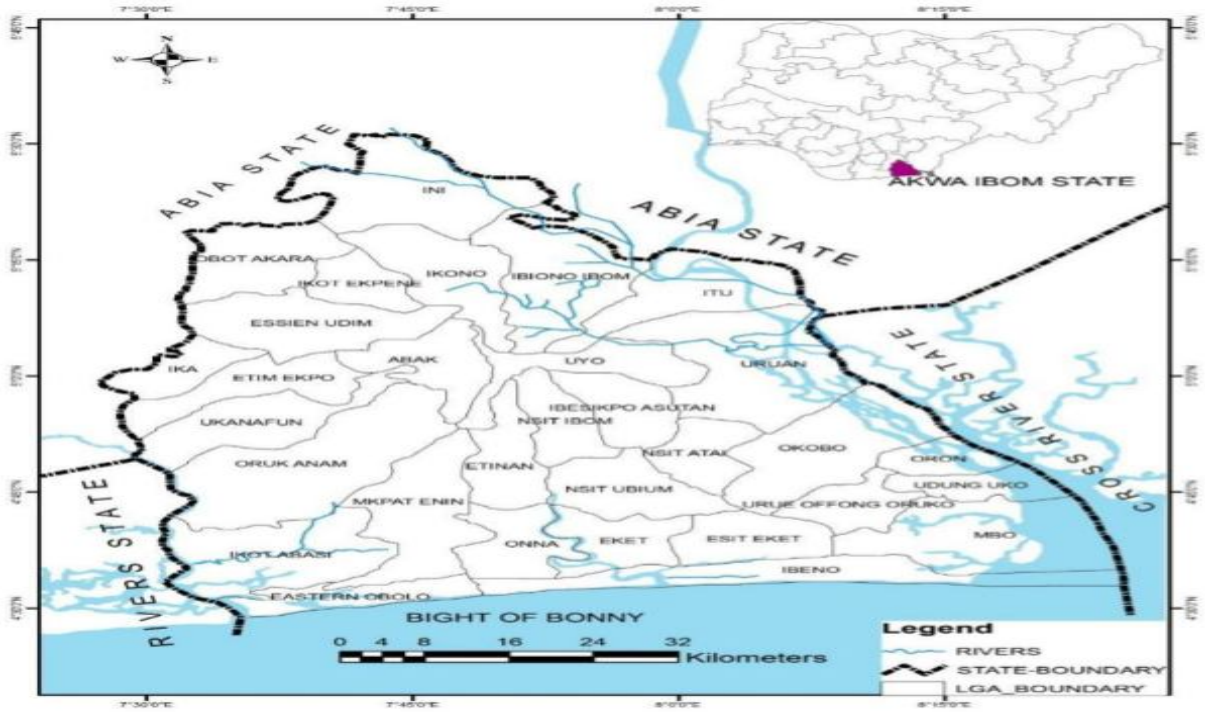

Figure 1a: Showing map of Akwa-Ibom state one of the study areas (Source: Essien, 2022).

Lagos state is located between latitudes 602'N and 604'N and longitudes 2045' E and 4020'E in South Western Nigeria. The Republic of Benin borders the state on the west, Ogun State borders it on the east, and the Atlantic Ocean borders it on the south. With a population of over 21 million, the state spans 3,345 kilometers in total land area. The study area's elevation varied from 38 meters below sea level to 52 meters above sea level. The majority of Lagos State's areas are vulnerable to flooding because many of them are lower than 15 meters above sea level. Wetlands and bodies of water make up more than 40% of the entire region. Lagos is divided into two main areas: The Mainland and the Island.The population of the state has rapidly increased, and urbanization has spread throughout all domains. The Metropolitan Lagos, which includes the developed portions of the state's island and mainland districts, is home to about 80% of Lagos' population. Lagos is thought of as the economic center of Nigeria, contributing the most to the GDP (GDP) of the nation. Lagos is one of the most populated cities in Africa, and its population is increasing quickly. The two areas in Lagos that have been chosen are Alimosho and Ikeja Local Government Area. These two regions were selected in a manner similar to that of Uyo and Eket LGA in Akwa Ibom.

