Research Article

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The Factors Determining Voter Turnouts in Presidential Elections in Nigeria: Multivariate Correlation Analysis of the 2019 Presidential Election

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Abstract: People's active participation in elections is one of the key measures of electoral democracy. The people's lack of interests or apathy in elections tends to undervalue the democratic process, engender mistrust in political institutions, and enthrone unaccountable leadership. This is why voter turnout is a crucial aspect of electoral studies. Even though Nigeria has successfully undergone two decades of uninterrupted democracy, she may not be too fast in imbibing the tenets of electoral democracy which presupposes active people's participation in the electoral process. This is because there has been a conspicuous decline in voter turnouts in presidential elections since 2003. There are several factors responsible for this decline. This paper analysed three key variables – violence, socioeconomic factors, and candidate's popularity - with the use of Multivariate Correlation Analysis (a statistical procedure that calculates correlation coefficients of two or more variables to determine the strengths of their relationships). The study, therefore, finds that of the three variables, candidate's popularity as indicated by voters' preferences for candidate's/running mate's tribe, political party, and trust in candidate's abilities provide stronger evidence of the declining turnouts in Nigerian presidential elections.

Keywords: Voter turnouts; legitimacy; Nigerian presidential election; candidates' popularity; violence; socioeconomic factors.

1 Introduction

Since the end of the Cold War in the 1990s, there have been renewed interests in electoral democracy, especially in African countries. This saw a significant increase in the number of countries that hold direct national elections. However, what Diamond (2015) refers to as “democratic recession” appears to be taking place with voter turnout decreasing significantly in national elections in several countries. Diamond (2015: 152) argues that the continuous declining of voter turnout is one of the “signs of democratic ill-health”. Given the importance of elections to democracy, the issue of voter participation should be taken more seriously by election stakeholders.

Electoral democracy is based on the assumption of full citizens' participation in the electoral process. This is why voter turnout is one of the most critical indicators of citizens' participation. While it is generally agreed that that higher voter turnout is a vital sign of democratic development, lower turnout is usually associated with voter apathy and mistrust of the electoral political process (Solijonor, 2016: 16). However, there is ample evidence to show that there is a global downward trend in voter turnout as manifested in political apathy, lack of psychological involvement in public affairs, emotional detachment from civic obligations, and abstention from political activity. In Nigeria, the conspicuous

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Table 1: Nigerian voter registration, turnouts, and Voting Age Population for presidential elections (2003 to 2019).

Year	Voter Turnout (%)	Total Votes	Registration	VAP Turnout (%)	Voting Age Population (VAP)
2003	69.08	42018735	60823022	65.33	64319246
2007	57.49	35397517	61567036	49.85	71004507
2011	53.68	39469484	73528040	48.32	81691751
2015	43.65	29432083	67422005	32.11	91669312
2019	34.75	28614190	82344107	26.87	106490312

Source: IDEA Voter Turnout Database, 2019 <https://www.idea.int/data-tools/data/voter-turnout>

Figure 1: Voter Turnout Data for Nigeria (1959-2019). Source: IDEA Voter Turnout Database, 2019 <https://www.idea.int/data-tools/data/voter-turnout> (Accessed on 29 March 2019)

decline in voter turnout in national elections since 2003 is an indication that Nigerians have greatly become apathetic towards elections.

Data from the Independent National Electoral Commission (INEC) and the International Institute for Democracy and Electoral Assistance (IDEA) Voter Turnout Database (as shown in Table 1) revealed that 52.3 per cent of the registered voters voted in the 1999 elections. This figure, as shown in Figure 1, rose to 69.1 per cent in 2003 but has fallen since then. In 2007, it went down to 57.4 per cent, 53.7 per cent in 2011 and 43.6 per cent in 2015 and 34.75 per cent in 2019 presidential election. This paper, therefore, seeks to analyse the factors that are responsible for the declining voter turnouts in national elections. Also, the IDEA Voter Turnout Database shows Nigeria has the lowest voter turnout in West Africa based on recent presidential elections even though she fared better in parliamentary elections as shown in the database. Moreover, the 2019 presidential election saw the lowest voter turnout in Nigeria's electoral history (see Table 1) with 34.75 per cent turnout which is higher than the voting age turnout.

