# NIGERIA'S ELECTORAL INTEGRITY AND BIMODAL VOTER ACCREDITATION SYSTEM: AN ASSESSMENT OF PUBLIC OPINION AND VOTING BEHAVIOR

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**ABSTRACT:** *In the pursuit to enhance public electoral participation, lately the electoral body introduced the adoption of a twin-technology i.e. Bimodal Voter Accreditation System (BVAS) and INEC Election Result Viewing Portal (IReV), in subsequent elections. The efficacy of the twin-technology has raised a lot of apprehensions. Thus, it is against this backdrop this study assessed the public opinions and voting behaviours as regarding the worthiness and integrity of new Electoral Act with reference to INEC adoption of BVAS and IReV in Nigeria subsequent elections. The study adopted a survey research design, where data were primarily sourced from randomly sampled 400 Abuja municipal residents using questionnaires. Specifically, the study utilized descriptive analysis methods these include frequencies, percentages, charts and word-cloud in analyzing respondents views as regard awareness of the use of BVAS and IReV in Nigeria elections. It also employed the Fisher's Exact Test to assess effects of the twin-technology awareness and its adoption on the public confidence in electoral process vis-à-vis their voting behaviour. The empirical findings from the descriptive analysis of the respondents revealed that there is great level of awareness among the public as regard the use of BVAS and IReV in subsequent elections in the country. Also, the study showed that respondents were full of praises for the innovation of the technology in Nigeria elections. Moreover, the Fisher's Exact results showed that public awareness of use of BVAS and IReV positively influenced the public PVC collection rate. Howbeit, it revealed that public awareness of use of BVAS and IReV positively influenced voters' turnout in subsequent General Election, if and only if electoral misconducts can be downcast. Thus, the study recommended that INEC could ensure full implementation and deployment of BVAS and IReV technology in coming (subsequent) elections. Also, INEC with NBA collaboration could ensure all electoral misconducts perpetrators are brought to justice as this would downcast electoral misconducts in the country and thereby enhancing voters' turnout.*

**KEYWORDS:** Elections, Electoral Integrity, Voting Behaviour, BVAS, IReV

## INTRODUCTION

To guarantee electoral integrity and maintaining it, requires proper election management by an unbiased electoral management body with the competence of conducting free and fair elections. According to Ugoh (2022), in well-developed democracies, the entities in charge of elections are often taken for granted because of their extensive track records of conducting free and free and fair elections. Thus, electoral administration bodies in evolving democracies, such as Nigeria, are faced with tremendous suspicion, disparagement and scrutiny. Worth mentioning, since independence Nigeria has witnessed nine different presidential or general elections (excluding the 2023 general election). However, from 1999 to the present, elections have been stable and are conducted on systematic basis. The reliability, standard or integrity of these elections are, however, sources of worry to electorates, political actors and observers both local and international. Since 2003, general elections were characterized by dissatisfaction from political contestants, voters, and observers. Elections were described by all sorts of electoral malpractices such as ballot box snatching, vote buying, secret voting, use of violence, false results, electoral violence to mention but few. These were reflected in the series of litigations that trailed the announcement of results and declaration of winners, nullification of results, and ultimately election-related violence which occurred at all the stages of the electoral process (Amao and Ambali, 2022).

Consequently, several scholars have expounded on the need for Electoral Act reform by the assessment of the correlation between Independent National Electoral Commission (INEC) as an electoral umpire and the credibility of the Nigeria's electoral process (Abe 2008; Enyenihi 2012; Odusote 2014; Aderemi 2015; Abdullahi and Sani 2016; Ademowo 2016). Their key point of convergence is on the pivotal and sensitive role that INEC plays in consolidating a fledgling democracy. The action and inaction of INEC affects the outcome of an election (Moses, 2022). As a result of numerous calls for electoral act reform, on Friday 25th February 2022 former President Muhammadu Buhari assented to the Electoral Bill 2022; repealing the 2010 Act and enacting a new Electoral Act. The new Act provides a legal framework that empowers the INEC to determine the mode of voting and transmission of results as well as to review declaration of election results made under duress (PLAC, 2022). Specifically, the new Act legalized the use of technology in elections; redefines over-voting and mandates INEC to take "reasonable steps" to provide support to Persons with Disabilities (PWDs) during voting. The new Act also alters the timelines for the conduct of elections and creates new time frames for political parties to fulfil various requirements and activities concerning nomination of candidates for elections. It is therefore envisaged that the new Act will increase the citizens' participation in the electoral process.

Following the new Electoral Act, the reliability and integrity of the adoption of BVAS (i.e. use for the identification and accreditation voters' fingerprints and facial recognition before voting), and the INEC Election Result Viewing Portal (IReV) (i.e. for an online portal where polling unit level results are uploaded directly from the polling unit, transmitted and published for the public) are being major sources of concerns. According to The Guardian Newspaper (November, 2020), INEC pursues to maintain the twin technology as a bulwark against 10 most pervasive weaknesses in Nigeria's election result management process, namely, falsification of votes at polling units, falsification of number of accredited voters, collation of false results, mutilation of results and computational errors, swapping of results sheets, forging of results sheets, snatching and destruction of results sheets, obtaining declaration and return involuntarily, making declaration and return while result collation is still in progress and poor

record-keeping. In fact following the recent success records of the twin technology in Edo, Anambra, Ekiti and Osun gubernatorial elections, INEC asserts that the use of the BVAS and IReV will enhance the transparency of election results and boosting public trust in electoral outcomes in forthcoming general election. From the forgoing, it is imperative to assess the public opinions and voting behaviours as regarding the worthiness and integrity of new Electoral Act with particular reference to use of BVAS and IReV. Hence, it is against these backdrops this study is proposed.