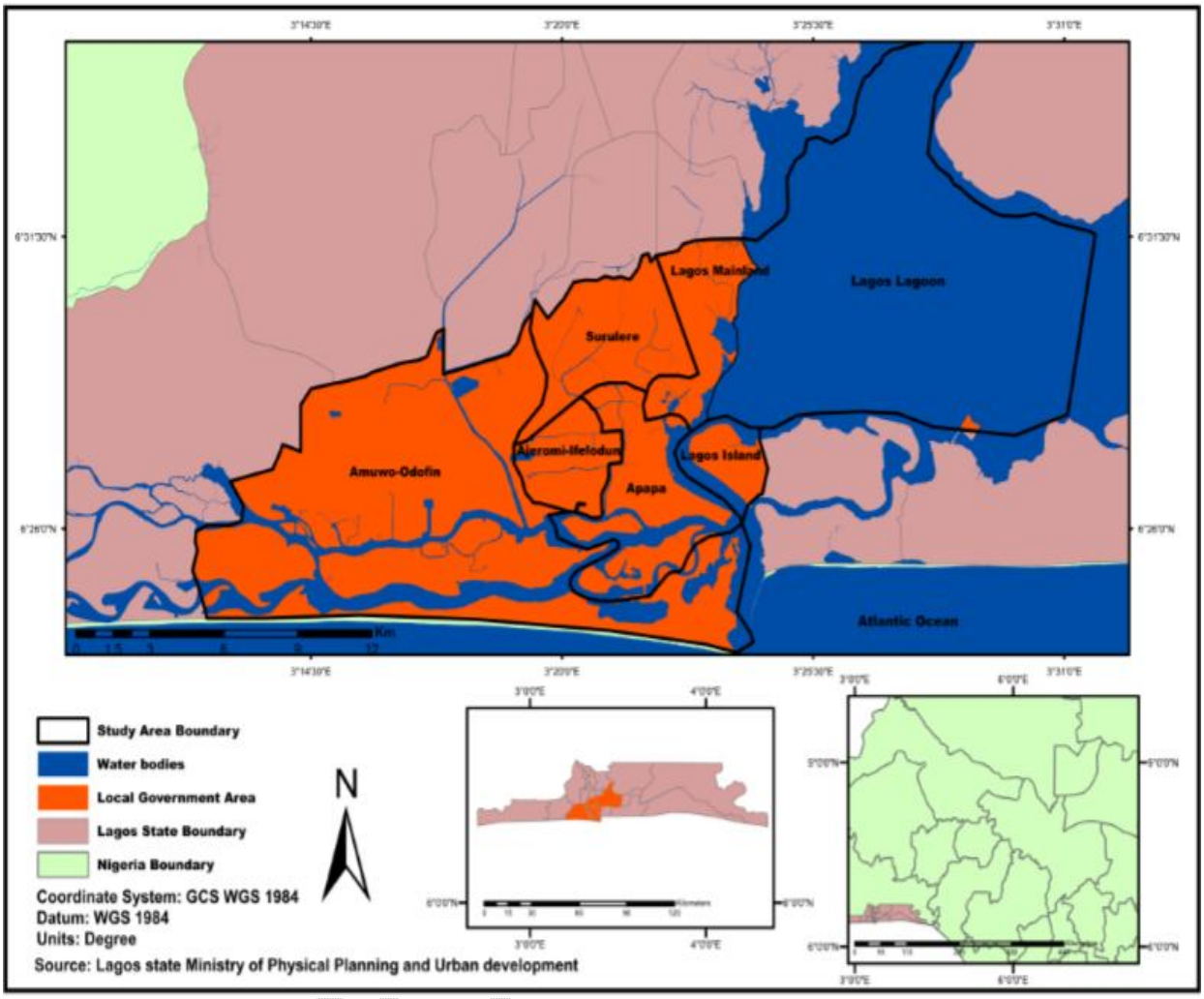

Figure 1b: Showing map of Lagos state one of the study areas

Method

The present research methodology of the study is based on the research onion framework developed by Saunders et al. (2015). The research philosophy, research approach, research strategy, methodological choice, temporal horizon, technique/procedure layer, and methodological choice are the six layers that make up the framework (see figure 2).

Research philosophy

Research philosophy is a framework of presumptions and attitudes regarding the advancement of knowledge. Three potential presumptions can be made in the process of developing knowledge: ontology, which deals with the nature of reality; epistemology, which deals with what constitutes acceptable knowledge; and axiology, which deals with the function of values in the process of developing knowledge. The initial layer of the research onion displays many research philosophies, such as positivism, realism, interpretivism, postmodernism, and pragmatism (refer to figure 2). The purpose of the study is to evaluate residential building disaster preparedness and response capabilities. The scientific approach and observable, quantifiable facts are needed to do

this. Park et al. (2020) claim that positivism uses the hypothetical deductive technique, from which functional links between causal and explanatory factors (independent variables) and outcomes (dependent variables) can be inferred, to evaluate a priori assumptions that are frequently expressed quantitatively. Because positivism is based on the scientific method, employs quantifiable and observable facts, accepts accepted theory for generalizations, and uses numbers to contribute to causal explanation and prediction, it is the philosophy most appropriate for the current study. also because the research has no inherent value. According to positivist philosophy, a researcher maintains an objective attitude while being dispassionate, neutral, and independent of the subject of the inquiry. The positivist ideology is usually deductive, highly structured, and involves large samples and measurement. It also frequently uses quantitative methods of analysis, however it is possible to analyze a variety of data.

Research Approach

The research methodology, which consists of an inductive and deductive approach, is displayed in the second layer of the framework. There are two kinds of reasoning strategies that could result in the acquisition of new knowledge: deductive and inductive reasoning. The deductive approach starts with generalization or a preexisting theoretical framework and looks for ways to apply the theory to particular situations. The deductive approach proceeds top-down, or from the general to the more specific. After gathering the theory and hypothesis, data will be acquired and verified. In contrast to the deductive strategy, the inductive approach follows a bottom-to-top procedure. A theory and hypothesis are put out when a tendency in the data was noticed. The deductive method was used in the current investigation to generate fresh data.

Research Strategy

The fourth layer of the research onions model reflects the research strategy, which comprises surveys, experiments, ethnographies, and other approaches, as shown in Figure 2. Surveying is the most sensible research strategy, given the deductive approach and positivism as the research philosophy.

Methodological choice

The study onion model in figure 2 has three methodological possibilities, as seen in the third layer of the model. They include qualitative, mixed-method, and quantitative techniques (Saunders, Lewis, and Thornhill, 2019). Quantitative approaches measure, analyze, and present data in numerical form, whereas qualitative methods analyze and communicate their findings in textual form. This is the primary difference in their outcomes. The deductive method, survey research strategy, and positivist philosophy are all chosen to work in tandem with quantitative research.

Time Horizon

The researcher should ask themselves this question before determining on a time horizon: "Do I want my research to be a "snapshot" taken at a specific moment, or do I want it to be more comparable to a diary or a succession of snapshots that depict occurrences over a specified period?" suggest Saunders et al. (2019). While the diary shows a longitudinal temporal horizon,

the snapshot depicts a cross-sectional one. Because of the nature of the research and the time constraints, the cross-sectional temporal horizon was chosen in this study.

Research Procedure

Population of the study: The population consists of individuals who resides in either Lagos State and Akwa-Ibom State of Nigeria.

Sampling Technique and Sample Size

The study used non-probability sampling techniques, namely convenience and snowballing sampling, to select 150 residents from both Lagos and Akwa-Ibom for the sample. Accidental sampling, another name for convenience sampling, is a kind of nonprobability or non-random sampling in which study participants who satisfy specific practical requirements—like being easily accessible, living nearby, available at a specific time, or willing to participate—are included in the sample. (Etikan et al. 2016).