Even though there has been a steady decline in the turnouts for Nigerian presidential elections, the data for parliamentary election does not support a sharp decline. While figures from the IDEA Voter Turnout Database show a steady decline in presidential election turnouts since 2003, turnouts for National Assembly elections appear to be on

the increase since 2011 rising from 28.66 per cent to 43.65 per cent in 2015 with presidential election turnouts decreasing during the same period by 10 per cent. Curiously, both elections held on the same days in 2015 and 2019. What then could be the factor(s) that account(s) for the consistent decline in voter turnouts for presidential elections as against other elections? To attempt to answer this question, we shall be focusing our study on the 2019 presidential election in Nigeria using the statistical technique of Multivariate Correlation Analysis (MCA) to unravel the critical dimensions of factors determining the turnouts.

2 Voter Turnouts, Political Legitimacy, and Democratization: A Theoretical Exploration

When studying elections and voter turnouts, several scholars (Stockemer, 2017; Solijonor, 2016; Burden and Neiheisel, 2013; Harder and Krosnick, 2008; Roberts, 2009; Grönlund, and Setälä, 2004; Ansolabehere and Konisky, 2006; Conway, 1999) have devoted their attention to institutional, psychological, and election-specific factors as primary determinants of voter turnouts. Given this focus, more decisive determinants like voter intimidations, vote-buying, ballot fraud (Collier and Vicente, 2012) and candidates' popularity on voter turnouts in sub-African elections have been largely *empirically* understudied.

Based on theoretical analysis, voter turnouts are important measures of political legitimacy and are contrasted with the measures of trust in politicians and satisfaction with the performance of the current government. Grönlund and Setälä (2004) hypothesised that measures of political legitimacy affect the voter turnout, whereas citizens' trust in political actors and satisfaction with the government may influence voters' choice but may not have a straightforward connection with turnout during elections.

There is consensus in the literature about the possibility of higher voter turnouts in countries that have adopted compulsory voting, where elections are considered important and are small in sizes and populations (Stockemer, 2017). Divergent views, however, exist on the impacts of socioeconomic variables, institutional factors, and election-specific variables on voter turnouts. Scholars over the years have considered a variety of factors that influence the level of citizen participation in elections. In both aggregate and individual-level studies, variables ranging from institutional conditions and political culture to voter characteristics and attitudes have been linked to observed differences in turnout (Conway, 1999; Patterson and Caldeira, 1983). Cancela and Geys (2016), Solijonor (2016: 36) and Hogan (2013) contend that campaign spending has a direct relationship to voter turnout. However, this position opens the debate on the role of moneybags (especially in Africa) in elections.

Cancela and Geys (2016) further contend that in addition to campaign expenditures, election closeness and registration requirements have more explanatory power in national elections, whereas population size and composition, concurrent elections, and the electoral system play a more important role for explaining turnout in subnational elections.

Robinson and Torvik (2009) analyse voter intimidation and coercion during the Zimbabwean 2008 presidential election. They focused on the role of weak institutional and legal environments that politicians tend to take advantage of to induce violence as a strategy to gain some advantages over their opponents especially among swing voters. Their thesis places much emphasis on the assumptions that voters themselves want to make rational choices but that the fear of violence voters expect to be unleashed by politicians may mean low voter turnouts. This position suffers from obvious deficiency that voters are rational beings who cannot be externally-influenced against Downs' (1957) position that voters are rationally ignorant.

In their studies, Tracey (2016), Burden and Wichowsky (2014), and Stockemer, LaMontagne and Scruggs (2013) reveal that potential voters may withdraw their participation in elections because they may have gone frustrated by socioeconomic challenges, such as unemployment, poor infrastructure, corruption in the electoral process. Stockemer, LaMontagne and Scruggs (2013) argued that citizens may not be willing to or distance themselves from the electoral process because they may feel incapacitated to elect trustworthy representatives that will serve their interests when elected. While conventional hypothesis may argue that high unemployment rates could induce low voter turnouts, Burden and Wichowsky (2014:897) argue the "withdrawal hypothesis" may not hold water because "unemployment, bring out more voters" since the potential voter is "more likely...to select candidates based on economic performance"

rather than their current state. Even though unemployment may be a crucial factor in voter turnout, some researchers, therefore, argue that it is not so much that unemployed potential voters are apathetic, but that the political institutions have failed to engage them to participate effectively in the electoral process by including issues seeking to address unemployment on the political agenda (Tracey 2016: 3).

Scholars have looked at onerous voter registration procedures, the electoral system, demographic groups, the social mobility, campaign funding or social capital, weak political parties (Roberts, 2009 and Harder & Krosnick, 2008). Burden & Neiheisel (2013), Roberts (2009) and Ansolabehere & Konisky (2006) maintained that the additional bureaucratic, long queues, legal barriers, and other restrictions in voter registrations mean potential voters are made to pay “additional costs” (Burden & Neiheisel, 2013: 87) are some the biggest factors inducing low voter turnouts in US elections (Roberts, 2009: 41).

