International Journal of Global Affairs , Research and Development (IJGARD) Vol.3, No.2, 2025, 56-80
ISSN 2992-2488

BIMODAL VOTER ACCREDITATION SYSTEM (BVAS) AND CREDIBILITY OF ELECTIONS: A STUDY OF 2023 GENERAL ELECTIONS IN ENUGU STATE, NIGERIA

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ABSTRACT

The thrust of this paper was to examine Bimodal Voter Accreditation System and credibility of elections. However, the study focused on the 2023 general elections in Enugu state, Nigeria. The study was guided with three specific objectives; to find out how the use of bimodal voter accreditation system enhanced inclusiveness in the 2023 general elections in Enugu state; identify if the use of bimodal voter accreditation system promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu state; and find out how bimodal voter accreditation system improved transparency in the 2023 general elections in Enugu state. The theory employed in the study was Cybernetic Communication theory. Analytical cross-sectional survey design was adopted. The study used both primary and secondary data. Data used in the study was analyzed using cluster mean method, on the statistical package for the social sciences. The study found among others that one of the ways the use of BVAS enhanced inclusiveness in the 2023 general elections in Enugu state was that all results belonging to candidates of political parties that participated in the election were uploaded using BVAS. The study recommended among others that transparency in the electoral process can be sustained and further enhanced using BVAS if the electoral umpire maintain consistent use of the device in the electoral process in a manner that the voters and the party agents are carried along from start to finish of election administration.

Keywords: Accreditation, Bimodal, Credibility, Elections, Enugu State, Nigeria

1.0 INTRODUCTION

In a democracy, government should originate from the people themselves following due process outlined in the constitution; and such government must be run to serve the people, providing them with true leadership, and securing lives and properties among other dividends of democracy. According to Murtala and Mohammed (2014) the reason most countries of the world have embraced democratic system of government and its principles is because of how high the system holds the process of political leadership emergence with serious emphasis on due process and intense active participation of the people meant to be led. Nigeria is one of the countries in the globe practicing this system of government since 1999. Some of the principles of this system are: citizens right and responsibilities to participate actively in the political system that in turn protects their rights and freedoms; equal treatment of people; accountability; transparency; political tolerance; multiparty system; control of the abuse of power; freedom of economy;

human rights protection, free and fair elections; acceptance of election results and rule of law (Jonathan, 2022).

Pursuance to the conduct of transparent, free and fair elections in Nigeria which are in principle, characteristics of credible election, fitting to the fundamental principles of Democracy; and to ensure that the political rights of the citizens of the country are protected, in furtherance to the promotion of acceptance of elections results, the Independent and National Electoral Commission (INEC) which is the country's electoral umpire in recent times to be precised in 2021 introduced the use of Bimodal Voter Accreditation System (BVAS) in the administration of elections in Nigeria (Wahab, 2022).

Wahab (2022) described BVAS as an electronic device/biometric technology designed to verify Permanent Voter Cards (PVCs), and enable human recognition through a biometric verification mechanism, using both fingerprint and facial recognition of voters. The device also can capture pictures of the polling units results sheet, that is form EC8A and enables the upload of the picture of the result sheet on INEC's Election Results Viewing Platform known as IRev (Wahab, 2022). Furthermore, he informed that the portal (IReV) allows members of the public to create personal accounts that grants them access to polling units' results uploaded on the platform as a Portable Document Format. Drawing from these assertions, BVAS was considered by the electoral umpire as crucial in verifying the genuineness of voter's cards and voters authentication during accreditation exercise on the day of election.

Odeh (2024) informed that Bimodal Voters Accreditation System works by scanning the bar-codes on the Permanent Voter's Card; through entrance of the last six digits of the Voter Identity Number; or keying in the last name of voter by the APO 1: Assistant Presiding Officer to verify and see to the voters authentication. It as well, serves as the Independent National Electoral Commission's Voter Enrolment Device during registration of voters; and eliminate the use of incident forms during accreditation (Odeh, 2024). Kuna (2021) revealed that the design of the BVAS makes it impossible for any person to abuse or tamper with the electoral results uploaded on the IReV using the technology. That is, with the use of BVAS, polling units results can be transferred to the viewing portal of INEC and the results transferred cannot be manipulated since the machine was not designed with the capability to edit the image results uploaded and sent to the electoral umpire's result viewing portal; and once the result is sent, it cannot be recalled (Kuna, 2021). Additionally, he informed that the upload of election results at the polling units using the BVAS is instant and at the viewing portal, members of the public can access the transmitted results uploaded. It was on this same footing that Mike Igini the former Akwa Ibom State Resident Electoral Commissioner of INEC held the belief that the device returned power to the people since it would make rigging of elections almost impossible for politicians and on that note has the potential to promote the conduct of credible elections in the country (Jannamike, 2023). This however, is subject to verification.

A credible election is an election which guarantees and accomplishes inclusiveness, accountability, compliance with laws and regulations, and transparency (Open Election Data Initiative, 2024). Explaining each of the indicators of credible elections, it stated that election is inclusive when it provides equal chances for all the qualified citizens to take part as voters in choosing their representatives and as candidates for election to government. More so, fair chance for eligible candidates to emerge as winners in the election. With regards to transparency, it maintained that a transparent election embodies steps that are open to scrutiny, and must make it possible for stakeholders to autonomously verify whether the process is conducted honestly and accurately. That is, principle of transparency has link to the fundamental right of citizens to seek, receive and impart information, as well as their right to engage in government and the affairs of the public. Going further, he stated that accountability in elections entails the rights which citizens have with regards to the conducts of other electoral stakeholders, including the government, political parties, security forces, election management bodies, and candidates. On compliance with laws and regulations as element of credible election, he averred that elections

are said to be laws and regulation compliant when the electoral umpire, its officials, candidates for the election and eligible voters observe the already established procedural and legal standards guiding the operation of the electoral system in the conduct of the election. Drawing from this, it would mean that BVAS application by INEC in the administration of elections in Nigeria should foster accountability, compliance with electoral laws and regulations, transparency and of course inclusiveness in elections if it must be deemed to be instrumental to elections credibility in Nigeria. However, before the introduction of BVAS in election administration in Nigeria, what was in practice was the manual system where papers were solely used for the exercise; later aided in 2015 with the use of Smart Card Reader an electronic device with the capability of reading and authenticating voters card; replaced with the BVAS in current era of electronic voting in Nigeria (Ogieva & Ajisebiyamo, 2023). They disclosed that the manual electoral process was flooded with manipulation of elections result by desperate and corrupt politicians who relentlessly installed incompetent and charlatans as leaders; thereby consistently forming illegitimate government in the country.