Data Collection method, Instrumentations and Completion Rate

The research employed a standardized self-administered questionnaire to perform the survey. The questionnaire was created with the study's goals in mind. Four components made up the questionnaire. While section two was used to evaluate the residents of the chosen areas in Lagos and Akwa-Ibom State in terms of installed and available fire safety equipment, materials, and escape plans, section one was used to gather information about the participants' demographics. Section two also looked at the residents' level of knowledge regarding fire disaster preparedness and their attitudes toward fire safety and fire events. Eight sociodemographic variables make up Section 1, and several possibilities were assigned in accordance with each variable. For instance, there were three choices for gender: male, female, and I'd rather not say. Twelve questions each in sections two and four use both choice and dichotomous scoring systems. One such inquiry is, "Is a working smoke detector installed in your residence?" in section two. The question "How many smoke detectors are installed in your residence?" was constructed with options like Less than 2, 2 - 4, 5 & above, and none (option-based). The options were yes or no (dichotomous). Section three, on the other hand, consists of ten distinct questions with a Likert scale and dichotomous options for measurement. For example, the Likert scale for the second question in section three, "Rate your level of confidence in responding to fire disaster," had the options "Not at all confident," "Not precisely confident," "Fairly confident," and "Precisely confident." A Google form survey was used to distribute and collect data for the study (https://forms.gle/5DChM5P82nZeB6yYA). The permission letter, in which the Google form link was linked, notified participants that submitting the completed form signifies their agreement to participate in the survey. The letter made clear what the intended time for data collection was for three weeks. After the survey ended, twenty-seven incomplete replies were removed from the retrieved Google Excel file containing the collected data, and the 123 valid responses were moved to the IBM 21 Spreadsheet Package Social for Science (SPSS) for analysis. The percentage of returned valid data divided by the disseminated data is known as the completion rate. The unit of measurement is %. The survey had an 82.0% completion rate, according to the result computation. They show an excellent completion rate.

Data Analysis Method

For data analysis and results display, the recovered valid data was uploaded to a Google Excel sheet using SPSS IBM 21. Following that, the data was examined using both descriptive and inferential techniques. Tables and clustered bar charts using frequencies, percentages, averages, and medians (cut-off points) were used to display the information's outcomes. Microsoft Excel 2016 was used to create the clustered bar charts. The goodness-of-fit of the sociodemographic variables was tested using Chi-Square. The best descriptive statistical methods for achieving objectives one through three were determined to be mean and median (cut-off point), and linear correlation was employed for evaluating hypotheses.

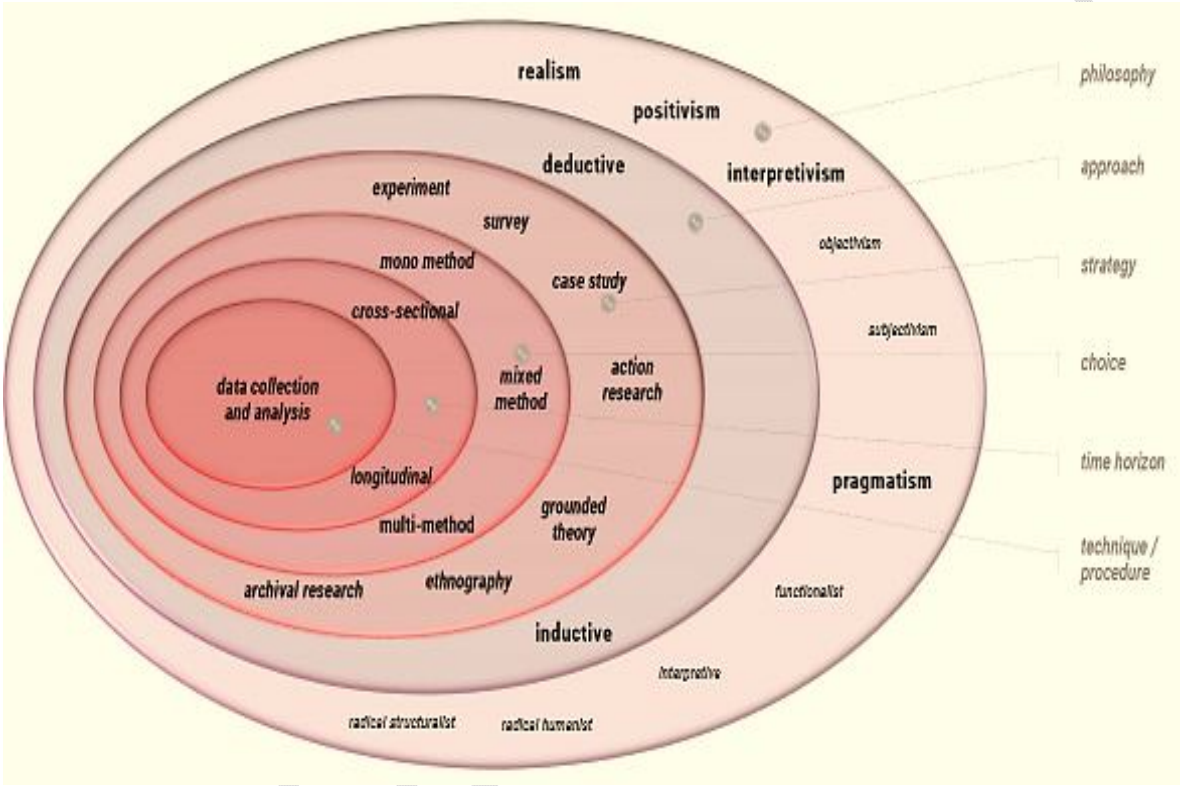

Figure 2: Framework for research methodology (**Source**: Saunders et al. 2015).

Results and Discussion

Results and Data Analysis

Table 1 Showing results of the overall reliability of the study instruments.

