



Evaluating Police Awareness and Utilization of Forensic Science in Criminal Investigations: Evidence from the Edo State Police Command, Nigeria.

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Abstract

Forensics can be used interchangeably with forensic science, it is the application of scientific expertise for the resolution of legal disputes, both criminal and civil. The main aim of forensic science is to gather intelligence to enable the judge to credible and logical decisions in the court by means of scientific approach through evaluation of evidence for the administration of justice, and country around the world now considers forensic methodology as the gold standard for criminal investigation. Therefore, the present study assessed the awareness level on the significance of forensics in criminal investigation in Nigeria: a case study of Edo State Police command. The questionnaire comprised of two main categories: Socio-demographic characteristics, and Information on the relevance of forensics in criminal investigation in Nigeria. For the analysis of data collected; the statistical tool used was Statistical Package for Social Sciences, version 22 for windows. The result of the present study revealed that the participants were distributed social demographically as follows; there was an observable higher number of male participants (68%) relative to the female participants (32%), As per age distribution, a larger population of the participants were found to be >40 years of age with 55%, and it was observed that age between 35-39 years ranked the least with 15%. On educational level, the result of the present study revealed that majority of the participants possesses a bachelor's degree as the highest level of educational qualification with 75% from a pool of 100% of participants. The present study further examined responses on the relevance of forensics in criminal investigation, and the result revealed an inadequate level of awareness on the relevance of forensics in criminal investigation. Therefore, the study recommends that the Nigerian Police Force and the Judiciary should collaboration with universities running programs on forensics for trainings.

INTRODUCTION

Forensic science refers to the application of natural, physical, and social sciences to matters of the law. Most forensic scientists hold that investigation begins at the scene, regardless of their associated field (Marasa & Miranda, 2014). The proper investigation, collection, and

preservation of evidence are essential for fact-finding and for ensuring proper evaluation and interpretation of the evidence, whether the evidence is bloodstains, human remains, hard drives, ledgers, and files or medical records (Marasa & Miranda 2014).



Forensic science is a multidisciplinary field drawing principally from chemistry and biology, but also psychology and social sciences. Its relevance in the criminal justice system cannot be overemphasized, as the need to have a crime-free, peaceful, habitable and developed society continually subsists (Ladapo, 2011). The activities of the forensic scientists include; deoxyribonucleic acid (DNA) matching, hair analysis, serology test, fingerprint analysis, blood spatter analysis, crime scene investigation, etc. The main aim of forensic science is to gather intelligence to enable the judge to credible and logical decisions in court by means of scientific approach through evaluation of evidence for the administration of justice (Cardinetti, & Cammarota, 2005).

In a country like Nigeria where the crime rate is on the surge and the government seems helpless because of the sophistication in terms of how such crimes are perpetrated. Experts have linked many cases of unsolved crimes that dot the Nigeria criminal justice system to the absence of forensic evidence. This forensic gap has rendered justice quite protracted and ineffective (Ngboawaji, 2012). In Nigeria, serious crimes such as murder continue to remain unsolved by the criminal justice system due to the gap in forensic science. Nigeria Police Force and other security agencies in Nigeria rely heavily on eye witness testimonies, circumstantial evidence, and confessions where others fail. A combination of two or all of them is a thorough and detailed investigation done as far as they are concerned. Whereas, the most important source of evidence; forensic evidence which is more reliable, authentic, concrete and productive are underutilized (Alisigwe and Oluwafemi, 2019). This is a serious dent on the forensic investigative ability of the Nigerian police and other such security agencies. The identification of murder suspects

is a critical element in forensic investigation (Alisigwe and Oluwafemi, 2019; Alemika & Chukwuma, 2006).