The broad objective of this study is to assess the public opinions and voting behaviours as regarding the worthiness and integrity of new Electoral Act with reference to INEC adoption of BVAS and IReV in Nigeria subsequent elections. In achieving this, the following specific objectives of the study are to:

i.    Assess the level of public awareness of the use of BVAS and IReV in electoral process and management in Nigeria;

ii.   Examine the public opinions regarding electoral integrity with the just introduced use of BVAS and IReV in electoral process and management in Nigeria; and

iii.  Ascertain the effects of the twin-technology (BVAS and IReV) awareness and its adoption on the public confidence in electoral process vis-à-vis their voting behaviour.

## LITERATURE REVIEW

### Electoral Act 2022

The new Act provides a legal framework that empowers the Independent National Electoral Commission (INEC) to determine the mode of voting and transmission of results as well as to review declaration of election results made under duress (Nigerian Electoral Act, 2022). The new Act legalized the use of technology in elections; redefines over-voting and mandates INEC to take "reasonable steps" to provide support to Persons with Disabilities (PWDs) during voting. The new Act also alters the timelines for the conduct of elections and creates new time frames for political parties to fulfil various requirements and activities concerning nomination of candidates for elections. Among other key provisions in the Electoral Act, 2022, below are vital provisions as regard electoral process and use of technology.

### Election Process and Use of Technology

-    INEC mandated to maintain a National Electronic Register of Election Results – an electronic database of polling unit results and collated election results of every election it conducts, which should be made available to any member of the public upon request and payment of prescribed fees *[Section 62(1) and (2)]*;

-    Introduction of the Smart Card Reader (SCR) or other technological device such as BVAS and IReV by INEC for accreditation, verification and authentication of voters *[Section 47(2)]*;

- Electronic Voting Device: INEC allowed to provide ballot boxes or "electronic voting machine or other voting device" for elections. This makes room for e-voting *[Section 41(1)]*;

- INEC empowered to determine mode of voting and transmission of results *[Section 50(2)]*;

- INEC also given discretion to prescribe method of transferring results including total number of accredited voters and results *[Section 60(5)]*;

- Collation and Announcement of Results: Collating Officers and Returning Officers to use the number of accredited voters and votes recorded and transmitted directly from Polling Units (PUs) to collate and announce results *[Section 64(4-5)]*;

- Over-voting: INEC empowered to use number of accredited voters to determine over-voting *[Section 51(2)]*;

- An election conducted without prior recording of the quantity, serial numbers and other particulars of results sheets, ballot papers and other sensitive election materials in the Forms prescribed by INEC shall be invalid. A Presiding Officer who violates this will face prosecution and will be liable on conviction to a fine of ₦10 million or imprisonment for a term of at least one year or both *[Section 73(2) and (3)]*.

Nonetheless, among the aforementioned provisions under the use of technology, this study focused on the introduction of BVAS and IReV by INEC for accreditation, verification and authentication of voters.

**Conceptual Framework of Analysis**

The study pursued to finds out the linkage between electoral integrity, use of technology and voting behaviour. Fig 1 presents the study conceptual framework of analysis, it shows the association depiction between electoral integrity, use of BVAS & IReV and perceptions of voters' voting behaviours.
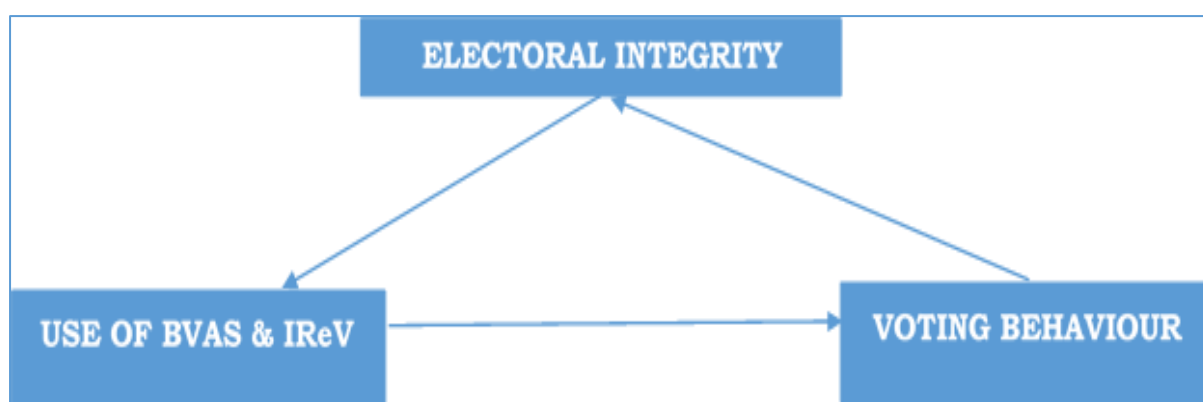


**Fig 1. Conceptual Framework of Analysis**

**Review of Related Empirical Studies**

Iwuoha (2018) argued that the public perception of biometric technology, the availability of proper infrastructure, and the distance between polling stations and the dwellings of rural voters all affect the latter's level of adoption of biometric technology. These interactions combine to produce specific modalities that shape voting behaviour and general political culture. The study elicited primary data from voters in Nigeria's remote villages, so as to predict the implications and consequences of glossing over the dimensions and magnitude of the biometric technology adaptation challenge by policymakers. It concluded by reflecting on how these interplays and interactions create "spatial differentials" in electoral outcomes/credibility, and proffer possible strategies for institutional intervention.

Chukwuma and Okpala (2018) examined voter turnout and the quest for free and fair election with focus on Anambra 2017 gubernatorial election. The study interrogates what account for voter turnout and the specific factor responsible in the Anambra 2017 election. The study was anchored on elite theory, while data for the study were generated through documentary techniques and analyzed using the analytical inductive technique. The finding reveals that while efforts are in place to address the recurring low voters' turnout in an election in Nigeria, the challenges persist due to the culture of political apathy that is implicated in elite disposition in Nigeria politics vis-à-vis other multiple factors which IPOB exacerbated in the 2017 Anambra election. Taking cognizance of these, the study recommends regular town halls meetings both at the rural and urban areas so as to address voter's apathy among Nigerians as well as internet voting to address situation of insecurity.