Reliability Statistics

Cronbach's Alpha	N of Items
.765	42

Table 1 shows the result of the overall Cronbach Alpha test in order to ascertain the internal consistency of the instruments on questionnaire used for the study. It demonstrates that the

Cronbach Alpha coefficient (α) of the instruments of the forty-two item returns 0.765. According to Taherdoost (2016) there are four cut-off points for reliability, which includes excellent reliability (0.90 and above), high reliability (0.70-0.90), moderate reliability (0.50-0.70) and low reliability (0.50 and below). Based on Taherdoost (2016) cut-off points for reliability, the instruments of the forty-two item have high reliability which indicates high internal consistency.

Sociodemographic Characteristics Information of Respondents

Chi-Square goodness-of-fit test on the demographic variables

Table 2 Chi-Square goodness-of-fit test on the demographic variables

Status variables	Chi-Square	df	Asymp. Sig.	Remark
Gender	21.146[a]	1	0.000	Statistically significant at 95% CL(0.05 S.L).
Age group	97.829[b]	5	0.000	Statistically significant at 95% CL(0.05 SL).
Marital status	80.927[c]	2	0.000	Statistically significant at 95% CL(0.05 SL).
Level of income	113.195[d]	3	0.000	Statistically significant at 95% CL(0.05 SL).
Family Size	49.390[d]	3	0.000	Statistically significant at 95% CL(0.05 SL).
State of residence	45.732[a]	1	0.000	Statistically significant at 95% CL(0.05 SL).

CL –Confidence Level, SL- Significant Level**.**

To be sure that the sample drawn is true representative of the population, Chi square Goodness-of-Fit test was carried out on the demographic variables. Table 2 shows that the Chi Square Goodness-of-Fit test result is significant ($p<0.05$) for gender, age group, Marital status, Level of Income, Family size and State of residence. Since the p-value (0.000) is less than the significance level (0.05), it is accepted that observed differences cannot be due to error. The results of demographic variables such as Religion and Level of Educational were not computed. This may be because all respondents coincidently marked Christianity and Tertiary as Religion and Level of Educational respectively.

Table 3 Showing the result and distribution of the sociodemographic Characteristics Information of Respondents.

Variables	Frequency (F)	Percentage (%)	Mode	Highest Distribution
Total valid responses = 123.				
Level of Educational			4	Tertiary
Tertiary	123	100.0		
Gender			1	Male
Male	87	70.7		

Female	36	29.3		
Age group			3	28 – 37years
Less than 18years	3	2.4		
18 -27years	6	4.9		
28 – 37years	51	41.5		
38 – 47years	36	29.3		
48 – 57years	24	19.5		
58years and above	3	2.4		
Marital status			2	Married
Single	36	29.3		
Married	84	68.3		
Divorced/Separated	3	2.4		
Level of income			3	Medium Income earner
None	15	12.2		
Low income earner	21	17.1		
Medium Income earner	81	65.9		
High income earner	6	4.9		
Family Size			2	3 - 5
Less than 3	33	26.8		
3 – 5	60	48.8		
6 – 8	24	19.5		
9 and above	6	4.9		
Religion			1	Christianity
Christianity	123	100.0		
State of residence				Akwa-Ibom
Lagos	24	19.5	2	
Akwa-Ibom	99	80.5		

Table 3 Shows the result and distribution of the sociodemographic characteristics information of Respondents. It demonstrates that all of the respondents 123(100%) and Mode 4 have had tertiary education. It also shows that majority of the respondents 87(70.7%) were male. Respondents with age group between 28 and 37years had the highest distribution 51(41.5%). The majority of the respondents 84(68.3) were married. The highest distribution of the respondents 81(65.9%) were medium income earners. Majority of the respondents 60(48.8%) had between 3 – 5 family size. All of the respondents 123(100%) were Christian. Highest distribution of the respondents 99(80.5%) resides in Akwa-Ibom.

Fire Disaster Preparedness of the Residents in Terms of Available and Installed Fire Safety Equipments, Materials and Escape Plan.

Table 4 Showing the result of the fire disaster preparedness of the residents in terms of available and installed fire safety equipment, materials and escape plan.

Variables	**Frequency (F)**	**Percentage (%)**
Total valid responses = 123.		

Is a working smoke detector installed in your residence?		
Yes	21	17.1
No	102	82.9
How many smoke detectors are installed in your residence?		
Less than 2	9	7.3
2 – 4	9	7.3
5 and above	9	7.3
None	96	78.0
Do you have the smoke detectors connected to a Central Alarm System(CAS)?		
Yes	12	9.8
No	111	90.2
How regularly do you check your smoke detector(s)?		
Never	21	17.1
Monthly	6	4.9
Quarterly	6	4.9
Annually	6	4.9
Don’t have smoke detector installed in our residence	84	68.3
Is a working fire extinguisher installed in your residence?		
Yes	57	46.3
No	66	53.7
Can you identify the type of fire extinguisher installed in your residence?		
Carbon-dioxide	24	19.5
Foam	6	4.9
Water	3	2.4
Dry chemical.	24	19.5
None	66	53.7
Ever since you installed your fire extinguisher, have you checked it to ensure it is working effectively?		
Yes	45	36.6
No	18	14.6
Don’t have fire extinguisher installed in our residence	60	48.8
How regularly do you check your fire extinguisher?		
Never	12	9.8
Monthly	18	14.6
Quarterly	18	14.6
Every six month	9	7.3
Annually	6	4.9
None	60	48.8
Do you have fire ball readily available in your residence?		
Yes	6	4.9

No	117	95.1
Do you have fire blankets readily available in your residence?		
Yes	21	17.1
No	102	82.9
Is there an emergency escape plan in place among your residents in the events of fire disaster?		
Yes	42	34.1
No	81	65.9
Have you with your residents at any point practiced the emergency escape plan to know it effectiveness?		
Yes	27	22.0
No	96	78.0

Table 4 & 5 shows the result and mode of the fire disaster preparedness of the residents in terms of available and installed fire safety equipment's, materials and escape plan. It demonstrates that majority of the respondents 102(82.9%) and 96(78.0%) had no working smoke detector installed in their residences. Majority of the respondents 111(90.2%) did not have smoke detectors connected to a Central Alarm System(CAS). Majority of the respondents 84(68.3%) do not have smoke detector installed in their residence. Majority of the respondents 66(53.7%) do not have a working and any type of fire extinguisher installed in their residences. Majority of the respondents 60(48.8%) do not have fire extinguisher installed in their residence and consequently don't have to check how effectively they are working. Majority of the respondents 117(95.1%) do not have fireball readily available in their residences. Majority of the respondents 102(82.9%) do not have fire blankets readily available in their residence. Majority of the respondents 81(65.9%) had no emergency escape plan in place among their residents in the events of fire disaster. Majority of the respondents 96(78.0%) have not with their residents at any point practiced the emergency escape plan to know it effectiveness.