Davenport (2010) maintained that face-to-face canvassing, voter mobilisations, and get-out-the-vote measures rather than traditional means of vote canvassing by candidates and parties can significantly influence voter turnout. This may often mean candidates must heavily invest in voter education and raise the stakes for elections during pre-election campaigns for potential voters to see the urgency and the need to turn out to vote on issues they consider important to solving their immediate economic or social challenges (Solijonor, 2016: 36).

Even though many scholars, like Collier and Vicente (2012) and Collier and Vicente (2014) have argued that electoral violence, intimidation, voter fraud and the prevalence of socioeconomic factors tend to influence voter turnouts, others contest the extent to which country-specific instances of pre-election violence can be generalised in other countries (Bekoe and Burchrad, 2017). Also, not too many studies have included candidate’s popularity as a variable in voter turnouts in elections in Africa. This explains why we seek to test the validity of these assertions using data from the 2019 presidential election.

3 Models and Hypotheses

Downs (1957), Riker and Ordeshook (1968), Tullock (1968), Ledyard (1981), and Demichelis and Dhillon (2001) have developed several models to explain voter turnouts in the past, but few have included electoral violence as explanatory variable in voter turnout except for few works like and Chaturvedi (2005) and Bratton (2008).

While many of the assumptions of Chaturvedi (2005) and Bratton (2008) models are still valid even after over a decade of their development, more recent models may be more suitable for recent cases of voter turnouts in Africa.

Violence, Voter Intimidation, and Voter Turnouts

This section analyses some models on the relationship between election violence and voter turnouts. In doing this, we examine the Collier and Vicente’s (2012) model and later updated Collier and Vicente (2014) with field data from the Nigerian 2007 presidential election, which will be referring to in this work as, C-V. This model was chosen because it suits the objective of this paper. Also, it is based on data from sub-Saharan Africa. It assumes a two-candidate, winner-takes-all scenario which is adopted for our analysis and case study.

This model is made on the assumption that there are two candidates (candidate A and candidate B) from which a typical voter (i) will vote for i.e $i \in \{A, B\}$ and both of them have the capacities to use violence as election-winning tactic to sway swing voters from either voting their opponents or intimidate them into voting for the party (or candidate) initiating the violence. It assumes parties and candidates target their opponents with violence.

We assume that candidate A is the challenger, and B is the incumbent. Both candidates have their strongholds of expressive voters “who votes not because of his influence on the outcome but because by doing so he attaches to an outcome” (Schuessler, 2000). Both candidates wish to maximize their share of the votes especially in their strongholds which vote based on strong ethnic appeals. Hence, the popular votes will be divided into A, B, and C. Where C is the share of swing or undecided voters that may break a possible tie between A and B. Let us assume there is a popular incumbent who a fraction of undecided voters, β , will vote for the incumbent, B, and $(1 - \beta)$ will vote for the challenger. We assume that no matter what, voters in the camp of A and B will always vote for their candidate no matter what.

Because both candidates have their strongholds, their supporters have the capabilities to use violence or intimidate undecided voters to vote for their respective candidates. Even with violence, v , sponsored by both candidates, there is a

fraction of voters, $(1 - v)$, will continue to vote. This means the turnout for swing voters will be $(1 - v)C$, if swing voters are the main targets of electoral violence.

With this, *ceteris paribus*, in the absence of violence, the incumbent, B's share of votes (α_B) is,

$$\frac{B + \beta C}{A + B + C}$$

With the presence of violence, B's vote share, α_B, α_B' , will be,

$$\frac{B + (1 - v)\beta C}{A + B + (1 - v)C}$$

The incumbent, B, can only benefit, electoral wise, from violence if:

$$\frac{1 - \beta}{\beta} > \frac{A}{B}$$

Also, assuming there is a constant marginal cost of violence, δ , the next proposition will give us the equilibrium level of violence:

If Candidate B set $v = 1$, i.e there is a certainty of him resorting to violence, then, α_B increases if $[(1 - v)C]$ is reduced to the barest minimum which must be greater than the cost of swing voters' abstentions,

$$\frac{[(1 - \beta)B - \beta A]C}{(A + B + C)(A + B)} > \delta$$

The model assumes, in the final analysis, only one candidate will reap the benefit of electoral violence especially among swing voters. The first condition, $\frac{1 - \beta}{\beta} > \frac{A}{B}$, demonstrates when B benefits from preventing swing voters from voting. The second condition, $\frac{[(1 - \beta)B - \beta A]C}{(A + B + C)(A + B)} > \delta$, deals with the benefits of using violence as a political tactic when other options, like vote-buying, are available.