The role of forensic science services in the administration of justice starts at the crime scene with the recognition and recovery of physical evidence. It proceeds with its analysis and the evaluation of the results in a laboratory, and the presentation of the findings to judges, prosecutors, lawyers and others in need of the factual information. From the first responders to the end-users of the information, all personnel involved should have an adequate understanding of the forensic process, the scientific disciplines and the specialized services provided by forensic laboratories (Alisigwe and Oluwafemi, 2019). Forensic science provides multiple options that would help in tracking and apprehending perpetrators of such dastardly acts by agents of the criminal justice system. The role of forensic science is changing from a supporting role to the playmaker in many types of investigation, providing quick, objective and reliable information on crime and suspects (Tjin-A-Tsoi, 2014). Therefore, the present study assessed the awareness level on the significance of forensics in criminal investigation in Nigeria: a case study of Edo State Police command.

MATERIALS AND METHODS

Research Design

The design used in this study is the survey research design. The type of survey design is section survey research design; it collects data immediately from respondent. This design is considered appropriate because all the variables of the study will be observed at a point in time and thereby relatively reducing the cost of the investigation.

Population and Sampling of the Study



The population of this study was the Edo State Police Command. The sample size of this study is a total number of one hundred (100) police officers in Edo State Command drawn from our population for empirical investigation. The sample size is what is considered adequate in order to avoid sampling error in our results. This is on account that we cannot statistically derive our sample size since the finite size of our population is not certain. The sampling method employed in this study is convenience sampling techniques.

Sources of Data

The sources of data employed in this study work include the primary data and secondary sources of data. Primary data sourced from questionnaire was mainly used in this study. Secondary source consisted of textbooks, journals, libraries, magazines and articles.

Validity and Reliability Test

This research study has been validated by my supervisor by reading my work and making corrections and this correction have been implemented. And hence has approved the validation of the study. Data from the primary sources are very reliable. It has been tested over and over again and the same results were obtained which means the information was very reliable.

Statistical analysis

Statistical analysis was conducted using IBM SPSS Version 22 and Microsoft Excel.

RESULTS

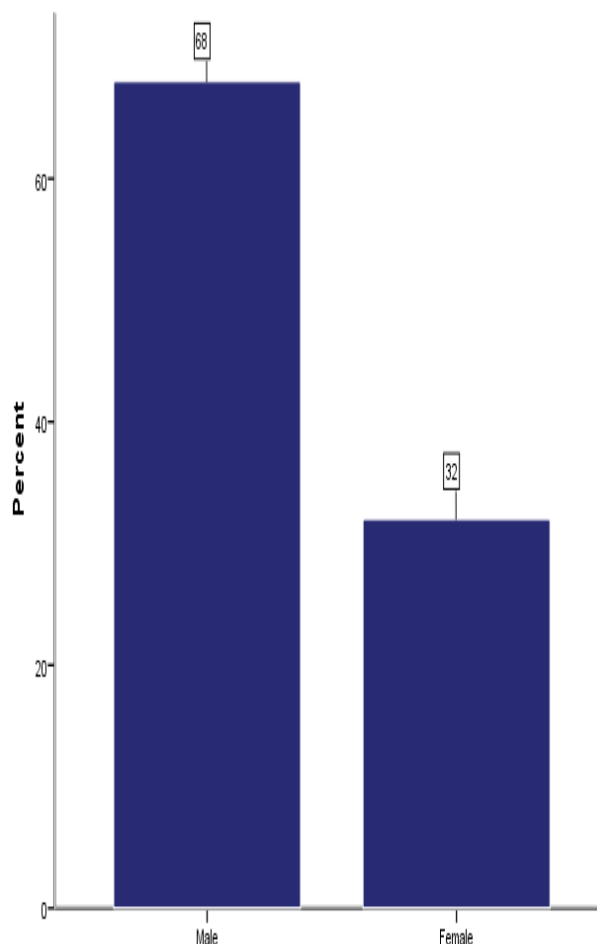


Figure 1: Showing Gender Distribution

The result of the present study on gender distribution, there was an observable higher number of male participants (68%) relative to the female participants (32%).