Table 5 Showing the mode of questions on fire disaster preparedness of the residents in terms of available and installed fire safety equipment's, materials and escape plan.

Variables	Mode	Remarks
Is a working smoke detector installed in your residence?	2	No
How many smoke detectors are installed in your residence?	4	None
Do you have the smoke detectors connected to a Central Alarm System(CAS)?	2	No
How regularly do you check your smoke detector(s)?	6	Don't have smoke detector installed in our residence
Is a working fire extinguisher installed in your residence?	2	No
Can you identify the type of fire extinguisher installed in your residence?	5	None
Ever since you installed your fire extinguisher, have you checked it to ensure it is working effectively?	3	Don't have fire extinguisher installed in our

		residence
How regularly do you check your fire extinguisher?	6	None
Do you have fire ball readily available in your residence?	2	No
Do you have fire blankets readily available in your residence?	2	No
Is there an emergency escape plan in place among your residents in the events of fire disaster?	2	No
Have you with your residents at any point practiced the emergency escape plan to know it effectiveness?	2	No

Knowledge of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness

Table 6 Showing the result of the knowledge of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness.

Variables	Frequency (F)	Percentage (%)
Total valid responses = 123.		
Have you at any point received fire safety training or education?		
Yes	102	82.9
No	21	17.1
Rate your level of confident in responding to fire disaster.		
Not confident at all	9	7.3
Not precisely confident	3	2.4
Fairly confident	72	58.5
Precisely confident	39	31.7
In the event of fire disaster, what is the first point of action?		
Call the fire service	21	17.1
Attempt to put the fire off	36	29.3
Evacuate the building	63	51.2
Rush inside and gather your belongings	3	2.4
How regularly should you check your fire extinguishers?		
Never	6	4.9
Monthly	51	41.5
Quarterly	33	26.8
Every six month	6	4.9
Annually	3	2.4
I can't say	24	19.5
How regularly should you test your smoke detectors?		
Never	9	7.3
Monthly	42	34.1
Quarterly	27	22.0

Every six month	6	4.9
I can't say	39	31.7
Is staying low to ground while escaping the recommended escape plan in the event of fire outbreak?		
Yes	102	82.9
No	21	17.1
Residential building fire outbreaks is mostly caused by?		
Candles	9	7.3
Electrical surge	54	43.9
Cooking, particularly with gas	60	48.8
How many seconds should it take you to evacuate a burning building?		
Less than 1min	39	31.7
1min	30	24.4
between 2 to 4mins	48	39.0
5mins and above	6	4.9
What is the core reason for fire drill?		
To test fire alarm	12	9.8
To practice and master evacuation procedures	84	68.3
To train on the usage of fire extinguisher	18	14.6
For hazards identification	9	7.3
What is the first point of action when a fire alarm is sounded?		
Call the fire service	12	9.8
Immediately evacuate the building	111	90.2

Table 6& 7shows the result and mode of the knowledge of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness. It demonstrated that Majority of the residents 102(82.9%) agreed to have received fire safety training or education at a point. Majority of the respondents 72(58.5%) were fairly confident to responding to fire disaster. Majority of the respondents 63(51.2%) believe that evacuating the building is the first point of action in the event of fire disaster. Majority of the respondents 51(41.5%) were of the opinion that their fire extinguishers should be checkedMonthly. Majority of the respondents 42(34.1%) were of the opinion that their smoke detectors should be testedMonthly. Majority of the respondents 102(82.9%) believe that staying low to ground while escaping is the recommended escape plan in the event of fire outbreak. Majority of the respondents 60(48.8%) were of the opinion that residential building fire outbreaks is mostly caused by Cooking, particularly with gas. Majority of the respondents 48(39.0%) believe that it should take an individual between 2 to 4minutes to evacuate a burning building. Majority of the participants 84(68.3%) believe that practicing and mastering evacuation procedures is the core reason for fire drill. Highest distribution of the respondents 111(90.2%) thinks immediately evacuating the building is the first point of action when a fire alarm is sounded.

Table 7 Showing the mode of questions on level of knowledge of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness

Variables	Mode	Remarks
Have you at any point received fire safety training or education?	1	Yes
Rate your level of confident in responding to fire disaster	3	Fairly confident
In the event of fire disaster, what is the first point of action?	3	Evacuate the building
How regularly should you check your fire extinguishers?	2	Monthly
How regularly should you test your smoke detectors?	2	Monthly
Is staying low to ground while escaping the recommended escape plan in the event of fire outbreak?	1	Yes
Residential building fire outbreaks is mostly caused by?	4	Candles
How many seconds should it take you to evacuate a burning building?	3	between 2 to 4mins
What is the core reason for fire drill?	2	To practice and master evacuation procedures
What is the first point of action when a fire alarm is sounded?	2	Immediately evacuate the building

The attitudes of the residents of the selected areas in Lagos and Akwa-Ibom to fire event and fire safety

Table 8 Showing the result of the attitudes of the residents of the selected areas in Lagos and Akwa-Ibom to fire event and fire safety.