This study seeks to examine the influence of the use of Bimodal Voter Accreditation System on the credibility of elections; particularly in the just concluded 2023 General Elections in Enugu state, Nigeria. The election was conducted on February 25, and March 18, 2023 for the Presidency and National Assembly, and Gubernatorial and House of Assembly respectively.

Election administration in Nigeria and specifically in Enugu State has over the years been bereft of transparency, inclusiveness, and compliance with electoral laws and regulations; instead has been enmeshed in frequent irregularities including electoral results manipulations, disenfranchisement of voters, voter intimidation and bullying, vote buying, forgery of the number of registered voters, mutilation of results and computational errors, swapping of results sheets, forgery of result sheets, snatching and destruction of result sheets to mention but a few, which often resulted in the imposition of candidates and installation of incompetent leaders (Alfred, 2019; Efebeh & Ohis 2023; Udenta & Udenta, 2023). They disclosed that further consequences of this anomaly is high voter apathy, formation of illegitimate government in the sight of the citizens, and successive alienated governments with an impoverished citizenry.

Most scholars blame the unsettling situation of electoral manipulation in the Nigerian electoral system on the mode or system of election administration in the previous years describing it as crude and worse-off, ineffectual in actually projecting and protecting the will of the people in selecting their leaders; while being hopeful that BVAS would be able to better the lots (Alfred, 2019; Efebeh & Ohis 2023; Kayode, 2023). According to Alfred (2019), the mode of election administration in the country before the advent of electronic voting system was the manual system which was flooded with series of electoral irregularities to include a voter voting multiple number of times for the same elective position, increased cases of voting by proxy or in absentia, overvalued election results among others. Efebeh and Ohis (2023) stated that BVAS is meant to aid the election process credibility as it has the capacity of immediate upload of elections result at the polling units to INEC viewing portal; that is electronic transfer of polling units result to INEC IRev for official use and for public consumption. It is also used for collation of results at the Registration Area Center (RAC); and lastly for voter accreditation. But whether BVAS employment in these areas in the election process fostered election credibility in Enugu State is what this study is set to investigate. That is, with the INEC's introduction and application of Bimodal Voter Accreditation System on the basis that it will help to curb the irregularities witnessed in the earlier administration of elections in Nigeria and in recent times; and in the light of the belief of the electoral umpire that the technology is designed in such a manner that it will make rigging of elections nearly impracticable in Nigeria and promote the conduct of credible elections all over the country; it becomes paramount to verify the outcome of the application of the Technology in the just concluded 2023 General Elections in Nigeria. The specific State of interest in Nigeria selected for the study being Enugu state, and the key indices of credible elections already discussed to include transparency in election, inclusiveness in election, and

compliance with electoral laws and regulations; the study examined the impact of the use of BVAS at the polling units, on credibility of elections in Nigeria, but in Enugu state precisely, raising the following research questions as guides to the study:

1. How has the use of Bimodal Voter Accreditation System enhanced inclusiveness in the 2023 general elections in Enugu State?
2. Did the use of Bimodal Voter Accreditation System promote compliance with electoral laws and regulations in the 2023 general elections in Enugu State?
3. How did Bimodal Voter Accreditation System improve transparency in the 2023 general elections in Enugu State?

The study has both broad and specific objectives. The broad objective of the study is to examine Bimodal Voter Accreditation System and Credibility of Elections in Nigeria. However, the specific objective of the study is to:

1. Find out how the use of Bimodal Voter Accreditation System enhanced inclusiveness in the 2023 general elections in Enugu State
2. Identify if the use of Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State
3. Find out how Bimodal Voter Accreditation System improved transparency in the 2023 general elections in Enugu State

The study has both theoretical and empirical significance. Theoretically, the study advances the frontiers of knowledge through the application of Cybernetic Communication Theory, coined by Nobert Weiner in 1948. It engages into critical review of other relevant theories related to the study, thereby further promoting and creating awareness about them in literature. More so, the study provides conceptual insight about the key concepts captured in the topic and other concepts related to them. It does this by engaging into conceptual review. The study also serves as data bank for future researchers who would develop interest in carrying out a related study or embark on the replication of the current one.

Empirically, the study made findings and recommendations which are very vital for use by the Independent National Electoral Commission, the State Electoral Commission, the civil society organizations (CSOs) and the electorates within Enugu State and in Nigeria as well. This is particularly in a time like this when citizens of Nigeria, the civil society organizations and members of the international community are in possession of varied information, misinformation, and opinion about the Nigerian electoral system, with some describing it as dubious and catastrophic and others as in near absolute promotion of denial of the dividends of democracy against the masses. The findings of the study can inform the change or modification of the use of BVAS in administering elections, specifically in pursuance of credibility in elections exercise as it has to do with the indices of: inclusiveness, competitiveness, and transparency. The study's findings can also prompt further research.

In content, the scope of the study covers examining Bimodal Voter Accreditation System and Credibility of Elections, particularly as it is concerned with the 2023 general elections conducted in Enugu State, Nigeria. Indices of credible election which the study looked into are: inclusiveness, transparency, and compliance with electoral laws and regulations. While BVAS assessment in the study covers its use at the poling units during the conduct of the election.

Geographically, the scope of the study is Enugu State; in which case INEC office in Enugu State was considered as well as the 2023 election administered by the Office in the territory of the state. The choice of this study period was because it is the year marking the first use of BVAS in the conduct of general elections in Enugu state; hence the impact is important to ascertain.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Bimodal Voter Accreditation System

Mark (2023) defined Bimodal Voter Accreditation System to mean an electronic gadget that is programmed to verify the registration of voters via the authentication of the PVC. In a related fashion, Egye (2024) defined BVAS as an electronic instrument that is used to validate voters' eligibility and identity card ownership before election. It refers to a system that enables voter authentication using facial recognition and fingerprint technology (Independent National Electoral Commission, 2023). More so, the Commission stated that it is made up of software and hardware elements. Oyemike (2023) informed that, its hardware components includes fingerprint scanner, front camera, touch screen, back camera, Light-Emitting Diode (LED) flash, microphone, volume button up/down button, Universal Serial Bus (USB) type A port, USB type C port, speaker, and sim card and Secured Digital (SD) cards slots and device battery enclosed within the back cover.

Writing on the uses of BVAS, Oyemike (2023) informed that it is used to transmit a snapshot of the result sheet at the polling units to INEC portal in real time for the members of the public to see, as long as they are logged in to the portal; it reads permanent voters card and it is used to accredit and authenticate the voter. This position was shared by Uwaezuoke and Nwaobu (2023) when they revealed that the it can be used to scan and electronically transmit polling unit, rack area, local government area, and state election results to INEC Results to INEC viewing portal.