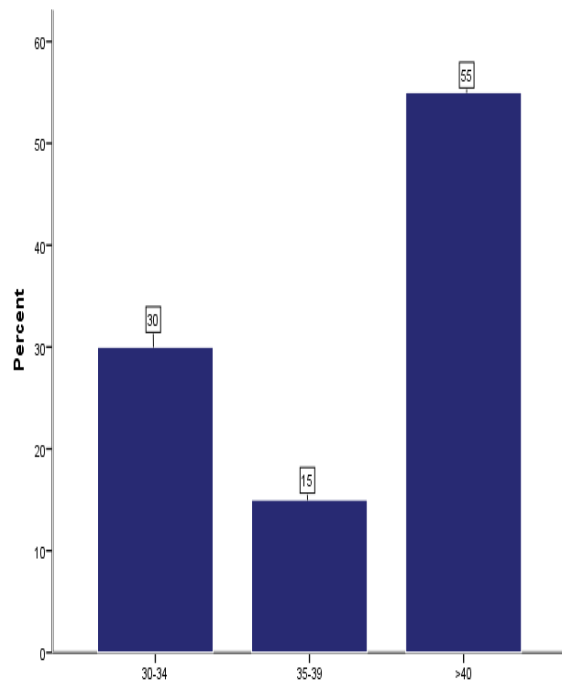


Figure 2: Showing Age Distribution.

The result presented in figure 2 revealed that the >40 years was the predominant age distribution of the participants and the age between 35-39 was observed to be the least.

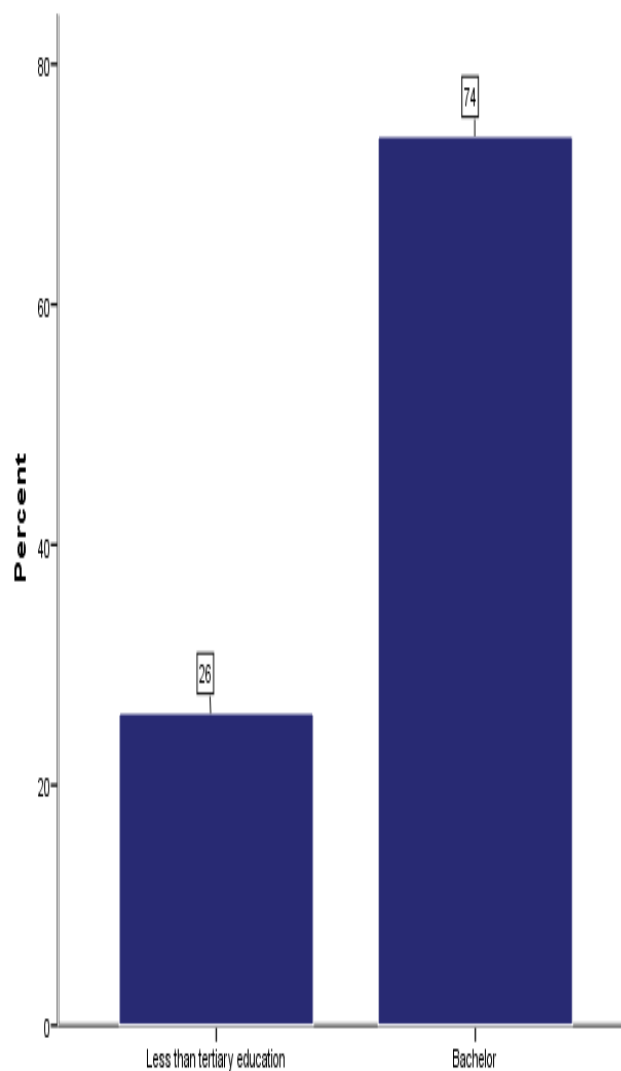


Figure 3: Showing Educational Level

From the total population of one hundred participants, it was observed that a large proportion of the participants had a bachelor degree as the highest academic qualification (77%) and a few others 26% were found to have less than a tertiary educational qualification.