This paper shall be putting all the assumptions of the C-V model to test using recent data from the Nigerian elections.

Socio-Economic Factors (SEF) and Voter Turnout

Still using our C-V turnout model

$$\alpha_B = \frac{B + (1 - v)\beta C}{A + B + (1 - v)C}$$

From our literature review, we saw Tracey (2016), Burden and Wichowsky (2014), Stockemer, LaMontagne and Scruggs (2013) have concluded that the socioeconomic factors (SEF) such as corruption, poverty, and unemployment rates are important indicators of voter turnout. As a result of this, we modify some of the variables in the C-V model while introducing some other parameters.

We will be taking our turnout model to be:

$$\alpha_B = f(K, P, U) \text{ ceteris paribus}$$

Where K= Corrupt electoral process, P= Poverty level, and U= rate of unemployment.

Unlike the C-V model which largely restricts violence to mean *physical violence*, we will be taking variables K , P , and U to be acts of violence to be deployed especially by candidate B, the incumbent. This is because, there is little or nothing the challenger, A, can do about this other than resort to the illicit tact of vote-buying to win elections in the face of K , P , and U . This means:

$$v \in \{K, P, U\} \text{ ceteris paribus}$$

LaMontagne and Scruggs (2013: 84) note that there is an indirect relationship between voter turnout (α_B) and the rate of corruption (K). An increase in K almost means a decrease in voter turnout. They maintain that “citizens may... stay at home on election day.”

Setting up the equation for this leaves us with:

$$\alpha_B = \frac{\mu}{K} \text{ where } \mu \text{ is constant}$$

Burden and Wichowsky (2014) and Tracey (2016) argue that unemployment and poverty rates have the tendencies to “bring out more voters” (Burden and Wichowsky, 2014: 897) because poor and unemployed voters tend to put poverty and unemployment on the political agenda as a way of influencing the political process (Tracey 2016: 3).

In setting up the equation for this, we have:

$$\alpha_B = \mu [P.U] \text{ where } \mu \text{ is constant}$$

Combining the turnout equations, we have:

$$\alpha_B = \frac{\mu [P.U]}{K} \text{ where } \mu \text{ is constant}$$

Taking the constant element (μ) in our original turnout equation to be;

$$\mu \in \{A, B, C, \text{ and } \beta\}$$

and setting up $v = \frac{[P.U]}{K}$, we have our new turnout to be:

$$\alpha_B = \frac{BK + (1 - [P.U])\beta C}{K(A + B) + (1 - [P.U])C}$$

If $K = P.U$, i.e the poverty and unemployment rates are direct products of rate of corruption, then, α_B , increases provided swing voters, C, are the worst hit by the effects of Candidate B-induced poverty, unemployment, and corruption. On the other hand, α_A increases if Candidate A indulges in heavy vote-buying.

We shall also be putting this equation to test using recent data in this paper.

Candidates' Popularity, Get-Out-The-Votes, and Voter Turnout

Still using our C-V model, we shall further relax some of the assumptions. To do this, we assume both candidates will consider it economically and politically inefficient to resort to physical violence because of the introduction of technology which will nullify the effect of violence on turnouts. In place of violence, candidates resort to massive Get-Out-The-Votes (GOTV) efforts within their strongholds such that:

$$\alpha_B = \frac{B}{A + B}$$

And

$$\alpha_A = \frac{A}{A + B}$$

Both will depend on which candidate's GOTV efforts yields the higher turnout. Candidate B wins if $\alpha_B > \alpha_A$ in their respective strongholds. The reverse is also true.

But since C-V does not factor in a variable like a candidate's popularity in voter turnouts, on our part, we intend to update the model to include this using recent evidence from the Nigerian 2019 presidential election.

4 Data Sources and Methods

For this study, we relied largely on data from several databases and reports of Non-governmental organisations who either monitored or have been part of previous elections in Nigeria including Nigeria Security Tracker database (<https://www.cfr.org/nigeria/nigeria-security-tracker/p29483>) which is a project of the Council on Foreign Relations' Africa program that documents and maps violence in Nigeria that is motivated by political, economic, or social grievances; the Independent National Electoral Commission (INEC)'s website (<https://www.inecnigeria.org/wp-content/uploads/2019/03/2019-GE-PRESIDENTIAL-ELECTION-RESULTS.pdf>); the International Institute for Democracy and Electoral Assistance (IDEA) Voter Turnout Database, 2019 (<https://www.idea.int/data-tools/data/voter-turnout>); Armed Conflicts Location and Event Database (ACLED) Project, Africa Data (www.acleddata.com); International Republican Institute (IRI), National Democratic Institute (NDI) National Bureau of Statistics; Oxford Poverty and Human Development Initiative (OPHI), University of Oxford (www.ophi.org.uk/multidimensional-poverty-index/mpi-country-briefings/); Nigeria Watch database which is a research project that monitors lethal violence, conflicts, and human security in Nigeria (www.nigeriawatch.org); European Union Election Observation Mission; Centre for Democracy and Development (CDD); and Election Monitor (www.election-monitor.org). These organisations were chosen primarily because of their history of relative neutrality and consistency in their reportage of election-related issues in Nigeria.