Variables	Frequency (F)	Percentage (%)
Total valid responses = 123.		
Are you concern about the risk of fire disaster in your residence?		
Yes	99	80.5
No	18	14.6
Maybe	6	4.9
Rate your level of concern		
Not concerned at all	6	4.9
Not precisely concerned	12	9.8
Fairly concerned	48	39.0
Precisely concerned	57	46.3
Fire safety is a shared responsibility among residents?		
TRUE	117	95.1

FALSE	6	4.9
Have you ever thought about fire safety?		
Yes	123	100.0
Are fire safety measures stressful?		
Yes	27	22.0
No	84	68.3
Maybe	12	9.8
Are you probably going to take a step in preparing for fire disaster?		
Yes	123	100.0
In the event of fire disaster in your residence, do you feel prepared?		
Yes	79	64.2
No	26	21.1
Maybe	18	14.6
Do you consider fire safety important to you?		
Yes	101	82.1
No	13	10.6
Maybe	9	7.3
Are you willing to invest your time and financial resources in preparing for fire emergency?		
Yes	111	90.2
No	6	4.9
Maybe	6	4.9
Is fire safety education important to you?		
Yes	123	100.0
Have you at any point ignored fire warning or alarm?		
Yes	6	4.9
No	108	87.8
Maybe	9	7.3
Do you feel a sense of responsibility for the protection of your residence and households from fire?		
Yes	120	97.6
Maybe	3	2.4

Table 8 & 9Shows the result and mode of the attitudes of the residents of the selected areas in Lagos and Akwa-Ibom to fire event and fire safety. It demonstrates that Majority of the respondents 99(80.2%) were concerned about the risk of fire disaster in their residence. Among them, 57(46.3%) which represent the highest number were precisely concerned. A greater number of the respondents 117(95.1%) believe that fire safety is a shared responsibility among residents. All the respondents 123(100%) have had the thought of fire safety at a point in their lifetime. Majority of the respondents 84(68.3%) believed that fire safety measures are not stressful. But a high number of the participants 27(22.0%) were of the opinion that they are indeed stressful. All the respondents 123(100%) believe they will undoubtedly to take a step in preparing for fire disaster. Majority of the respondents 79(64.2%) feel they are prepared should there be a fire disaster in their residents. Majority of the respondents 101(82.1%) considers fire

safety to be important to them. Majority of the respondents 111(90.2%) were willing to invest their time and financial resources in preparation for fire emergency. All the respondents 123(100%) were of the opinion that fire safety education is important to them. Majority of the respondents 108(87.8%) have not ignored fire warning or alarm at any point in their existence. Largest numbers of the respondents 120(97.6%) felt a sense of responsibility for the protection of their residence and households from fire disaster.

Table 9 Showing the mode of questions of the attitudes of the residents of the selected areas in Lagos and Akwa-Ibom to fire event and fire safety.

Variables	Mode	Remarks
Are you concern about the risk of fire disaster in your residence?	1	Yes
Rate your level of concern	4	Precisely concerned
Fire safety is a shared responsibility among residents?	1	TRUE
Have you ever thought about fire safety?	1	Yes
Are fire safety measures stressful?	2	No
Are you probably going to take a step in preparing for fire disaster?	1	Yes
In the event of fire disaster in your residence, do you feel prepared?	1	Yes
Do you consider fire safety important to you?	1	Yes
Are you willing to invest your time and financial resources in preparing for fire emergency?	1	Yes
Is fire safety education important to you?	1	Yes
Have you at any point ignored fire warning or alarm?	2	No
Do you feel a sense of responsibility for the protection of your residence and households from fire?	1	Yes

Data Analysis

The outcomes of the data analysis are displayed in Table 10, Figures 3, 4, and 5. The median scores for the outcomes shown in Figures 3, 4, and 5 are regarded as the respective Means' cut-off points. An outcome is deemed good when the Average Mean exceeds the Average Median, or the cut-off point, and vice versa. The conclusion in Table 10 is predicated on a 0.05 significance level and a 95% confidence level.

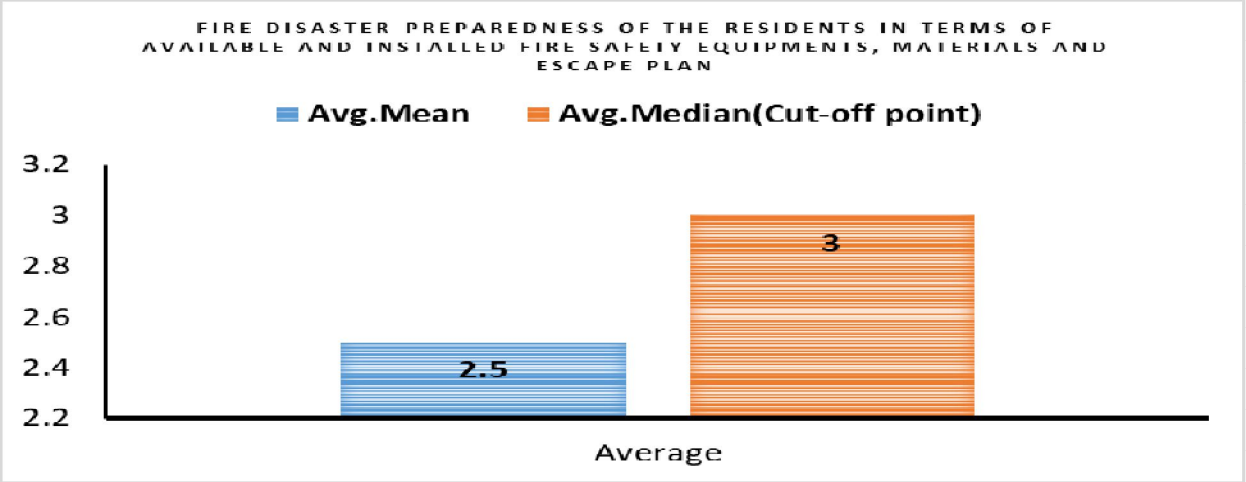

Figure 3 Showing the mean and median result of the fire disaster preparedness of the residents in terms of available and installed fire safety equipments, materials and escape plan.