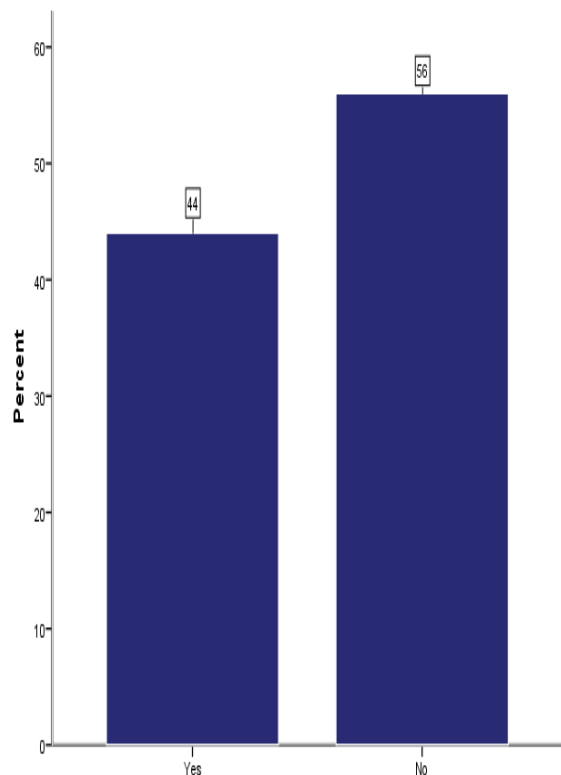


Figure 4: Showing responses on knowledge about forensic sciences

The result on the knowledge of forensics science as demonstrated in figure 4 revealed that, a greater population (56%) of the participants from a pool of 100% had no knowledge about forensics, and only 46% of the population demonstrated adequate knowledge of forensics.

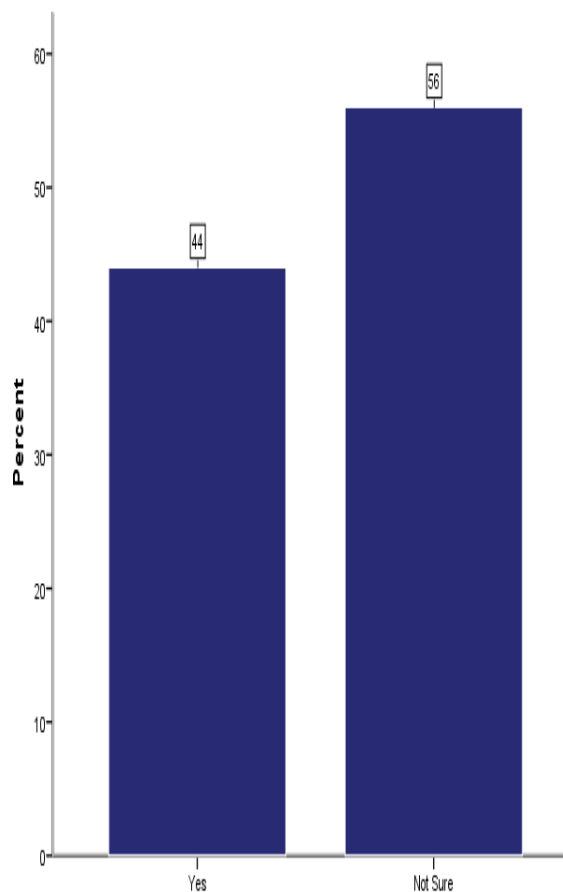


Figure 5: Showing responses on can forensics methodology be used for criminal investigation in Nigeria.

The result on can forensics methodology be used for criminal investigation in Nigeria as shown in figure 5 revealed that, a greater population (56%) of the participants from a pool of 100% were not sure, and only 44% of the population demonstrated adequate knowledge of forensics.