Adeshina and Ojo (2019) examined the potentials of using blockchains and distributed ledgers to support voting processes have attracted significant attention in the electronic voting community. According to Adeshina and Ojo (2019), most of these recent ideas are centered on blockchain-based e-voting protocols. Others focus on how blockchain can be exploited to simultaneously deliver auditability and anonymity of voters in the voting process. A common feature of these research efforts is the use of blockchain within e-voting contexts. Also, Nwabunze and Okoye (2019) investigated the influence of social media on voting pattern of youths in Enugu State during the 2015 general elections in Nigeria. The study was anchored on the technological determinism theory. The survey research method was used. Findings demonstrated that the social media enhanced the conduct of the election as it offered the avenue for youths engagement in political mobilization, electoral campaigns, involvement in political discussion and participation, exposure to electoral manifestoes and candidates, interaction between politicians and the voters, monitoring of election results, which were believed to have contributed to the acceptance of the outcome of the process.

Subsequently, Mbah *et al* (2020) examined Separatist Threat, Militarization and Voter Turnout: Exploring the Dynamics of the 2017 Governorship Election in Anambra State, Nigeria. Using the qual-dominant mixed methods approach, this study analyzed the impact of the separatist threat and the militarization of elections on voter turnout during the 2017 governorship election in Anambra State, Nigeria. Findings indicate that perceived and real marginalization of the Igbo in Nigeria's state-building is largely driving the neo-Biafra separatist threat to boycott elections in Anambra State. Ogundiran (2020) examined the impact of social studies on the voting behaviour of Nigerians for democratic sustenance and political development of Nigeria. The study revealed the extent to which these forces affect citizens'

participation and voters' behaviour in Nigeria is too complex and with no doubt requires education.

Moreover, Adebiyi (2021) examined the voting pattern of the 2019 general elections in Nigeria. Through a descriptive-statistical analysis of official election results released by the Independent National Electoral Commission and a critical review and analysis of extant secondary data which includes relevant journal articles, books, reports of Civil Society Organizations and Election Observer Missions on the general elections, it is found that voting pattern in the 2019 general elections in Nigeria was largely determined by psychological factors such as ethnic considerations and party affiliation rather than by personal qualities of candidates and performance of the party in government. Also, Michal *et al.* (2021) focused on changes of perception of electoral integrity as a function of satisfaction with the electoral results in contexts where the quality of elections has always been at the centre of political conflict.

Recently, Amao and Ambali (2022) examined the relationship between and among the variables of electoral integrity, voters' confidence and good governance in Nigeria. As a multivariate study, the research adopted the mixed research method in which data were qualitatively and quantitatively analyzed. The study drew a population of 1200 respondents from three states in Nigeria (Kwara, Ekiti and Rivers) using the Taro Yamane statistical formulae. To complement these, forty-five interviewees were purposively selected for Key Informant Interviews (KII). The study is situated within the prisms of the Rational Choice theory. Findings from the study revealed significant joint impact of electoral integrity and voters' confidence on good governance in Nigeria.

Also, Moses (2022) examined the organizational structure of the INEC. Specifically, it looked at the bureaucratic structure of the commission as it relates to the electoral process in Nigeria. The study attempted to correlate such arrangements with key variables like the organizational decision-making process, its autonomy and the quality of election outcome in Nigeria. Moses adopted a descriptive survey research methodology. To achieve this, the study relied on secondary technique of data collection and content analyses technique for analyses, while equally subjecting collected data to logical reasoning with diagrammatic representations. The study recommended inter alia, that electoral process should not be managed entirely by a single electoral umpire, rather elections should be conducted on a more decentralized level, given that there is a new electoral law that harnesses the use of technology. Idam and Emeh (2022) examined the voting trajectory of Nigerians in the last two presidential election with the purpose of enlightening voters on the importance of their choice and its possible implication on the development paradigm of the country. This was done with data from extant literature and questionnaire administered to a cluster of respondents hence a correlation research design. The chi-square was used for the analysis of data generated through the questionnaire and insights were also drawn from scholarly opinions and empirical historical substantiations whose outcomes form the essence of the analysis of the paper.

Besides, Idowu (2022) made a forecast for the 2023 general elections in the country. Idowu adopted primary and secondary data sources, using qualitative interview method. Idowu's findings revealed that indeed, electoral malpractice is huge in the Nigerian democratic/electoral process, that the practice permeates all aspects of the electoral process, and that they are driven by a number of factors. The forecast revealed that the 2023 general elections will be one of the most keenly contested in the history of democracy and elections in Nigeria, and that the new laws going into the elections (e.g., the electronic transmission of election results), are envisaged

to enhance electoral integrity in 2023 only if they are effectively implemented. Electoral malpractices should be expected to continue in 2023, as politicians are likely to devise novel means/patterns (hacking is most likely) of manipulating the electoral process in Nigeria. The study concluded that in order to improve the democratic/electoral process in 2023, electronic voting should be introduced, while all hands must be on deck to ensure that the envisaged new patterns of electoral malpractices are nipped in the bud.

**Gap in Knowledge**

Consequently, building on the aforementioned on previous related studies topic such as the electoral processes, electoral integrity and voting behaviours. However, to best of our knowledge no study has assessed the voting behaviours as regarding the reliability and integrity of new Electoral Act with particular reference to use of BVAS and IReV. Hence, this study pursuits to fill the existing lacuna in literature. More specific, this study seeks to contribute to the study on the use of technology in electoral processes.

## RESEARCH METHODOLOGY

### Research Design, Area and Population of Study

Following the scope and objectives of the study, this study utilized survey research design in order to depth assessment of the public perspectives on their voting behaviour as regard Nigeria electoral integrity in relation to use of BVAS and IReV. The research area of study is Abuja City, the Federal Capital Territory (FCT) of Nigeria. It specifically focused on Abuja Municipal Area Council (AMAC). Thus, population of this study consist of AMAC residents (particularly the electorates) with different backgrounds such as religion, tribe, educational qualifications and different years of experience.