Figure 3shows the mean and median result of the fire disaster preparedness of the residents in terms of available and installed fire safety equipments, materials and escape plan. It demonstrates that average mean 2.5 is less than the average median. This is an indication that the respondents on the average were not prepared for fire disaster in terms of available and installed fire safety equipments, materials and escape plan.

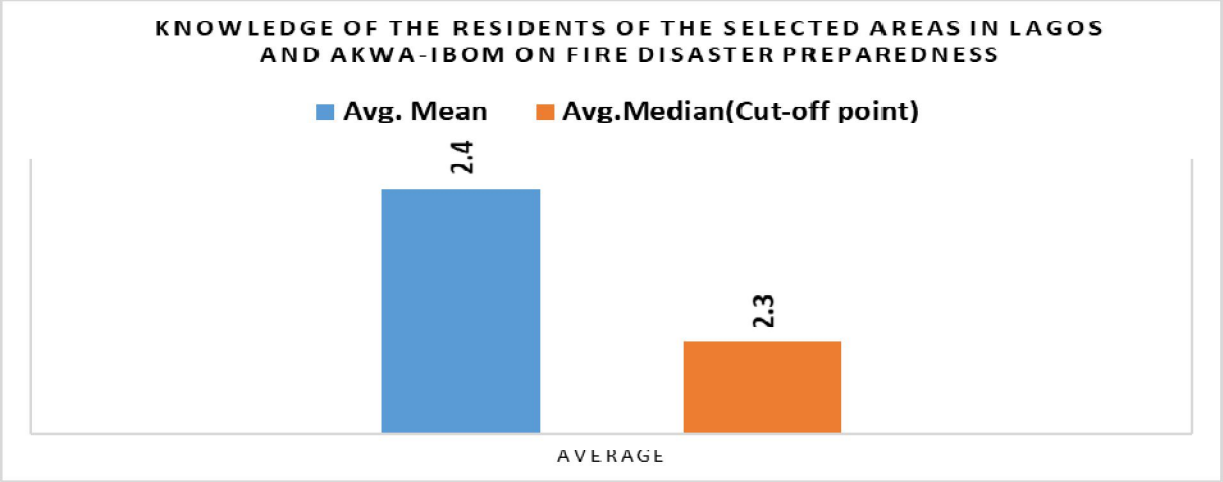

Figure 4 Showing the mean and median result of the knowledge of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness.

Figure 4shows the mean and median result of the knowledge of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness. It demonstrates that the average mean 2.4 is greater than the average median i.e. the cut-off point 2.3. It can therefore be inferred that the respondents of the study have knowledge of fire disaster preparedness.

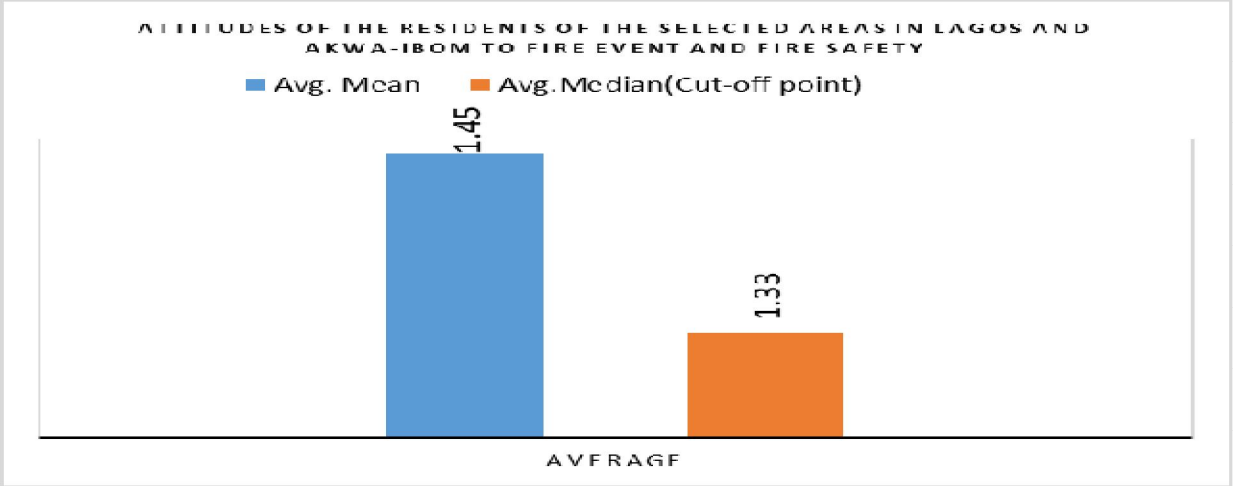

Figure 5 Showing the mean and median result of the attitudes of the residents of the selected areas in Lagos and Akwa-Ibom to fire event and fire safety.

Figure 5Shows the mean and median result of the attitudes of the residents of the selected areas in Lagos and Akwa-Ibom to fire event and fire safety. It demonstrates that the average mean 1.45 is greater than the average median 1.33. This is an indication that the respondents have good attitude towards fire event and fire safety.

There is no a positive relationship between knowledge and attitude of the residents of the selected areas in Lagos and Akwa-Ibom on fire disaster preparedness.

Table 10 Showing result of correlation between knowledge and attitude on fire disaster preparedness.

Correlations

		KNOWLEDGE	ATTITUDE
KNOWLEDGE	Pearson Correlation	1	-.167
	Sig. (2-tailed)		.066
	N	123	123
ATTITUDE	Pearson Correlation	-.167	1
	Sig. (2-tailed)	.066	
	N	123	123

Table 10Showing result of correlation between knowledge and attitude on fire disaster preparedness. It demonstrates that p-value > 0.05, i.e. p-value = 0.066, not statistically significance and correlation coefficient = -0.167. In this case the null hypothesis is not rejected, i.e. it is accepted. This indicates that there is no positive relationship knowledge and attitude on fire disaster preparedness.