We also relied on media reports such as the *Stears Nigerian Election Centre* (<https://nigeriaelections.stearsng.com/president/2019>) which carried out live coverage of the voting and collations across all states during the 2019 presidential election. We, therefore, compiled media reports to complement databases.

Due to the dearth of reliable pre-election polls, this study relied on a recent survey carried out by in partnership with VTrackerNG (<http://vtrackerng.org/>) – a resource for conducting research and analysis on various forms of social and political disturbances in Nigeria – to measure candidates' popularity and acceptance using a simple questionnaire. The survey was conducted in 12 states – Anambra, Bauchi, Benue, Edo, Enugu, Kaduna, Kano, Kwara, Oyo, Rivers, Lagos, Taraba – with two each chosen the six geo-political zones.

The population for the study was taken to be the 84,004,084 Nigerians who registered to vote in the 2019 election. Our sample size was calculated at 95 per cent confidence level with a 0.05 margin of error (Tejumaiye 2017) using the formula:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = Sample size, N = Population and e = Minimum margin error 0.05

With $N = 84,004,084$ and $e = 0.05$, our sample size will therefore be:

$$\begin{aligned} &= \frac{84,004,084}{1 + 84,004,084(0.05)^2} \\ &= \frac{84,004,084}{1 + 84,004,084(0.0025)} \\ &= \frac{84,004,084}{210,011.21} \\ &= 399.99 \end{aligned}$$

Therefore, $n = 400$

A total of 500 questionnaires were printed and distributed out of which 415 were filled and returned. The questionnaires were distributed among the states in using the following quotas calculated as proportion of registered

voters in the states: Oyo (32), Lagos (74), Rivers (35), Edo (24), Anambra (27), Enugu (21), Kano (60), Kaduna (44), Kwara (16), Benue (27), Bauchi (27) Taraba (20), and “Others” (8).

The data generated from these databases were largely aggregated for a study of this nature. It was, therefore, our responsibility to code and analyse them in tabular, graphic, and analytical formats. We relied on software such as the Statistical Package for Social Scientists (SPSS) to generate the Multivariate Correlations Analyses and Microsoft Excel for the tables and graphs.

The multivariate correlation analysis (MCA) calculates correlation coefficients of two or more variables to determine the *strengths* of their relationships. The key advantage of MCA is that it gives the analyst the possibility of handling many variables of the time series which gives room for interactions of the variables in the series and are “are dependent upon lag” (Geiß, and Einax, 1996) to explain their interrelationships.

5 Turnouts for the Nigerian 2019 Presidential Election: A Geo-Political Analysis

A geopolitical analysis highlights that the trends of voter turnouts in the 2019 presidential election provide some interesting insights which are quite significant. Data from the Independent National Electoral Commission (INEC) as shown in the figure below indicate the turnouts in the 36 states of the federation with Jigawa and Katsina states (both in the North-West) with the highest turnout rates of 54.62 per cent and 48.67 per cent respectively. Lagos state (in the South-West) has the lowest turnout with 21.22 per cent as shown in Figure 2.

From Figure 3 below, the North-West and North-East geo-political zones had the highest voter turnout of 44.00 per cent and 41.71 per cent respectively. While the South-South and South-East have the lowest turnout of 28.91 per cent and 26.16 per cent respectively. Several polls projected (albeit correctly) that the North-West and North-East geo-political zones were the incumbent president and All Progressive Congress (APC) candidate, General Muhammadu Buhari’s (rtd), strongholds and South-South and South-East were projected to be former Vice President and People’s Democratic Party (PDP) candidate, Alhaji Atiku Abubakar’s, strongholds in the build-up to the election. The swing region and battle-grounds were the states of North-Central and South-West which had 35.75 per cent and 36.27 per cent respectively.