Uwaezuoke and Nwobu, (2023) pointed out how the verification process using BVAS is done. They said it is done by the Adhoc staff of INEC via the use of fingerprint of the card holder, and the card holders facial recognition attribute to prove eligibility of the voter and certainty of polling units. The process of authentication using BVAS is done following: the scanning of the QR code on the PVC; conducting an online search using the last 6-digits on the permanent voters card, and online search using the surname of the card bearer (Uwaezuoke & Nwobu, 2023). Additionally, they disclosed that this verification is executed by the Assistant Presiding Officer (APO) in the polling unit within the time the election is slated.

Writing on importance of BVAS, Ajani (2023) avers that it assist in reducing the incidences of manual manipulation of figures. In the 2023 general election in Nigeria, Stefanov (2023) reported that the relevance of BVAS was to improve the integrity of elections in the country and restore public trust on INEC. Going forward he reiterated that it was a hope of fairer elections as its appearance saw many citizens of the country pin their hopes on the technology. Bimodal Voter Accreditation System finds its relevance in its capacity to checkmate on over-voting (Dennis, 2023). He further stated that with the technology, registered voters will first be accredited, and once this is done, it digitally reflects on the electoral umpire's central database, which makes it easy for INEC to track the number of actual votes in a polling unit. Itodo (2022) stated that according to the Independent National Electoral Commission, BVAS in conjunction with IReV are addressing the ten most pervasive weaknesses in Nigeria's election result management process to include manipulation of results and computational errors, swapping of results sheets, snatching and destruction of results sheets, falsification of number of accredited voters, falsification of votes at polling units, among others.

2.1.2 The Concept of Election Credibility

In the view of Onyinmiebi & Inokoba (2024), election credibility in other words, credible election is one that is devoid of fraud, permits equal participation, holds stakeholders accountable, promotes fair political competition, and maintains transparency. That is, election credibility emphasizes electoral process that are made up of numerous fundamental issues. To begin with, for elections to posses credibility, they require granting all eligible citizens the right to vote without discrimination based on race, religion, and gender; and they require universal suffrage (International Foundation for Electoral Systems, 2020). In same vein, International Institute for Democracy and Electoral Assistance (2012) states that election credibility demands freedom of expression, which enables persons to voice their opinions without the fear of intimidation and

repression. This means, election credibility is founded on the principles of democracy cutting across fairness, inclusiveness, competitiveness, equity, justice, minimal interference of incumbent leadership, and transparency. It must follow strictly, the provisions outlined in the constitution and in the electoral law. Additionally, a credible election must be free from electoral violence.

According to Magaji & Ahmed (2018), election credibility promotes social, economic and political development of any country practicing democracy. That is, election credibility is the central instrument for measuring democracy and the degree to which the electoral process produces the actual will of the people is indicative of the thoroughness of democracy in a given society.

2.1.3 Electoral Reforms in Nigeria

According to Arowolo (2013) electoral reform refers to an intoto overhaul of election administration with the aim of increasing participation opportunities in a setting that is free from bias and is transparent. They are intentionally made efforts to change the format and conduct of elections including the behaviour and attitudes of voters in order to improve election processes for the advancement of democracy and the country (Ughulu & Ihaza, 2023).

Election administration in Nigeria is currently regulated by the 1999 Constitution of Nigeria (as amended), the Electoral Act of 2010 (as amended) and Electoral Act (as amended) 2022 respectively (Ughulu & Ihaza, 2023). They further disclosed that Electoral Act was first passed in Nigeria in 2001 with others coming afterwards to include that passed in 2006, 2011, 2015, and 2022. According to Agbaje and Adejumobi (2006), other than this line of electoral reform, previously was the irregular change of the name of the electoral umpire from 1959: Electoral Commission of Nigeria (ECN: 1959-1963); Federal Electoral Commission (FEC: 1963-1966); Federal Electoral Commission (FEDECO: 1976-1979); National Electoral Commission (NEC: 1986-1993); National Electoral Commission of Nigeria (NECON: 1993-1998); and the Independent National Electoral Commission (INEC: 1998-date). Each of these commissions conducted election in the country at one level or the other.

Moving to the electoral reforms proper, some key entrenchments in each of them to begin with the 2006 Electoral Act are pointed out. The 2006 electoral act gave the Commission the power to appoint its secretary who was to undertake voter education and to prosecute offenders. It was the same 2006 act that addressed the ambiguities that surrounded the appointment and dismissal of resident electoral commissioners. Due to some shortcomings of the 2006 Act, the 2010 electoral act was passed to address them and get the Act in line with the amended constitution. The act was however, revised once prior to the 2011 elections to make for extension of the voter registration period, move the date for the election and streamline the Act's authority to de-register political parties in tune with the law, and also restrict the ability of an election tribunal to invalidate election and prevent them from announcing candidates as winners of election. It was the Act that established criminal penalties for electoral offenses, and requires the announcement and posting of election results at polling places- given INEC authority to initiate proceedings against offenders.

The first alteration of the 1999 constitution provided for the financial autonomy of INEC, and charges its chair and members salaries as well the budget of the Commission to the Consolidated Revenue Fund. Key areas of the constitutional reform include the neutrality and non-partisanship of commission members, the jurisdiction of the courts in determining election petitions, the composition of election petition tribunals and the time limits for the determination of election petitions.

Oliji (2021) noted that, before the 2006, 2010 Acts and the constitution amendment, the chain of command between the Commission and the resident electoral commissioners was blurry, and there was no lucid legal framework on how to remove them from office. He further informed that this made them not answerable to the commission, but to the person who appointed them (the president). This was addressed in the 2010 Act providing their tenure and their stewardship

to the commission in addition to stipulating the channel to be followed in removing them from office. More so, Oliji (2021) informed that the 2011 reform brought about the use of an electronic smart card reader, permanent voters card, simultaneous accreditation and voting system in the country's electoral system. It was the 2011 Electoral Act that also abridged the time from 60 days to 30 days within which the commission must stop the registration of voters before any general election. The 2010 Electoral Act was further amended by the 2015 Electoral Act, to increase the number of days for duplicate voter card application and issues, determine procedure for voting and making provisions for the secretary's tenure.

The most recent electoral reform in the country is the 2022 Electoral (Amendment) Act. It came into force on 25 February, 2022. This Act repealed the Electoral Act No. 6, 2010 and it is targeted at reforming and bringing new wave of innovations to control all federal, state, and local governments councils elections in the country (Adewole, 2022). He pointed out that this act introduced the following changes: technological change in electoral process (from card reader to BVAS), what happens at the death of electoral candidates; INEC having the power of review; establishing who is qualified to sue a candidate; granting INEC financial independence; provision for central electronic voter database to mention but this few.