### Sample Size and Sampling Procedure

Following the scope and targeted population of this study, the INEC 2019 electorate population for AMAC was utilized in estimating the study's sample size. Thus, the Slovin's (1960) formula is employed to determine the targeted sample size (n) of AMAC residents given the population size (N) and a margin of error (e). The formula is stated as thus; $n = \frac{N}{1+Ne^2}$ where $n$ is the sample size, $N = 679,940$ (INEC, 2019) is the population of AMAC, $e = 0.05$ is the Margin of Error. The sample sizes for AMAC population is calculated as follows:

$$n = \frac{679940}{1 + 679940(0.05^2)} = 399.76$$

Thus, a total number of 400 AMAC residents were sampled. Subsequently, this paper adopted random sampling technique. The study randomly sampled residents in AMAC via administration of structured-questionnaires.

## Method of Data Analysis

Collected responses (via use of questionnaires) from the field were entered, coded and analyzed using Statistical Package for Social Sciences (SPSS) version 23. The study employed descriptive and inferential types of analysis.

## Descriptive Analysis

The research work employs descriptive analysis such as frequencies, percentages, charts (data visualization), word-cloud as well as cross-tabulations in order to identify the public views vis-à-vis their voting behaviour as regard Nigeria electoral integrity in relation to use of BVAS and IReV.

## Inferential Analysis – Fisher's Exact Test

Fisher's exact test is used to test the independence between two qualitative variables in a contingency table. E.g., we can use Fisher's exact test to test if public with PVC and those without PVC have identical of being aware of use of BVAS and IReV or not. Under the null hypothesis, two variables are independent, that is;

i.  **Null Hypothesis:** There is no dependency association between public awareness of use of BVAS/IReV and public possession of PVC.

ii. **Null Hypothesis:** There is no dependency association between public awareness of use of BVAS/IReV and public readiness (turnout) to vote.

The expected frequencies under independence will be those in the following table, multiplying marginal frequencies for each cell, and dividing by the sampling size. Fisher's Exact Statistic is given as:

$$p = \frac{(a+b)!\,(c+d)!\,(a+c)!\,(b+d)!}{a!\,b!\,c!\,d!\,n!}$$

$p = $ P-value

$a, b, c, d = $ values in contingency table

$n = $ total frequency

## Pre-Test of Instrument

To assess the validity and reliability of the research instrument, a pilot study was conducted using 50 respondents purposively selected from the population. The questionnaires were administered via online to the respondents to fill. The validity test results returned cogency for all 19-items tested. Table 1 below presents the reliability (consistency) test results of the valid 19-items.

**Table 1: Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | No of Items |
|---|---|---|
| .752 | .702 | 19 |

According to Table 1 above, the Cronbach's Alpha is 0.752 which indicates a high level of internal consistency. Therefore, the items are valid and highly reliable for this study.

**Measurable Variables**

For the purpose of achieving the research objectives of the study, an independent variable was designed, "respondents' BVAS and IReV Awareness", this variable was set to capture respondents (public) level of awareness of the introduction of BVAS and IReV technology in Nigeria General Election. The dependent variables in this study will be measured as follows;

- **Possession of Permanent Voter's Card (PVC):** This was measured by asking respondents questions as regard if respondents possess Permanent Voter's Card (PVC).

- **Voting Behaviour:** this was measured by asking the respondents questions if they will consider to vote in the coming General Election (2023).

**ANALYSIS AND DISCUSSION OF FINDINGS**

**Demographic Characteristics of the Respondents**

Table 2 presents the demographic information of the study respondents. According to the table, majority of the respondents were male (79%, N=314) while few were female (21%, N=86). Equally, the table reveals that majority of the respondents were between the age of 18years to 47years (95%, N=380), which indicates that majority of the study respondents were youth.

**Table 2. Demographic Data of the Respondents**

|  | Frequency | Percent (%) |
|---|---|---|
| **Gender** | | |
| Female | 86 | 21.4 |
| Male | 314 | 78.6 |
| **Age** | | |
| 18-27 Years | 135 | 33.8 |
| 28-37 Years | 166 | 41.6 |
| 38-47 Years | 79 | 19.5 |
| 48-57 Years | 10 | 2.6 |
| Above 57 Years | 10 | 2.6 |
| **Educational Level** | | |
| Secondary School / SSCE | 18 | 4.5 |
| OND/NCE | 49 | 12.3 |
| HND/BSc | 233 | 58.4 |
| Higher Degree | 100 | 24.7 |