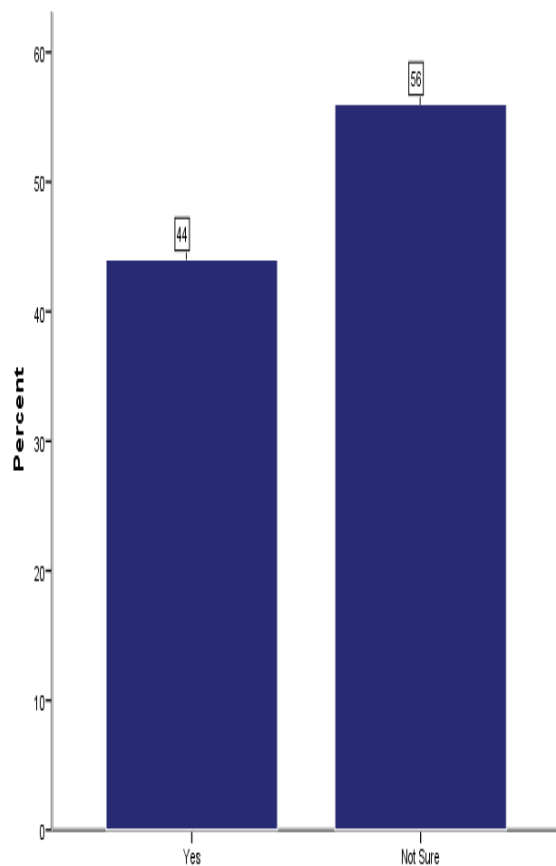


Figure 6: Showing responses on does forensics provide irrefutable evidence for the administration of justice.

The result shown in figure 6 on does forensics provide irrefutable evidence for the administration of justice, a significant proportion of the participants revealed were not sure and a minimal proportion from the pool of total population 44% agreed.

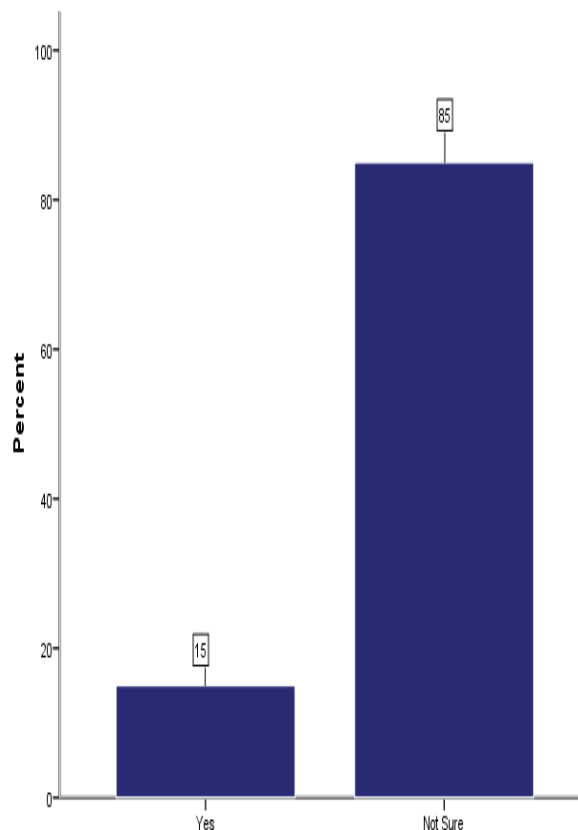


Figure 7: Showing responses on does Nigeria courts accepts forensic evidence

The result as shown in figure 7 on does Nigeria courts accepts forensic evidence, revealed that majority of the participants were not sure and only a little fraction of the population 15% agreed that Nigeria courts accept forensic evidence.