2.2 Theoretical Review

2.2.1 Liberal Theory of Democracy

This theory was put together by Jeremy Bentham and James Mills. The central idea of the theory is how to promote political systems that foster universal suffrage where adult citizens are given the opportunity to vote and be voted for regardless of gender; race and religion (Ebegbulem, 2017). Kwasau (2013) stated that the dogmas of the theory are free, fair and periodic elections based on universal franchise; rule of law; emphasis on civil liberties or individual rights such as freedom of speech, assembly etc; competitive party system as opposed to one party system; and abhorrence of revolutionary approach to change government. But the theory did not emphasize the application of technology.

2.2.2 Task-Technology Fit Theory (TTF)

This Theory is one of the several theories under Information System Theory. According to Furneaux (2012), this Theory was developed in the mid-1990s and widely credited to Goodhue. The Theory provides explanative insight into the degree to which technology functionality matches task requirements to be executed by individuals and organizations (Goodhue, 1995). Additionally, he stated that the key idea of the Theory is that Information Technology (IT) capabilities need to be aligned with user and organizational tasks for it to accomplish the desired result and foster task execution. The Theory application has widely been in researches centered on technology functionality in organizational performance; and in research works seeking to justify the need for instrument fitness with task requirement for execution (Bernard, Bruz & Mohdab, 2019). The theory failed to lay emphasis on electoral system application of information and communication technology.

2.2.3 Cybernetic Communication Theory

This theory was coined by an American Mathematician named Norbert Weiner in his book titled "Cybernetics", published in the year 1948. Others who advanced this theory are Von Neuman and Couffignal. According to Abdulkadir (2021), cybernetic communication theory is a theoretical instrument for analyzing the role of information and communication technology in human activities. Cybernetics is the study of the operations of control and communications systems (Garuba, 2003). Buttressing on the application of technology in mans endeavour as key in cybernetic communication theory, Abdulkadir (2021) further stated that this is because, the exceeding convolution of the world has made the use of information and communication technology for administrative purposes quite fundamental. This however, underpins why most countries around the globe, Nigeria inclusive deploy information and communication technologies to aid in executing certain task in governance; election inclusive (Abdulkadir, 2021). Additionally, he stated that this makes the theory a basis for comprehending electoral process,

and a reason the Nigerian political system has ventured into the employment of information and communication technology as a means to an end in advancing the pace of politics and the efficiency of administration and governance in Nigeria. The theory is apt about technology application in electoral process, although its shortfall is on the human elements that has to man the technology which was not given due attention in terms of their capacity and level of capability.

2.3 Empirical Literature Review

Chima (2022) titled his study "Transiting from manual voting to electronic voting system for enduring democratic governance in Nigeria: The imperative for digital remedy". The study which was prompted on the ground that there are mixed reactions from different individuals, academics and societies that the country Nigeria is not ripe for electronic voting and may not be able to sustain such technology investigated the enormity of hitches tied to transiting from manual-based electoral systems to the electronic voting system and determined hurdles with the electronic voting system. The study was descriptive and exploratory. It drew mainly from secondary sources, data informing its findings. The study found among others that documentary evidence and cases drawing from other climes where electronic voting has been put into practice worldwide revealed that the cost-saving potential of electronic voting is limitless, eliminates electoral frauds with votes completed and submitted online.

In another fashion, Jonah (2018) centered his study on "The impacts of smart card reader on election credibility in Nigeria: A study of 2015 presidential election in Ekeremor local government area of Bayelsa state, Nigeria". The study stated that the pivotal issue in the 2015 presidential election in the country was the use of the Smart Card Reader, which was a critical element in the election. More so, the study stated that the use of Smart Card Reader brought about debate among election stakeholders before, during and after the election of 2015. The study was a quantitative survey. It draws its data from primary sources. Data collected in the study was analyzed using Statistical Package for the Social Sciences. The study found among others that smart card reader has credibility on the conduct of the 2015 general elections in the country.

In a related fashion, Joseph (2023) conducted a study with the title "The use of BVAS in Nigeria's 2023 election, challenges and prospects". The aim of the study was to examine the voting pattern of the February/March 2023 presidential election using BVAS machine in Bogoro local government area of Bauchi state. The study was a qualitative survey. It adopted both primary and secondary data. Data employed for the study was analyzed using descriptive statistics of frequency count and simple percentages. The study found among others that there is great level of awareness among the public as regards the use of Bimodal Voter Accreditation System.

Badmus (2018) rather investigated paradigm shift in election security and triology threats of ransom-ware, phishing and internet disruptions in the federal Republic of Nigeria. The study being a qualitative survey, employed thematic approach on related literature. Among the findings of the study are that, the world including Nigeria in seeing to the address of election related issues via the use of cyberspace and other technological devices must be wary in curtailing disruption to election security brought to being by the new technologies. Instances of such threats manifestation include: cyber-attack on election management website; issues of holding reporting data and other sensitive election software into ransom on election night etc.

2.2 Theoretical Framework

The theoretical orientation most fitted for this study is Cybernetic Communication Theory. The theory was coined by an American Mathematician named Norbert Weiner in his book titled "Cybernetics", published in the year 1948. According to Abdulkadir (2021), Cybernetic communication theory is a theoretical instrument for analyzing the role of information and communication technology in human activities. Buttressing the application of technology in mans endeavour as key in cybernetics communication theory, he further stated that the exceeding convolution of the world made the use of information and communication

technology for administrative purposes necessary. This, underpins why most countries around the world, Nigeria inclusive deploy information and communication technologies to aid in executing certain tasks in governance; election inclusive (Abdulkadir, 2021). Additionally, he stated that, this makes the theory a basis for comprehending electoral process, and a reason the Nigerian political system has ventured into the employment of information and communication technology as a means to an end in advancing the pace of politics and the efficiency of administration and governance in Nigeria.

2.2.1 Tenets of Cybernetic Communication Theory

According to Wiener (1969), the propositions of this theory are:

1. The exceeding convolution of the globe has made the use of information and communication technology for administrative reasons very fundamental
2. Election management aligns with these administrative imperatives
3. Information and communication technology has role in human endeavours
4. Information and communication technology is a system that has the capability of receiving, storing, and processing information and such data processed can be utilized for control purposes in human activities
5. There is a correlation between actions within a system and the emerging results

2.2.2 Application of Cybernetics Communication Theory to the Study

This theory, applies to this study in line with its principles. In the first instance, the theory is a justification of the assessment of the moderating variable in this study in terms of its implementation and observable impact on election credibility. More so, the theory proposition that information and communication technology as a system has the capacity to receive, store retrieve and process information which can be utilized for regulatory purposes, substantiates the nature and role of Bimodal Vote Accreditation System in election administration in Nigeria, defining and aligning with its components in facilitation of/ in upholding a proper regulation of activities necessary for the promotion of credible election as a purpose. This sets the current study into perspective and forming the parameter on which the outcome of the use of BVAS in the election can be assessed side-by-side the indices of credible election covered in this study. Succinctly, the theory provides analytical insight, very crucial for understanding the degree of technological deployment and the role technology assumes in the electoral process.