*Source: Field Survey, January 2023*

**Fig 2. Occupational Distribution of the Respondents**
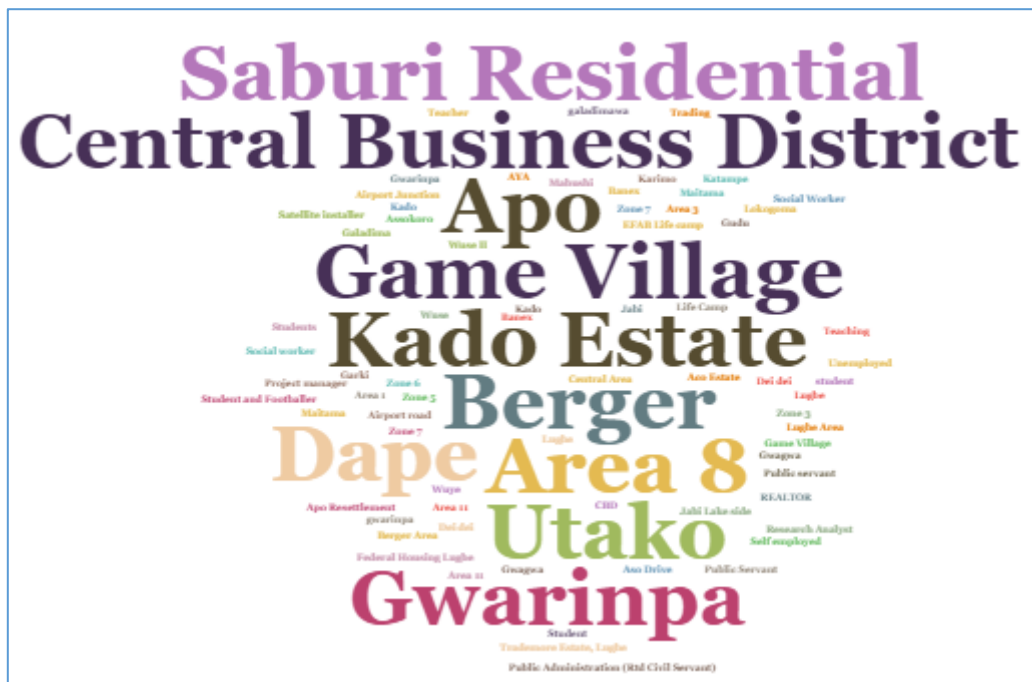


**Fig 3. Geographical Location of the Respondents**

Also, the results in Table 2 indicated that most of the respondents possessed either HND/BSc (58%, N=233) or a higher degree (25%, N=100). Moreover, Fig 2 and 3 presents the occupational distribution and geographical location of respondents respectively. Fig 2 reveals that respondents are from the heterogeneous kind of occupations, thus respondents' background experience are different. Similarly, the geographical location of respondents as shown in Fig 3 indicates that all respondents were from the Abuja Municipal Area Council (AMAC). The demographic information of the respondents imply that the study respondents were youthful, highly educated with diverse working experiences, therefore the study respondents views and knowledge are apt and essential to this research.

**Public Level of Awareness of the use of BVAS and IReV in Electoral Process and Management in Nigeria**

Prior to the assessment of BVAS and IReV awareness among the public respondents, this study assessed the level of electoral participation and the credibility of elections among the respondents in the past, Fig 4 and Fig 5 present the results. According to Fig 4, most of the respondents (63%) had never participated (in terms of voting) in General Election, while minority of them had voted either 2-times (10%) or more than 2-times (18%). Subsequently, according to Fig 5 most of the respondents poorly rated (Poor=30%, Very-Poor=31%) the credibility and integrity of past General Election in the country. Thus, this findings indicated that past General Elections in the country were poorly conducted and have resulted into poor public participation in electoral process such as voting. Furthermore, Fig 6 presents the public awareness level of adoption of BVAS and IReV technology in the subsequent elections in the country. The results revealed that virtually all the respondents were highly informed or aware of the adoption of BVAS and IReV in subsequent elections. Thus, there is great awareness level among the public of the use of BVAS and IReV in subsequent elections in the country.
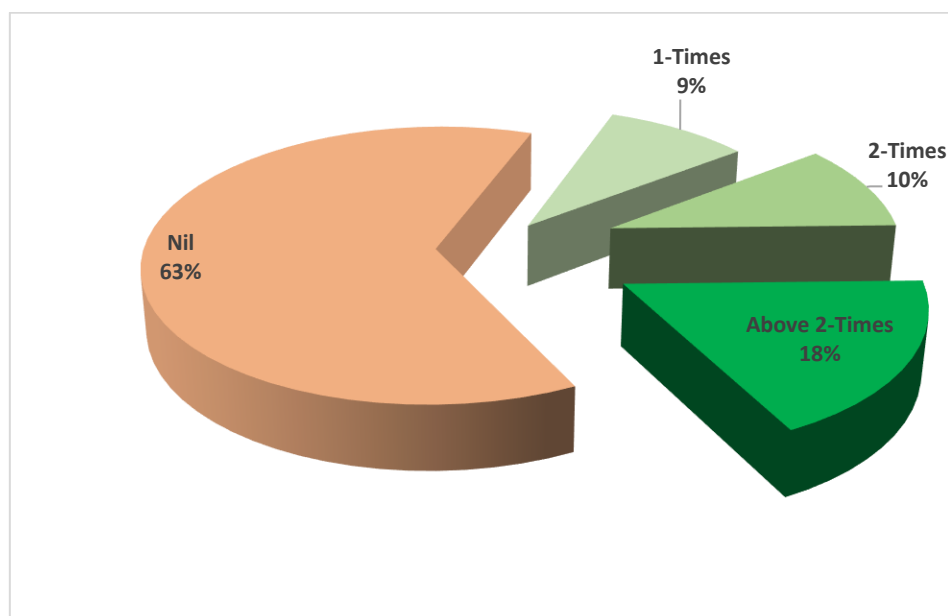


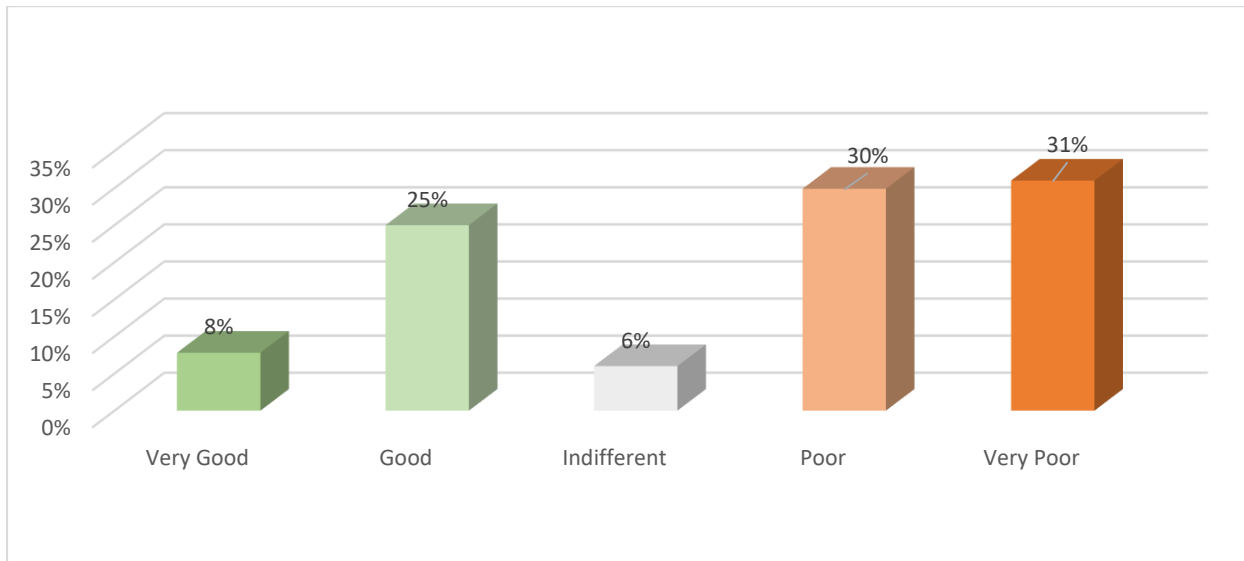**Fig 4. No of times Public-Respondents Participated (in terms of voting) in General Election**