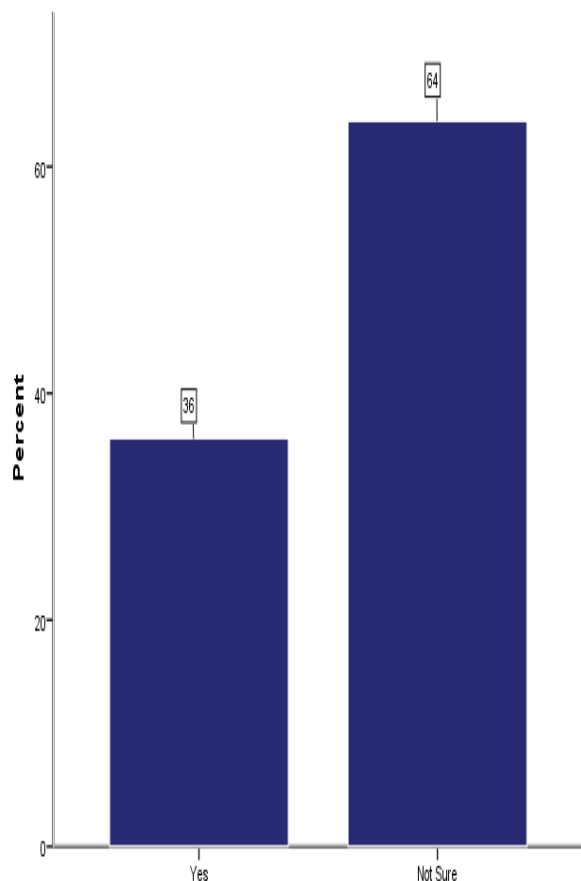


Figure 8: Showing responses on would forensics contribute to the reduction of crimes in Nigeria

Figure 8 showed that from the total pool of the study population, a low proportion of the participants 36% agreed that forensics contributes to the reduction of crimes in Nigeria.

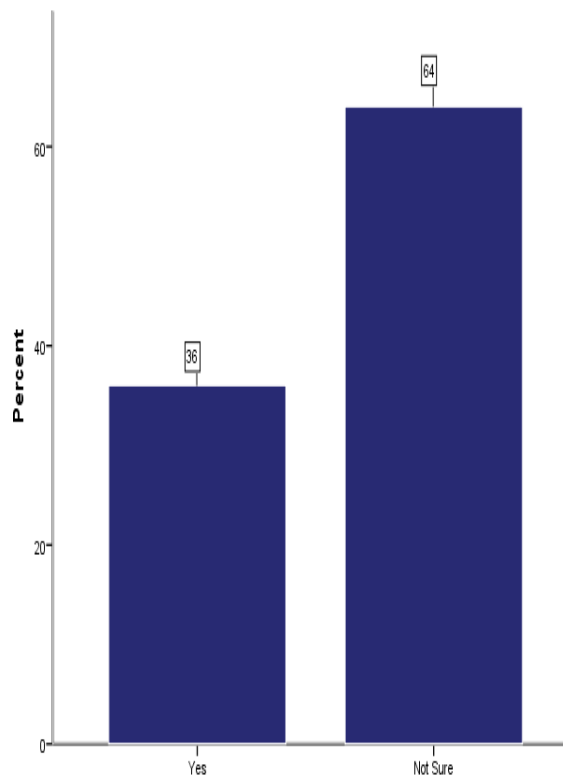


Figure 9: Showing responses on can forensics be used to tackle the upsurge of crime in Nigeria.

Figure 9 revealed that majority of the participant 64% were not sure if forensics can be used in tackling the upsurge of crime in Nigeria. Conversely, 36% agreed to the response forensics can be used to tackle the upsurge of crime in Nigeria.

Discussion

Forensic science is one of the significant elements of criminal justice system. It basically deals with the exploration of scientific and physical clues gathered from the crime scene. The need for the application of this Science in criminal investigation arose because our society has been undergoing drastic societal changes at a very rapid pace (Narejo and Avais, 2012). We saw a growing shift from a rural society to an urban one which left the old technique of criminal investigation obsolete. Consequently, there is a growing need of forensic Sciences to identify the different types of crimes and



criminals and the techniques which are used by the offenders. It is important because when scientific techniques and methods are used there is not much scope for any biases or injustices (Narejo and Avais, 2012; Faiza et al., 2020). Hence, the present study examined the awareness level on the significance of forensics in criminal investigation in Nigeria: a case study of Edo State police command

The result of the present study on social demographic characteristics as shown in figure 1-4 revealed the following. For gender; from the study population of 100 participants, there was an observable higher number of male participants (68%) relative to the female participants (32%). Our result on gender distribution corroborates similar report of (Nwawuba and Akpata, 2020; Oguntunde, 2012). As per age distribution, a larger population of the participants were found to be >40 years of age with 55%, and it was observed that age between 35-39 years ranked the least with 15%. On educational level, the result of the present study revealed that majority of the participants possesses a bachelor's degree as the highest level of educational qualification with 75% from a pool of 100% of participants, while 26% of the participants was found to possess less than tertiary education as the highest qualification. The inclusion criteria of participants of Law enforcement, is as a result of their involvement in criminal investigation. of course, the criminal justice system (CJS) is an essential part of any civilized nation to ensure justice, fairness, the practice of the rule of law and the institutionalization of a democratic system (Olonisakin et al., 2017). A criminal justice system is a system made up of different agents charged with the responsibilities of investigating and prosecuting criminal cases and the system envisages the law enforcement, and judiciary as its components (Olonisakin et al., 2017; Alemika, 2014). Correspondingly, body of evidence has revealed that the