While it is tempting to argue that the reason for the relatively high turnouts in the North-West and North-East geo-political zones is because the two leading candidates hail from there, the same argument may fail to explain the reason for the poor turnout in the South-East and Lagos (with the highest number of registered voters in the country) even

Figure 2: Turnouts for the Nigerian 2019 presidential election by states. Sources: INEC’s website <https://www.inecnigeria.org/wp-content/uploads/2019/03/2019-GE-PRESIDENTIAL-ELECTION-RESULTS.pdf>. The state by state analysis is from the author’s compilations from *Stears Nigerian Election Centre* and verified with results from INEC’s Database and Nigerian News Outlets <https://nigeriaelections.stearsng.com/president/2019>. The turnout rates were from the author’s calculations with Invalid Votes: 1,289,607 (4.51 %).

Figure 3: Voter Turnouts in the Nigerian 2019 presidential election in the six geo-political zones. Source: Author's compilations from INEC's website <https://www.inecnigeria.org/wp-content/uploads/2019/03/2019-GE-PRESIDENTIAL-ELECTION-RESULTS.pdf> and *Stears Nigerian Election Centre*.

Figure 4: Voter Turnout in the South-South geopolitical zone in 2011, 2015 and 2019 presidential elections in Nigeria. Source: Election Monitor www.election-monitor.org

Figure 5: Voter Turnout in the South-East geopolitical zone in 2011, 2015 and 2019 presidential elections in Nigeria. Source: Election Monitor www.election-monitor.org

Figure 6: Voter Turnout in the North-West geopolitical zone in 2011, 2015 and 2019 presidential elections in Nigeria. Source: Election Monitor www.election-monitor.org

Figure 7: Voter Turnout in the North-East geopolitical zone in 2011, 2015 and 2019 presidential elections in Nigeria. Source: Election Monitor www.election-monitor.org

though the PDP Vice Presidential candidate and former Governor of Anambra state (in the South-East) Chief Peter Obi and APC Vice Presidential candidate and current vice president, Professor Yemi Osinbajo voted in the two places.

Figure 4 shows the voter turnout for the states of the South-South – Edo, Delta, Cross River, River, Akwa Ibom, and Bayelsa from 2011 to 2019. It shows the turnouts for Akwa Ibom state 75.9% in 2011, 62.5% in 2015, and 28.5% in 2019. It shows the turnouts for Bayelsa state to be 85.5% in 2011, 61.4% in 2015, and 36.4% in 2019. The turnouts for Cross River state were 62.8% in 2011, 40.7% in 2015, and 29.5% in 2019. For Delta was 68.5% in 2011, 62.8% in 2015, and 32.4% in 2019. In Edo, the turnouts were 74.1% in 2011, 31.7% in 2015, and 27.9% in 2019. The turnouts in Rivers state for the period were 76.1% in 2011, 68.2% in 2015, and 20.7% in 2019. The data shows a consistent decline in voter turnouts in these periods in all the states.

Figure 5 below shows the voter turnouts in the states of the South-East – Ebonyi, Enugu, Imo, Anambra, and Abia states. The turnouts for Abia state for the period were 77.8% in 2011, 29.7% in 2015, and 19.2% in 2019. For Anambra, the turnouts were 57.4% in 2011, 35.8% in 2015, and 26.2% in 2019. For Ebonyi, the turnouts show 47.3% in 2011, 36.7% in 2015, and 27.2% in 2019. For Enugu, the turnouts show 62.1% in 2011, 42.4% for 2015, and 23.3% in 2019. Data for

Figure 8: Voter Turnout in the South-West geopolitical zone in 2011, 2015 and 2019 presidential elections in Nigeria. Source: Election Monitor www.election-monitor.org

Figure 9: Voter Turnout in the North-Central geopolitical zone in 2011, 2015 and 2019 presidential elections in Nigeria. Source: Election Monitor www.election-monitor.org

Imo state shows 83.3% turnout in 2011, 41.9% in 2015, and 26.6% in 2019. Like the states of the South-South, the voter turnouts declined between 2011 to 2019 with Abia and Imo being the sharpest decline in the period.

Figure 6 shows the voter turnouts in the North-West states from 2011 to 2019. The data shows Jigawa state has 50% turnout in 2011, 59% in 2015, and 54.6% in 2019. Turnout for Kaduna was 65.4% in 2011, 49.1% in 2015, and 44.3% in 2019. The turnouts for Kano state were 52.4% in 2011, 43.9% in 2015, and 36.4% in 2019. For Katsina state were 51.5% in 2011, 52.1% in 2015, and 50.4% in 2019. Kebbi state turnout was 54.9% in 2011, 49.1% in 2015, and 44.6% in 2019. In Sokoto state, the turnouts were 38.6% in 2011, 52.7% in 2015, and 48.9% in 2019. For Zamfara state was 50.9% in 2011, 52.5% in 2015, and 34.8% in 2019. Of the 7 states, four states – Jigawa, Katsina, Sokoto, and Zamfara - recorded higher voter turnouts in 2015 than 2011 and lower turnouts in 2019. The other three – Kaduna, Kano, and Kebbi – show evidence of declining voter turnouts in the period under review.