Findings

In terms of readily available and installed fire safety equipment, materials, and escape plans, participants were ill-prepared for a fire disaster. The respondents are aware of the need to prepare for fire emergencies. Regarding fire incidents and fire safety, the respondents have a positive opinion. Regarding fire catastrophe readiness, there is no correlation between knowledge and attitude that is favorable.

Discussion of Findings

The investigation revealed the following According to the investigation; responders were unprepared for a fire disaster in terms of installed fire safety equipment, materials, and an escape strategy. The results of this investigation are consistent with those of Valentine and Bolaji (2021), who discovered that the research area has extremely low levels of fire disaster preparedness due to respondents' lack of knowledge, training, and access to firefighting equipment. The focus of this study is on people living in Lagos and Akwa-Ibom, whereas the study by Valentine and Bolaji (2021) was carried out in Osun state. According to Omunagbe et al. (2023), the primary causes of fire disasters in buildings were frequently found to be inadequate maintenance, non-functional fire safety equipment, and inadequate provision. The majority of survey participants had middle-class incomes, which may be the reason why they cannot afford home safety systems and gadgets. In a similar vein, Cvetković (2016) observed that employed citizens have, relative to unemployed citizens, undertaken a higher percentage of preventive measures aimed at lessening the immediate effects of floods, would contribute money to an account to aid flood victims, and would actively assist in providing aid to flood victims.Additionally, the majority of respondents are married, and one reason why they might not be able to afford firefighting facilities is because married people have additional financial obligations, such as paying for school tuition and other costs... Married people are more likely to think about being ready for emergencies, understand the potential consequences of calamities, and know how to follow safety protocols in the event of a flood, such as early evacuation, according to Cvetković (2016b).Conversely, divorced individuals do not take proactive steps to lessen the practical effects of crisis since they are not yet ready.Despite the fact that the majority of research participants have postsecondary degrees, their level of fire preparedness is low.While most study participants believe that everyone has a shared duty for fire safety and will likely take precautions against a fire, the majority of respondents have disregarded fire warnings or alarms... Cooking and heating equipment, smoking materials, children playing with fire, electrical, open flame or ember, and other things are among the contributing elements to fire tragedies (Bejide, 2023). A fire outbreak results in both physical and psychological harm. It was discovered that respondents were aware of fire disaster readiness after looking at (objective two) the level of awareness among the inhabitants of the chosen locations in Lagos and Akwa-Ibom about fire disaster preparedness. This is consistent with the findings of Oridota et al. (2015), who discovered that most Lagos residents had positive attitudes and levels of knowledge regarding emergency preparedness. This could be as a result of Lagos citizens being exposed to information on fire disasters via radio, television, seminars held at their places of employment, etc. The third objective's analysis revealed that the respondents had a positive attitude toward fire incidents and fire safety. This is evident from the majority of respondents who expressed fear about the possibility of a fire tragedy at their home. The majority of respondents' value fire

safety and are prepared to spend money and effort getting ready for a fire. They take heed of fire alarms and take personal responsibility for keeping their home and family safe from flames. The examination of the fourth goal showed that attitudes and knowledge regarding fire catastrophe preparedness are not positively correlated. Corresponding to this result, Ekong and Ogunbanwo (2023) discovered that while there is a relationship between the amount of awareness and the practice of gas station employees in fire emergencies, there is no association between the level of awareness and the attitude of such employees. In contrast to the results of this study, public knowledge and disaster preparedness are related (Suryadi, Zulfan, and Kulsum (2021). Workers may be unprepared even when they are aware of the risks. Building management must have a mechanism for communicating with tenants about their objectives and long-term plans for creating a secure and comfortable work environment (Mohammed, 2019). Building managers and owners must prepare ahead of time for how they will handle a fire emergency (Kelvin, 2014). To assist facility fire safety managers in resolving the majority of pressing fire safety concerns in facilities, an emergency plan is strategically implemented. Rushing to find quick fixes for fire safety problems frequently backfires and defeats the purpose of finding those quick fixes (Alao and Mohmood, 2020; Qureshi, 2018). It is impossible to overstate the impact of a fire; they inflict both bodily and psychological harm. It is unpredictable and poses a threat to people and property. What people witness both during and after a fire breakout frequently has an impact on them. The degree of loss and how terrifying the fire was seem to be the best indicators of post-fire sadness (Bejide, 2023). Every time there is a fire disaster, the affected parties might have to move their family members to a safe location first. Once there, the family has additional challenges, like where to get food, water, clothing, money, and permanent housing in addition to finding an immediate place to live (Bejide, 2023). Kileo, Koda, and Okendo (2021) pointed out that techniques for increasing public awareness of fire disaster preparedness include the use of posters, educational television shows or news, resource materials, fire safety drills, and feedback from fire safety inspections.

Conclusion and Recommendations

The study assessed the disaster preparedness and response capacity to incidents of fire among residential buildings in selected areas in Lagos and Akwa-Ibom State. The study discovered the following:Participants were not prepared for fire disaster in terms of available and installed fire safety equipment, materials and escape plan, Respondents have knowledge of fire disaster preparedness, The respondents have good attitude towards fire event and fire safety; There is no positive relationship between knowledge and attitude on fire disaster preparedness. This implies that although people may have knowledge of the relevance of fire preparedness and have a positive attitude towards fire prevention, they may not be prepared for fire outbreak.

Based on the finding of this study, the following is recommended:

The Nigerian government should develop policies that is channeled to ensuring citizens are prepared for fire by first making it compulsory for every household to have specific fire fighting equipment installed in their houses.

Intervention should be designed by the government to train individuals on how to use fire-fighting equipment and discounts should be given to participants of the intervention for fire fighting equipment purchased during the programme. The intervention should comprise of

simulation and hands on training to demonstrate the practical application of fire safety knowledge.

The intervention should include both hands-on training and simulation to show how fire safety information is applied in real-world situations. The government, safety commissions, and safety professional associations should launch awareness campaigns stressing the value of fire safety planning. It is also important to remove preconceived notions and biases that impede a positive outlook on fire safety preparedness.

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1.

2.

3.

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