**Fig 5. The Credibility and Integrity Rating of the Past Nigeria General Elections**
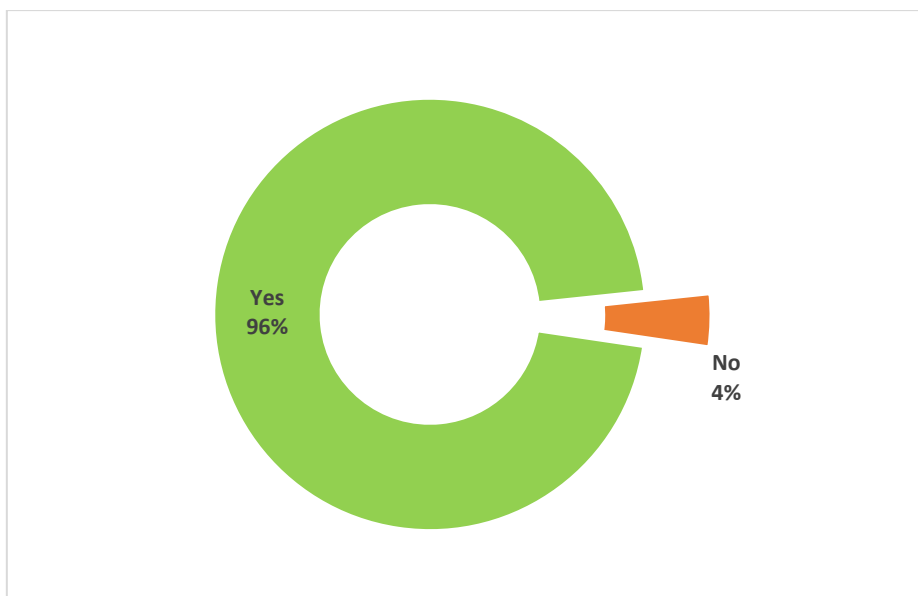


**Fig 6. Public Awareness of the Adoption of Technology such as BVAS and IReV in Subsequent Elections in Nigeria**

**Examination of the Public Perspectives as regards Election Credibility and Integrity with the just Introduced use of BVAS and IReV in Electoral Process and Management in Nigeria**

This section assesses the public perspectives on the use of BVAS and IReV in Nigeria electoral process and management vis-à-vis the implications on the country election credibility and integrity. Fig 7 presents the content-views of the respondents on the use of BVAS and IReV, according to the results, all the respondents commended this innovation by INEC – here are few of their citations "it was a great decision, Great Move, it is a good idea, Excellent for development, Good development, It will better the electoral system and so on …" Thus, respondents are full of praises with the introduction of BVAS and IReV in subsequent Nigeria elections.



**Fig 7. Public Views as regard the Introduction of BVAS and IReV (a)**

In addition, according to Fig 8 most of the respondents admitted that the introduction of the BVAS and IReV in the country electoral process would; increase the public participation (in terms of voting) in election (64%), reduce electoral violence (67%), promote electoral transparency (76%), enhance the public level of trust and confidence in Nigeria election (80%),

improve the country electoral integrity (79%), and with the use of BVAS and IReV election results cannot be compromised (60%). Thus, these findings indicate that public are highly optimistic that the use of BVAS and IReV in Nigeria elections would enhance the election credibility and integrity as well as public confidence in INEC thereby increasing public participation in terms of voting.
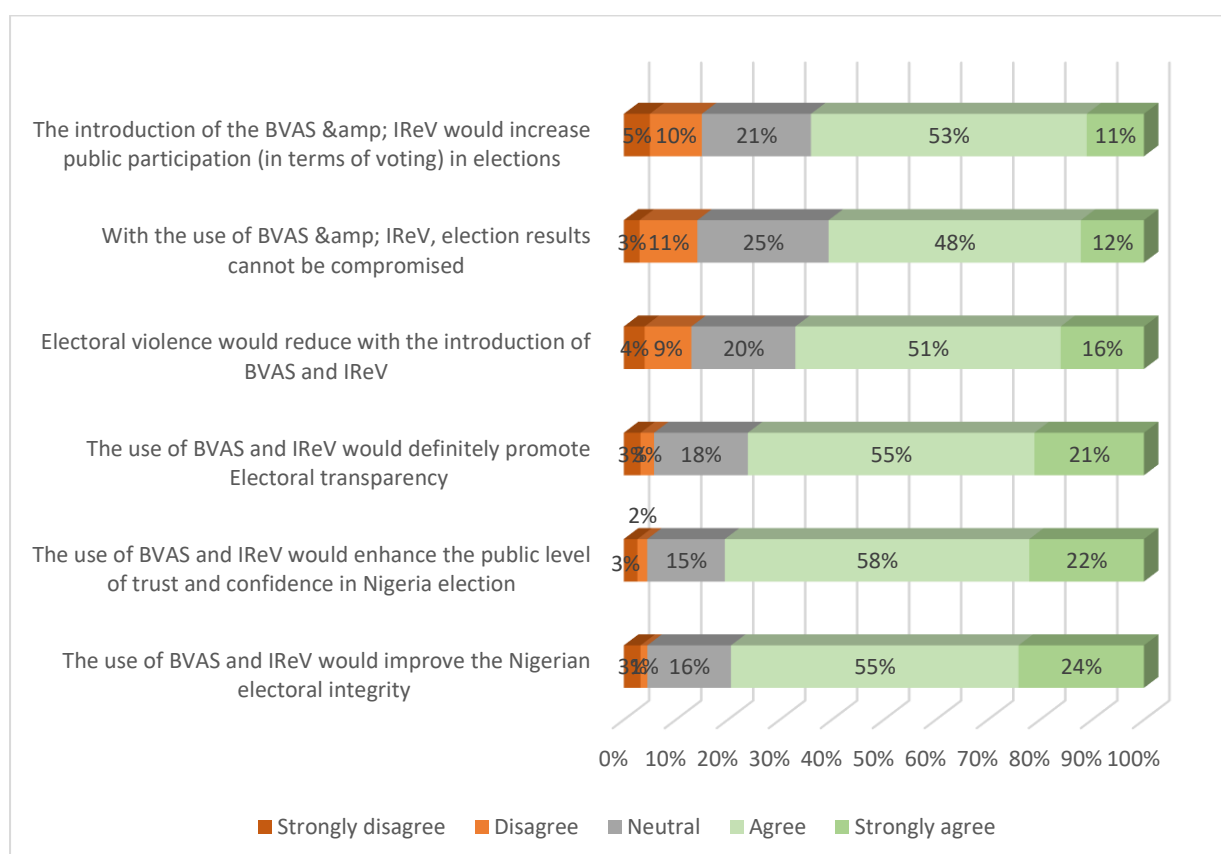