Figure 7 shows the voter turnouts in the North-East states. The data for the geopolitical zone show Adamawa state had turnouts of 49.9% in 2011, 43.6% in 2015, and 43.9% in 2019. For Bauchi, there were turnouts of 63.4% in 2011, 50.6% in 2015, 43.3% in 2019. For Borno state, there was 48.8% in 2011, 28.6% in 2015, 41.2% in 2019. For Gombe state, there

was 57.6% turnout in 2011, 42.6% in 2015, 41.9% in 2019. In Taraba state, there was 54.5% turnout in 2011, 43.9% in 2015, and 41.7% in 2019. For Yobe state, there was 44% turnout in 2011, 45.6% in 2015, and 42.9% in 2019.

In the geopolitical zone, both Adamawa and Borno states recorded higher turnouts in 2019 despite been faced with the challenge of insurgency. The other states had a decline in their voter turnouts.

Figure 8 below shows the turnouts of votes in the South-West geopolitical zones from 2011 to 2019. The turnouts per state show Ekiti has 33.5% in 2011, 42.8% in 2015, and 43.7% in 2019. Lagos has 31.2% in 2011, 25.5% in 2015, and 18.3% in 2019. Ogun has 27.3% in 2011, 32.7% in 2015, and 25.9% in 2019. Ondo has 29.7% in 2011, 38.8% in 2015, and 32.4% in 2019. Osun has 38.5% in 2011, 48.1 in 2015, and 43.7% in 2019. Oyo has 32.5% in 2011, 39.6% in 2015, and 31.9% in 2019. Of all the states, only Lagos had a consistent decline in turnouts in the period.

In Figure 9, the voter turnout for North-Central states were presented. The data per state show that Benue got 43.3% in 2011, 37.1% in 2015, and 31.9% in 2019. For Kogi, turnouts were 41.1% in 2011, 32.5% in 2015, and 33.7% in 2019. In Kwara 35.2% in 2011, 39.1% in 2015, and 34.7% in 2019. For Nassarawa, turnouts were 49.6% in 2011, 42.7% in 2015, and 39.7% in 2019. Niger has 45.7% in 2011, 42.3% in 2015, and 37.8% in 2019. Plateau state has 62.1% in 2011, 50.6% in 2015, and 43.9% in 2019.

In the geopolitical zone, All the states except Kogi had a consistent decline in voter turnout during the period under review. Despite its sharp decline, Plateau state recorded the highest turnouts in all the elections.

6 Discussion and Analysis

6.1 Violence, Voter Intimidation, and Voter Turnouts in the 2019 presidential election

The presidential campaigns of both the APC and PDP were intense with both leading presidential candidates held rallies across all six geo-political zones of the country. While the rallies were peaceful nationwide, there were reports of violence at rallies (recording deaths) in Oyo¹, Bayelsa², Ogun³, Jigawa⁴, Kwara⁵, and other states with Akwa Ibom, Lagos and Rivers recording the most incidents of election-related violence leading to at least 46 deaths during the campaigns according to the European Union Election Observation Mission (EUOM). The EUOM also reported that there was a rise in instances of voter intimidation and violence during the campaign, particularly in the week after the original election date⁶.

The campaign rhetoric of both parties especially after the one-week postponement of the presidential election became more bad-blooded, issuing of threats and acrimonious. Analysis of campaign speeches of both leading parties, the candidates, and supporters included calls to resort to violence in other to “protect the votes on election” (EUOM, 2019: 9). This included APC candidate and incumbent president issuing an order to the military during the party caucus meeting to be ruthless with ballot snatchers. He specifically warned those who intend to steal ballot boxes that they may be doing so at “at the expense of his own life.”