Mores so, the theory as applied in this study provides the ground for the sub-theory wherein there is the linking, tentatively of the expected outcome of the election with the technology employed and a juxtaposition of this with the actual results obtained in the form of findings. This further entails that the application of this theory to the study stretches to the determination of research participants, and method of data collection and analysis. It also provides guides to the interpretation or discussion of the findings of the study and recommendations to be made which all connects to the sub-theory and at the same time are aligned with the specific objectives of the study.

2.3 Hypotheses

Three alternative hypotheses were postulated to guide the study. They are as follows:

1. The use of Bimodal Voter Accreditation System significantly enhanced inclusiveness in the 2023 general elections in Enugu State
2. The use of Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State
3. Bimodal Voter Accreditation System significantly improved transparency in the 2023 general elections in Enugu State

2.3.1 Operationalization of Key Concepts

The following main concepts in the hypotheses means:

i. **Bimodal Voter Accreditation System:** an electronic gadget programmed to verify the registration of voters via the authentication of the permanent voters card. It is also used to upload results on INEC election results viewing portal; and as well for result collation.

ii. **Inconclusiveness:** the provision of equal chances for all the qualified citizens to take part as voters in choosing their representatives as candidates for election into government
iii. **Compliance with Electoral Laws and Regulations:** the observation of the 2022 Electoral Act and the contents of the 1999 Constitution of Nigeria as amended and related to elections in the country by candidates that took part in the election, the eligible voters, INEC and its officials.
iv. **Transparency:** an election embodying steps that are open to scrutiny and makes it possible for stakeholders to independently verify the honesty and accuracy or otherwise of the election process.

3.0 METHODOLOGY

3.1 Research Design

The study is an analytical cross-sectional survey. An analytical cross-sectional survey is a research design which involve the collection of vital information on the presence or level of one or more variables of interest; and assesses the relationship between the presence of an exposure and that of an outcome (Aggarwal & Ranganathan, 2019). It is adopted in this study, as the study sets to obtain information about the variables of interest from the population at one time.

3.1 Population of the Study

The population of this study comprises of all the 2,104,723 (two million, one hundred and four thousand, seven hundred and twenty three) persons above the age of 18 years in Enugu state (National Bureau of Statistics, 2022).

3.2 Sample Size and Sampling Technique

The sample size of the study comprises of 300 research respondents who were above the age of 18 years. The sample selection was done by employing multiple stage sampling technique. In the first phase of the sample selection, cluster sampling technique was employed to partition the population into the three senatorial districts of the state: Enugu North, South and East. In the second phase, stratified simple random sampling technique was adopted to draw one local government each from the strata of local governments in the clusters. In the third stage, convenience sampling technique was adopted to select 100 participants from age 18 and above from each of the three strata of local governments. Thus, a total of 100 respondents from the first local government plus 100 respondents from the second local government, plus 100 respondents from the third local government were drawn, amounting to 300 research participants. That is 100+100+100 = 300.

3.3 Sources and Methods of Data Collection

The sources of data collection for the study comprised both primary and secondary methods of data collection. The primary sources of data collection which consists of data directly generated by the researcher from the field was through questionnaire instrument. The secondary sources of data collection which are from previous works of other scholars and researchers, comprised of documentary information from books, articles, journal publications, and official government publications.

3.4 Method of Data Collection

The method of data collection for this study is questionnaire. A structured questionnaire was drafted to elicit guided responses from the research participants; and each question asked was useful to the attainment of the specific objectives of the study. This questionnaire is modeled on five points Likert scale of Strongly (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD); with the respective value of the measurement scale coded as 5,4,3,2,1.

3.5 Validity of Instrument of Study

For the validity of the instrument of data collection, the instrument (questionnaire) was submitted to three experts to validate its content. First, the questionnaire was submitted to an expert in the Department of Measurement and Evaluation, Faculty of Education, University of Nigeria Nsukka, to review the items in the instrument in terms of their clarity, suitability and

appropriateness of language. Later, the questionnaire was submitted to two independent researchers in the Department of Public Administration, Faculty of the Social Sciences, University of Nigeria, Nsukka for verification and approval of appropriateness. Of these last two independent researchers, one was the project supervisor, whose final vetting was adopted as guide in preparing the final copy distributed.

3.6 Reliability of Instrument of Study

Pilot test method was applied to foster the reliability of the data gathering instrument. The questionnaire was first administered to 20 notable politicians in Nsukka Local Government of the State. Data collected was subjected to the test of internal consistency using Crombach Alpha, and the outcome of the test of the responses to the entire items on the questionnaire was 0.896.

3.7 Method of Data Presentation and Analysis

Data were presented in tables that display their percentile representation and descriptive statistics for easy understanding. The method of data analysis employed in the study is Grand Mean Approach. In the use of Grand Mean Approach, cluster mean was used to test the three hypotheses. These were done using the Statistical Packages for the Social Sciences (SPSS) version 20.

3.8 Decision Rule for Consideration of Test Result

For descriptive statistics of responses to item statements, any item statement whose mean of response is above 2.50 is accepted; while those with mean of response below 2.50 are rejected. With regards to hypotheses testing, Cluster Mean of 2.50 benchmark would result to the acceptance of the alternative hypothesis, but with a lesser figure, the alternative hypothesis would be rejected, and the null hypothesis accepted.

4.0 RESULTS AND DISCUSSION

4.1 RESULTS

4.1.1 Biodata and Location of the Respondents

The bio data and Local Government Areas of the respondents is presented in Tables 1A, B and C. Table 3.0.1 above disclosed that 182(60.7%) of the respondents were male, while 118(39.3%) of them were females. Table 3.0.1 above disclosed that 182(60.7%) of the respondents were male, while 118(39.3%) of them were females. Data in table 3.0.3 above revealed that 100(33.3%) off the respondents were from Nsukka, 100(33.3%) were from Nkanu West, and 100(33.3%) others were from Ezeagu.