**Fig 8. Public Perspectives on the Use of BVAS and IReV (b)**

**Assessment of the Effects of the Twin-Technology Awareness and its Adoption on the Public Confidence in Electoral Process Vis-À-Vis their Voting Behaviour**

Moreover, this section assesses the causal effect of BVAS and IReV awareness among the public on public possession of PVC and their voting behaviour. According to Fig 9, majority of the respondents were with their PVC and have considered to participate (vote) in the coming 2023 General Election. Thus, these findings indicate respondents were well prepared and ready to participate in the subsequent General Elections i.e. 2023 Elections.
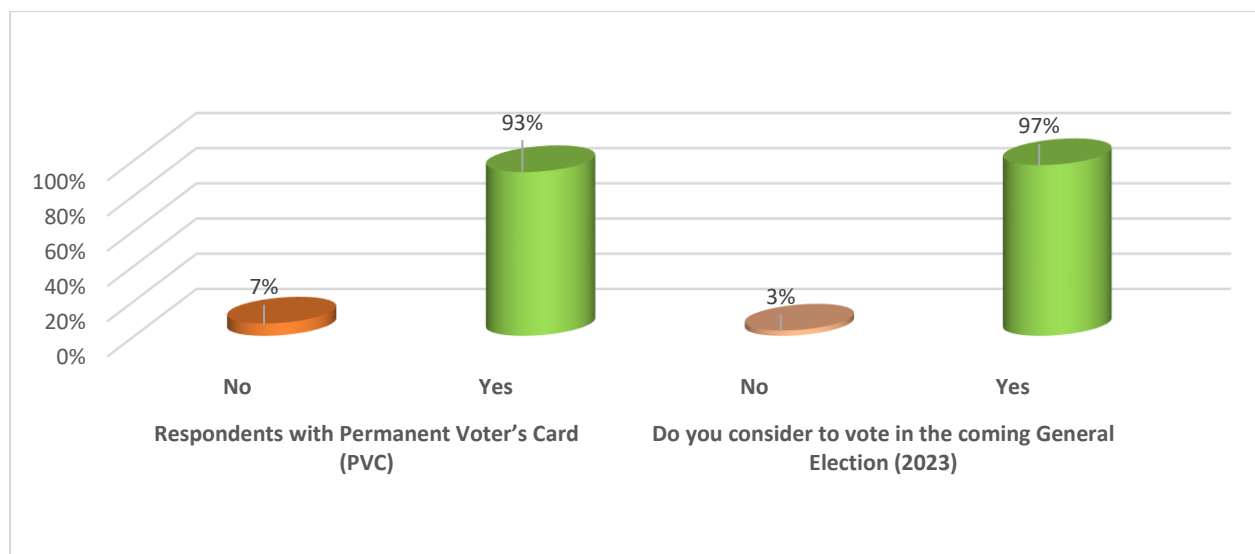
**Fig 9. Respondents PVC Possession and Intention in the coming 2023 General Election**

**Table 3.** Assessment of the Association between Respondents' BVAS and IReV Awareness and Voting Behaviours

| Respondents' Voting Behaviour Variable | Awareness of the adoption of technology such as BVAS and IReV in subsequent election in Nigeria | | | Hypothesis Testing | |
|---|---|---|---|---|---|
| | | **No** | **Yes** | **Hypotheses** | **Fisher's Exact Test p-value** |
| Possess Permanent Voter's Card (PVC) | No | 89% | 11% | There is no dependency association between public awareness of use of BVAS/IReV and public possession of PVC. | 0.020* |
| | Yes | 4% | 96% | | |
| Do you consider to vote in the coming General Election (2023) | No | 80% | 20% | There is no dependency association between public awareness of use of BVAS/IReV and public readiness (turnout) to vote | 0.029* |
| | Yes | 3% | 97% | | |

**Note:** * denotes significant at 0.05 level

*Source: Computed by the Researchers*

Subsequently, Table 3 presents the assessment results of the dependency association of public possession of PVC and their readiness (turnout) to vote in the coming 2023 General Election on their awareness of the adoption of technology such as BVAS and IReV in subsequent election in Nigeria. The table depicts the rejection of the two hypotheses (5% level of significance) in favour of their respective alternative hypotheses. The results reveal that public possession of PVC significantly depend on their public awareness of use of BVAS and IReV. It also shows that public readiness (turnout) to vote significantly depend on their public awareness of use of BVAS and IReV. More explicitly, the results reveal that higher proportion of respondents (89%) with no PVC are significantly ($0.020 < 0.05$) not aware of the adoption of BVAS and IReV in subsequent election in Nigeria while majority of respondents (96%) with PVC are significantly ($0.020 < 0.05$) aware of the adoption of BVAS and IReV. Hence, this finding infer that high possession of PVC among the respondents significantly depend on the awareness of the adoption of BVAS and IReV in subsequent elections.