law enforcement and the judiciary collaborate with forensic scientist in criminal investigation (Nwawuba and Akpata, 2020; Nwawuba et al., 2021), hence the study focused on examining the level of awareness on the relevance of forensics in criminal investigation among the law enforcement agencies.

The present study further examined responses on the relevance of forensics in criminal investigation. the result on have you heard about forensics as demonstrated in figure 4 revealed that, a greater population (56%) of the participants from a pool of 100% had no knowledge about forensics, and only 46% of the population demonstrated adequate knowledge of forensics. The same trend was also observed on can forensic methodology be used for criminal investigation in Nigeria (figure 5) as well the responses on does forensics provide irrefutable evidence for the administration of justice (figure 6) with 56% (Not Sure) and 46% (Yes). Forensics can be used interchangeably with forensic science, it is the application of scientific expertise for the resolution of legal disputes, both criminal and civil (Nwawuba et al., 2020). The main aim of forensic science is to gather intelligence to enable the judge to credible and logical decisions in the court by means of scientific approach through evaluation of evidence for the administration of justice, and country around the world now considers forensic methodology as the gold standard for criminal investigation (Cardinetti, & Cammarota, 2005; Nwawuba et al., 2021; Machado and Silva, 2019). Additionally, forensics facilitates criminal investigation in all varied facets and plays the pivotal role in keeping law and order in a society, and in today's world the use of forensic evidence and the application of forensic sciences form an integral part of the criminal investigation system and prosecutions (Gowsia and Sheeba, 2018; Faiza et al., 2020).



As per the responses on do Nigeria courts accepts forensic evidence, the result as demonstrated in figure 7 revealed that a larger proportion of the participants were not sure (85%) while only 15% (Yes) demonstrated adequate knowledge on the position of forensic evidence in the Nigeria justice system. This result agrees to the assertion that there is dearth in knowledge on forensics as well as the laws that allows for acceptance of forensic evidence in the Nigerian courts (Alisigwe and Oluwafemi, 2019; Obafunwa, 2018). In practice, the Nigerian courts are placed in a position to accept evidence relating to the use of scientific evidence, and the person empowered to present such evidence is regarded as an expert witness as contained in Evidence Act 2011, s 68 (Kehinde, 2014; Nwawuba et al., 2021).

Finally, responses on would forensics contribute to the reduction of crimes in Nigeria, and can forensics be used to tackle the upsurge of crime in Nigeria as shown in figure 8 & 9 followed similar trend with 64% of the participants reporting (Not Sure) and only 36% from the pool of 100% reported with a (Yes). The relevance of forensics in the criminal justice system cannot be overemphasized, as the need to have a crime-free, peaceful, habitable and developed society continually subsists (Ladapo, 2011). Regardless of the severity of a criminal case, it has been proven that forensics continues to be a reliable workhorse for criminal investigation, and the result of forensic investigation can make the difference between the acquittal and conviction in the court of law (Gowsia and Sheeba, 2018). It is unbelievable that with the advancement of technologies for forensics in crime investigation, the Nigerian Police Force still to a great extent relies on traditional investigative techniques for criminal investigation (Alisigwe and Oluwafemi, 2019). The present-day Nigeria is faced with security challenges and it has been revealed that criminals have become more sophisticated

in their operations, and the peculiarity of the various forms of crime committed in Nigeria tends to involve or leave behind biological evidence at the scene of a crime. These biological shreds of evidence are a key sample for DNA profiling and subsequent storage in a forensic DNA database (Nwawuba et al., 2020). Hence, a switch to a modern approach of criminal investigation “forensics” has become very necessary to detect, apprehend, and enhance the administration of justice.

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