Table 1A Gender of Respondents

Category		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	182	60.7	60.7	60.7
	Female	118	39.3	39.3	100.0
	Total	300	100.0	100.0	

Table 1B: Respondents Age

Category		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-28	108	36.0	36.0	36.0
	29-39	41	13.7	13.7	49.7
	40-50	100	33.3	33.3	83.0
	51 and Above	51	17.0	17.0	100.0
	Total	300	100.0	100.0	

Table 1C Respondents Local Government

Name		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nsukka	100	33.3	33.3	33.3
	Nkanu West	100	33.3	33.3	66.7
	Ezeagu	100	33.3	33.3	100.0
	Total	300	100.0	100.0	

4.1,2 The use of Bimodal Voter Accreditation System significantly enhanced inclusiveness in the 2023 general elections in Enugu State

In line with the first hypothesis postulated to guide the study, the data obtained from the respondents matchable to the hypothesis testing were presented hereunder and linked to questions 1, 2, 3, 4, and 5 of the questionnaire.

Table 2: **Frequency and percentile distribution of responses of respondents on whether Bimodal Voter Accreditation System significantly enhanced inclusiveness in the 2023 general elections in Enugu State**

Most registered voters who appeared at my polling unit voted on the basis that their votes will count since BVAS was used to upload the election result

Response	**Frequency**	**Percentage**
Strongly Disagree	1	3
Disagree	4	1.3
Undecided	-	-
Agree	86	28.7
Strongly Agree	209	69.7
Total	300	100

The level of voter discrimination at my polling unit was little, given the excitement which electorates had about BVAS upload of election result

Response	**Frequency**	**Percentage**
Strongly Disagree	48	16.0
Disagree	41	13.7
Undecided	-	-
Agree	145	48.3
Strongly Agree	66	22.0
Total	300	100

All results belonging to candidates of the distinct political parties were uploaded using BVAS

Response	**Frequency**	**Percentage**
Strongly Disagree	-	-
Disagree	6	2.0
Undecided	-	-
Agree	28	9.3
Strongly Agree	266	88.7
Total	300	100

There was indeed, massive participation in the election as a result that BVAS was to be used to transmit the election results

Response	**Frequency**	**Percentage**
Strongly Disagree	-	-
Disagree	68	22.7
Undecided	-	-
Agree	103	34.3
Strongly Agree	129	43.0
Total	300	100

Party agents were effectively present in the electoral processes and were less agitated because, all voters duly accredited using BVAS were allowed to vote

Response	**Frequency**	**Percentage**
Strongly Disagree	5	1.7
Disagree	-	-
Undecided	-	-
Agree	231	77.0
Strongly Agree	64	21.3
Total	300	100

Source: SPSS output, 2024.

Table 3.1 above discloses responses obtained from respondents on whether Bimodal Voter Accreditation System significantly enhanced inclusiveness in the 2023 general elections in Enugu State. The result showed that 295(98.3%) of the respondents gave positive response that most registered voters who appeared at their polling units voted on the basis that their votes will count since BVAS was used to upload the election result; 211(70.3%) of the respondents positively affirmed that the level of voter discrimination at their polling units was little, given the excitement which electorates had about BVAS upload of election result; 294(98%) of the respondents gave positive response that all results belonging to candidates of different political parties were uploaded using BVAS; more so, 232(77.3%) of the respondents positively affirmed that there was indeed, massive participation in the election as a result that BVAS was to be used

to transmit the election results; and 295(98.3%) of the respondents positively affirmed that party agents were effectively present in the electoral processes and were less agitated because, all voters duly accredited using BVAS were allowed to vote.

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3.1.1 Data Analysis and Finding

Using SPSS for the analysis, the mean rating of the responses given by the respondents along side their standard deviations were ascertained. Following the rating, decision was reached on the rule to accept item statements and alternative hypothesis on 2.50 minimum mean benchmark, reject alternative hypothesis if the cluster mean falls below 2.50; and reject item statements having mean responses below 2.50 benchmark.

Table 3.1.1: **Mean, Standard Deviation (SD) and Decision on whether Bimodal Voter Accreditation System significantly enhanced inclusiveness in the 2023 general elections in Enugu State**

Item Statements	Mean	SD	Decision
Most registered voters voted on the basis that their votes will count since BVAS was used to upload the election result	4.66	0.59	Accepted
Low level of voter discrimination given the excitement which electorates had about BVAS upload of election result	3.47	1.39	Accepted
All results belonging to candidates of the distinct political parties uploaded using BVAS	4.85	0.50	Accepted
Massive participation in the election as a result that BVAS was to be used to transmit the election results	3.98	1.16	Accepted
Party agents effective presence in the electoral processes and their less agitation because all voters duly accredited using BVAS were allowed to vote	4.16	0.58	Accepted
Cluster Mean	**4.22**	**0.84**	**Accepted**

Source: SPSS Version 20

Result on table 3.1.1 above is a Grand Mean analysis on whether Bimodal Voter Accreditation System significantly enhanced inclusiveness in the 2023 general elections in Enugu State. All the item statements were accepted since none of them have mean value less than 2.50 benchmark. The result from the table shows a cluster mean ***4.22*** of responses pertaining to hypothesis one which is above 2.50.

Findings: with a cluster mean of ***4.22*** of responses pertaining to hypothesis one which is above 2.50 as contained on table 3.1.1 above in support of the alternative hypothesis, the alternative

hypothesis which states that, the use of Bimodal Voter Accreditation System significantly enhanced inclusiveness in the 2023 general elections in Enugu State was accepted. An instance to this was that all results belonging to candidates of the distinct political parties was uploaded using BVAS, among others.

3.1.2 Discussion of Findings

The study's finding that Bimodal Voter Accreditation System significantly enhanced inclusiveness in the 2023 general elections in Enugu State was a result that most registered voters, voted on the basis that their votes will count since BVAS was used for upload of the election result. That is, it was on the basis that the electronic and not the manual approach of result collation was adopted that large number of voters who showed up at the polling units castes their ballots. More so, this goes to portray the peoples distaste of manual system of result collation in election. Another reason for the outcome of the analysis was low level of voter discrimination given the excitement which electorates had about the use of BVAS for upload of election result. Voter discrimination had featured in some elections conducted in the country in the earlier years when manual system was adopted. But with the excitement which people had about the use of BVAS, this anomaly reduced.

Additionally, all results belonging to candidates of the various political parties who took part in the election were uploaded using BVAS. This points to a fair and all inclusive election process. There was also massive participation in the election due to the employment of BVAS for the transmission of the election results. Lastly, party agents took active part in the electoral processes with less agitation due to the fact that all voters duly accredited using BVAS were allowed to vote.

3.2: Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State

In line with the second hypothesis postulated to guide the study, the data obtained from the respondents matchable to the hypothesis testing were presented hereunder and linked to questions 6, 7, 8, 9, and 10 of the questionnaire.