Additionally, Table 3 reveals that higher proportion of respondents (80%) who have considered not to vote in coming 2023 General Election are significantly ($0.029 < 0.05$) not aware of the adoption of BVAS and IReV. While higher proportion of respondents (97%) who have considered to vote in 2023 General Election are significantly ($0.029 < 0.05$) aware of the adoption of BVAS and IReV in subsequent election. Thus, these findings infer that respondents' readiness (turnout) to vote in 2023 General Election significantly depend on their awareness of the adoption of BVAS and IReV in subsequent elections.

## DISCUSSION OF FINDINGS

This research study recognized that past General Elections in the country were poorly conducted and have resulted into poor public participation (in terms of voting) in electoral process. This is identical to Chukwuma and Okpala (2018), Ogundiran (2020), Amao and Ambali (2022), Idowu (2022) and Ugoh (2022) to mention but few, they established that Nigeria elections were not fair and credible rather they were often characterized with different form electoral malpractice. Hence, the introduction of technology such as BVAS and IReV to improve election integrity in the country just as Amao and Ambali (2022), Idowu (2022) and Ugoh (2022) recommended. Subsequently and distinctively, this study found that there is great level of awareness among the public as regard the use of BVAS and IReV in subsequent elections in the country. Also, it established that the public-respondents are highly optimistic that the use of BVAS and IReV in Nigeria elections would enhance the election credibility and integrity as well as public confidence in INEC thereby increasing public participation in terms of voting. This finding is similar to Moses (2022), who established that the assent of the new Electoral Act presented a high tendency for a far more credible election in Nigeria. Thus, the respondents were full of praises for the innovation of BVAS and IReV in Nigeria elections.

Furthermore, the empirical findings showed that 93% PVC possession rate among the respondents with 97% of them ready to vote in 2023 General Election. Therefore this study revealed huge level of respondents' preparedness in terms of rate of possession of PVC and their readiness to vote in the 2023 General Election. Consequently, the empirical findings from the test of association indicated the established high possession of PVC among the respondents was significantly depending on the respondents' awareness level of the adoption of BVAS and IReV in elections. Similarly, the study established that respondents' turnout to vote in 2023

General Election significantly depend on their awareness of the adoption of BVAS and IReV in subsequent elections. It explicitly showed that 89% of the respondents without PVC were significantly not aware of use of BVAS and IReV while 96% of the respondents with PVC were significantly aware of use of BVAS and IReV.

Also, it revealed that 80% of public-respondents with no intention of voting were significantly not aware of use of BVAS and IReV while 97% of the respondents with right intention of voting in 2023 General Election were significantly aware of use of BVAS and IReV. Thus, the empirical findings infer that the public high awareness of use of BVAS and IReV translating into the high collection rate of PVC as well as public readiness to vote in 2023 General Election. The former finding (i.e. the high public awareness of use of BVAS and IReV translating into the high collection rate of PVC) is thriving apropos to the reality on ground as Nigeria recorded a highest rate (93.4%; that is about 87,209,007) of voter's card collection since the country return to democracy (1999). However, the latter finding (i.e. the high public awareness of use of BVAS and IReV translating into high public readiness to vote in 2023 General Election) is not by the way exact with the reality on ground as only 27% of the eligible voters decided who became the President in in the just concluded 2023 general election. This could cogently be linked to the reported electoral misconducts such as apathy, violence and voter suppression that marred the 2023 general election (THISDAY, 2023).

## CONCLUSIONS

Following the discussed major empirical findings, the study concludes that there is great level of awareness among the public as regard the use of BVAS and IReV in subsequent elections in the country and public were full of praises for the innovation. Also, public are highly optimistic that the use of BVAS and IReV in Nigeria elections would enhance the election credibility, transparency, and integrity as well as public confidence in INEC. Moreover, following the empirical findings which revealed 93% PVC possession rate among the respondents with 97% of them ready to vote in 2023 General Election. Therefore this study concludes huge level of public preparedness in terms of rate of possession of PVC and their readiness to vote in subsequent General Elections.

Additionally, according to the test of association this study concludes that the high possession of PVC among the public was significantly depending on the public awareness level of the adoption of BVAS and IReV in elections. Also, the public readiness (turnout) to vote in subsequent General Elections was significantly dependent of the public awareness of the use of BVAS and IReV in elections. Hence, it can be infer and conclude that public awareness of use of BVAS and IReV positively influenced the public PVC collection rate. Also, the study concludes that if and only if electoral misconduct such as violence, apathy and voter suppression can be downcast then public awareness of use of BVAS and IReV will positively influenced public readiness (high turnout) to vote in subsequent General Election, with public being optimistic that INEC introduction and adoption of BVAS and IReV will enhance the transparency of election results.

Based on the findings of this study, the following were recommended;

Though this study established high preparedness in terms of rate of possession of PVC and their readiness to vote in subsequent General Elections, this should be further enhanced. There

should be regular town halls meetings between INEC and the public members both at the rural and urban areas so as to address voter's apathy among Nigerians. This should often be carried out before elections in order to encourage citizen's participation in an election;

INEC should ensure the implementation and deployment of BVAS and IReV technology in coming (subsequent) elections. This will further address and boost public confidence in electoral processes; and

Federal government should ensure all election violence, voter suppression and other electoral misconducts perpetrators are brought to justice as this would downcast electoral misconducts in the country and thereby enhancing voters' turnout in subsequent election.

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