Table 3.2: **Frequency and percentile distribution of responses of respondents on whether Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State**

Political party agents in the election duly signed result sheets without engaging in physical confrontation due to the use of BVAS to snap the results sheets and transmit them to INEC election viewing portal

Response	Frequency	Percentage
Strongly Disagree	8	2.7
Disagree	-	-
Undecided	73	24.3
Agree	103	34.3
Strongly Agree	116	38.7
Total	300	100

Candidates who took part in the election encouraged their supporters to desist from violence at polling units, trusting that BVAS upload of election results will ensure votes castes in their favour are protected

Response	**Frequency**	**Percentage**
Strongly Disagree	13	4.3
Disagree	19	6.3
Undecided	3	1.0
Agree	184	61.3
Strongly Agree	81	27
Total	300	100

At my polling unit, some voters with physical disabilities, and special needs disclosed that they were assisted to polling units by persons of their choice on the basis that BVAS would be used to upload results of the election

Response	**Frequency**	**Percentage**
Strongly Disagree	-	-
Disagree	9	3.0
Undecided	-	-
Agree	160	53.3
Strongly Agree	131	43.7
Total	300	100

I seriously frowned at vote buying at the polling units due to BVAS employment to transmit actual electoral results

Response	**Frequency**	**Percentage**
Strongly Disagree	-	-
Disagree	3	1.0
Undecided	8	2.7
Agree	70	23.3
Strongly Agree	219	73.0
Total	300	100

Some voters in my polling unit said it was because of BVAS use for upload of election results that they did not sale out their voters card

Response	Frequency	Percentage
Strongly Disagree	8	2.7
Disagree	27	9.0
Undecided	-	-
Agree	218	72.7
Strongly Agree	47	15.7
Total	300	100

Source: SPSS output, 2024.

Table 3.2 above discloses the position of respondents on whether Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State. The result showed that 219(73%) of the respondents gave positive response that political party agents in the election duly signed result sheets without engaging in physical confrontation due to the use of BVAS to snap the results sheets and transmit them to INEC election viewing portal; 265(88.3%) of the respondents positively affirmed that Candidates who took part in the election encouraged their supporters to desist from violence at polling units, trusting that BVAS upload of election results will ensure votes castes in their favour are protected; 291(97%) of the respondents gave positive response that at their polling units, some voters with physical disabilities, and special needs disclosed that they were assisted to polling units by persons of their choice on the basis that BVAS would be used to upload results of the election; more so, 289(96.3%) of the respondents positively affirmed that they seriously frowned at vote buying at the polling units due to BVAS employment to transmit actual electoral results; and 265(88.3%) of the respondents positively affirmed that some voters at their polling units said it was because of BVAS use for upload of election results that they did not sale out their voters card.

3.2.1 Data Analysis and Finding

Using SPSS for the analysis, the mean rating of the responses given by the respondents along side their standard deviations were ascertained. Following the rating, decision was reached on the rule to accept item statements and alternative hypothesis on 2.50 minimum mean benchmark, reject alternative hypothesis if the cluster mean falls below 2.50; and reject item statements having mean responses below 2.50 benchmark.

Table 3.2.1: **Mean, Standard Deviation (SD) and Decision on whether Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State**

Item Statements	Mean	SD	Decision
Political party agents signing result sheets without engaging in physical confrontation due to the use of BVAS to snap the result sheets and transmit them to INEC election viewing portal	4.03	0.93	Accepted
Candidates encouraging their supporters to desist from violence at polling units, trusting that BVAS upload of election results will ensure votes castes in their favour are protected	4.00	0.96	Accepted
Voters with physical disabilities, and special needs assisted to polling units by persons of their choice on the basis that BVAS were to be used to upload results of the election	4.38	0.65	Accepted
Disregard for vote buying at the polling units due to BVAS employment to transmit actual electoral results	4.68	0.58	Accepted
BVAS use for upload of election results being the reason voters did not sale out their voters card	3.91	0.87	Accepted
Cluster Mean	**4.20**	**0.81**	**Accepted**

Source: SPSS Version 20

Result on table 3.2.1 above is a Grand Mean analysis on whether Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State. All the item statements were accepted since none of them have mean value less than 2.50 benchmark. The result from the table shows a cluster mean *__4.20__* of responses pertaining to hypothesis two which is above 2.50.

Findings: with a cluster mean of ***4.20*** of responses pertaining to hypothesis two which is above 2.50 as contained on table 3.2.1 above, in support of the alternative hypothesis, the alternative hypothesis which states that Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State was accepted. An instance to this was voters disregard for vote buying at the polling units due to BVAS employment to transmit actual electoral results, among others.

3.2.2 Discussion of Findings

That Bimodal Voter Accreditation System promoted compliance with electoral laws and regulations in the 2023 general elections in Enugu State was arrived at on the basis that the use of BVAS for upload of election results informed why voters did not sale out their voters card. That is, the voters believed in the technology so much that they did not fall to the bidden of political marabouts who made advances to buy-off their voters card to ensure they do not cast their ballots. There was disregard for vote buying at the various polling units due to BVAS employment to transmit actual electoral results. More so, voters with physical disabilities, and special needs were duly assisted to/at polling units by persons of their choice as approved by electoral regulations and laws, on the basis that BVAS was used in the conduct of the election.

Candidates who took part in the election encouraged their supporters to desist from violence at polling units, trusting that BVAS upload of the election results will ensure votes castes in their favour are protected; and political party agents signed result sheets without engaging in physical confrontation due to the use of BVAS to snap the results sheets and transmit them to INEC election viewing portal.

3.3: Bimodal Voter Accreditation System significantly improved transparency in the 2023 general elections in Enugu State

In line with the third hypothesis postulated to guide the study, the data obtained from the respondents matchable to the hypothesis testing were presented hereunder and linked to questions 11, 12, 13, 14, and 15 of the questionnaire.

Table 3.3: **Frequency and percentile distribution of responses of respondents on whether Bimodal Voter Accreditation System significantly improved transparency in the 2023 general elections in Enugu State**

INEC officials made sure they showed the data content of the BVAS to the party agents before any inputs were made and results transmitted

Response	Frequency	Percentage
Strongly Disagree	-	-
Disagree	38	12.7
Undecided	-	-
Agree	102	34.0
Strongly Agree	160	53.3
Total	300	100

The election was reasonably done in the day time due to the need to use BVAS to take clear pictures of the election result

Response	Frequency	Percentage
Strongly Disagree	8	2.7
Disagree	-	-
Undecided	32	10.7
Agree	107	35.7
Strongly Agree	153	51.0
Total	300	100

Voters voted only after they were duly accredited using BVAS in the presence of other voters

Response	Frequency	Percentage
Strongly Disagree	-	-
Disagree	24	8.0
Undecided	16	5.3
Agree	212	70.7
Strongly Agree	48	16.0
Total	300	100

Due to BVAS capacity to upload election result, at my polling unit, voters insisted that electoral officials count the votes in their presence, and upload exactly what was counted

Response	Frequency	Percentage
Strongly Disagree	-	-
Disagree	8	2.7
Undecided	4	1.3
Agree	278	92.7
Strongly Agree	10	3.3
Total	300	100

Voters at my polling unit insisted that result transmission using BVAS will only occur when all void votes are sorted out in their presence

Response	Frequency	Percentage
Strongly Disagree	35	11.7
Disagree	-	-
Undecided	6	2.0
Agree	65	21.7
Strongly Agree	194	64.7
Total	300	100

Source: SPSS output, 2024.

Table 3.3 above discloses the position of the research participants on whether Bimodal Voter Accreditation System significantly improved transparency in the 2023 general elections in Enugu State. The result showed that 262(87.3%) of the respondents gave positive response that INEC officials made sure they showed the data content of the BVAS to the party agents before any inputs were made and results transmitted; 260(86.7%) of the respondents positively affirmed that the election was reasonably done in the day time, due to the need to use BVAS to take clear pictures of the election results; 260(86.6%) of the respondents gave positive responses that voters voted only after they were duly accredited using BVAS in the presence of other voters; more so, 288(96%) of the respondents positively affirmed that due to BVAS capacity to upload election result, at their polling units, voters insisted that electoral officials count the votes in their presence, and upload exactly what was counted; and 259(86.3%) of the respondents positively affirmed that voters at their polling units insisted that result transmission using BVAS will only occur when all void votes were sorted out in their presence.

3.3.1 Data Analysis and Finding

Using SPSS for the analysis, the mean rating of the responses given by the respondents along side their standard deviations were ascertained. Following the rating, decision was reached on the rule to accept item statements and alternative hypothesis on 2.50 minimum mean benchmark, reject alternative hypothesis if the cluster mean falls below 2.50; and reject item statements having mean responses below 2.50 benchmark.

Table 3.3.1: **Mean, Standard Deviation (SD) and Decision on whether Bimodal Voter Accreditation System significantly improved transparency in the 2023 general elections in Enugu State**

Item Statements	Mean	SD	Decision
INEC officials showing the data content of the BVAS to the party agents before any inputs were made and results transmitted	4.28	0.98	Accepted
The election reasonably done in the day time due to the need to use BVAS to take clear pictures of the election result	4.32	0.87	Accepted
Voters voting only after they were duly accredited using BVAS in the presence of other voters	3.95	0.73	Accepted
Due to BVAS capacity to upload election result, at my polling unit, voters insisted that electoral officials count the votes in their presence, and upload exactly what was counted	3.97	0.39	Accepted
Voters at polling units insisted that result transmission using BVAS will only occur when all void votes are sorted out in their presence	4.28	1.28	Accepted
Cluster mean	**4.16**	**0.85**	**Accepted**

Source: SPSS Version 20

Result on table 3.3.1 above is a Grand Mean analysis on whether Bimodal Voter Accreditation System significantly improved transparency in the 2023 general elections in Enugu State. All the item statements were accepted since none of them have mean value less than 2.50 benchmark. The result from the table shows a cluster mean ***4.16*** of responses pertaining to hypothesis three which is above 2.50.

Findings: with a cluster mean of ***4.16*** of responses pertaining to hypothesis three which is above 2.50 as contained on table 3.3.1 above, in support of the alternative hypothesis, the alternative hypothesis which states that Bimodal Voter Accreditation System significantly improved transparency in the 2023 general elections in Enugu State was accepted. An instance to this was that voters at polling units insisted that result transmission using BVAS will only occur when all void votes were sorted out in their presence, among others.

3.3.2 Discussion of Findings

The outcome of test of hypothesis three that Bimodal Voter Accreditation System significantly improved transparency in the 2023 general elections in Enugu State emerged as a result that voters at polling units insisted that result transmission using BVAS will only occur when all void votes were sorted out in their presence. This, in essence was to ensure that whatever result to be transmitted to INEC election result viewing portal must be a true reflection of the actual outcome of the exercise to the confirmation or as it is obvious to the voters and party agents at the election venue. More so, due to BVAS capacity to upload election result at polling unit, voters insisted that electoral officials count the votes in their presence, and upload exactly what was counted. Voters who took part in the election voted only after they were duly accredited using BVAS in the presence of other voters.

The election was reasonably done in the day time due to the need to use BVAS to take clear pictures of the election results before uploading them; and INEC officials ensured that they

showed the data content of the BVAS to the party agents before any inputs were made and results transmitted which in essence, checkmated electoral results manipulation and guaranteed voter open oversight of the electoral process.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

In tune with the findings of the study, Bimodal Voter Accreditation System is a welcomed innovation in the Nigerian electoral process. Its continued use especially improved use, for the promotion of credible elections in the country can amount to better results beyond the significant yield it evidently produced in this study in the area of transparency, inclusiveness, and compliance with electoral laws and regulations. What perhaps is needed is a thorough insight or assessment on large scale by the electoral umpire or civil society organizations into the effective use or otherwise of the device and its output in terms of contributions to credible electoral process in the country generally. The device has gone on to rebrand the Nigerian election administration system, endearing the people into improved active participation in the political process; hence what more could be right to say if not that the technology application in the country's political process is in line with global best practices of modern democracy; especially in this current era of electronic democracy where technology has made the world a global village and governments has fancied it in pubic service delivery in divergent forms.

5.2 Recommendations

1. In pursuit of improvement in inclusiveness of electoral process in Nigeria, Bimodal Voter Accreditation System should be sustained in usage. Its capacity to enhance inclusiveness of the electoral process can be improved upon by further sensitizing the voters about its usefulness with reference to some elections conducted in the country, where it boosted the outcome positively. This should be done by INEC, civil society organizations, and political parties.
2. Bimodal Voter Accreditation System should be continually used for the promotion of compliance with electoral laws and regulations in the Country's electoral process. In doing this, candidates and voters should be educated by INEC and civil society organizations about the existing electoral laws and regulations operational in the country, and be intimated with knowledge of the BVAS capability to protect their votes should they comply with the laws and regulations governing the electoral process.
3. Transparency in the electoral process can be sustained and further enhanced using BVAS if the electoral umpire maintain consistent use of the device in the electoral process in a manner that the voters and the party agents are carried along from start to finish of the election administration. This can take the form of the INEC avoiding pre-loading of the device with results, and making sure that the data content of the device is shown to both party agents and voters before commencement with actual election exercise. More so, BVAS should be operated during the day time on the day of election.

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