With many observer groups, especially the European Union Election Observation Mission Nigeria, reporting that there may be an increase in the incidents of organised violence before presidential elections, their fears of low voter turnouts were, therefore, real and for good reasons. “There were increasing instances of intimidation and violence during the campaign, particularly in the week after the original election date” (EUOM, 2019: 8). “The high rate of

1 Two dead, several injured at APC campaign rally in Oyo *The Guardian* <https://guardian.ng/news/two-dead-several-injured-at-apc-rally-in-oyo/>

2 One dead, 2 injured as violence rocks APC rally in Bayelsa *The Vanguard* <https://www.vanguardngr.com/2019/02/1-dead-2-injured-as-thugs-attack-apc-rally-in-sagbama/>

3 Scores Injured, Properties Destroyed As APC, APM Supporters Clash In Ogun *The Guardian* <https://guardian.ng/politics/ogun-apc-apm-supporters-clash/>

4 One reportedly dead as violence rocks PDP campaign, *Premium Times* <https://www.premiumtimesng.com/regional/nwest/306272-updated-one-shot-police-vehicle-burnt-as-violence-mars-pdp-rally.html>

5 Two injured as thugs shoot at Kwara APC rally, *Premium Times* <https://www.premiumtimesng.com/regional/north-central/305590-two-injured-as-thugs-shoot-at-kwara-apc-rally-official.html>

6 The election management body, INEC postponed the presidential election from the originally-scheduled February 16 to 23, 2019.

electoral violence experienced in various phases of elections” the Centre for Democracy and Development (CDD) notes was the “reason for the decline in voter registration” and turnouts.

The data from the Armed Conflicts Location Events Database (ACLED) show that there confirms there was an actual increase in the incidents of organised violence and the number of deaths in the build-up to the presidential election. From Figure 10 below, the incidents of violence got to its peak in February and March (the months of the presidential and governorship elections) with 179 incidents.

There is an obvious temptation for us to conclude (using the data in Figure 10 above) that there is a strong relationship between the level of violence and the turnouts for the presidential election. But we may need to disaggregate the data for proper analysis.

Since the Armed Conflicts Location and Event Database (ACLED) does not provide adequate disaggregated data suitable for this analysis, we relied on raw data from the Nigeria Security Tracker database which provides information on the location and frequency of each violent incident and deaths. From the NST database, we can see (as shown in Table 2 below) that there were a total of 532 incidents of organised violence (from December 2018 to February 2019) which resulted in 548 deaths (according to the Ibadan-based *Nigerian Watch*). Calculating the correlation coefficient (using Statistical Package for Social Scientists, SPSS displayed in Table 3) between the incidents of violence and voter turnouts in the 36 states and the Federal Capital Territory, we arrive at $r = -0.162$. This means there is a *weak* negative correlation between organised pre-election violence and the turnouts.

Table 2: Pre-Election Related Violent Incidents for December 2018 – February 2019.

	Organised Violence	Election-Related Violence
Total Incidents	532	85
Total Deaths	548	81

Sources: Author’s compilations of data from Nigerian Security Tracker, Armed Conflicts Location and Event Database (ACLED), and *Nigerian Watch*

Figure 10: Incidents of Organised Violence in Nigeria (January 2017 - May, 2019). Source: Armed Conflicts Location and Event Database (ACLED) Project, Africa Data (www.acleddata.com)

Table 3: MCA Between Violence and Voter Turnouts in the 2019 presidential election.

Organised violence and Voter Turnouts	
N	Pearson Correlation
37	-0.162
Election-Related Violent Incidents and Voter Turnout	
N	Pearson Correlation
32	-0.501
Organised Violent Incidents and Voter Turnouts For Top Ten Swing States	
N	Pearson Correlation
10	-0.773
Violence and Turnouts in states of North-West and North-East (Incumbent's strongholds)	
N	Pearson Correlation
13	-0.331
Violence and Turnouts in states of South-South and South-East (Opposition strongholds)	
N	Pearson Correlation
11	-0.192
Violence and Turnouts in states of South-West and North-Central (Battlegrounds and Swing states)	
N	Pearson Correlation
13	-0.677

This poses a new challenge: not all incidents of organised violence that took place during the period have anything to do with the election. It is fairly normal for organised violence to rise weeks or months to presidential elections in sub-Saharan African countries (Bekoe and Burchard, 2017: 4). We, therefore, went ahead to select election-specific violence (whether or not they resort in deaths or injuries) from the NST database.

From Table 2 above, there were 85 reported incidents of election-related violence from December 2018 to February 2019. Calculating the correlation coefficient, we arrive at $r = -0.50134$ as shown in Table 3. This still shows there is a *negative correlation* between election-related pre-election violence and the turnouts. But is this enough to conclude that the prevalence of election-related violence was responsible for the low turnout in the presidential election?

Based on the Centre for Democracy and Development (CDD 2019: 21) projected ten states – Lagos, Kano, Kaduna, Katsina, Rivers, Oyo, Delta, Plateau, and Benue – as the swing or battleground states in the run-up to the presidential election, data from these states provides some intriguing results on the relationship between violence and voter turnouts. Data for these states show a *strong negative correlation* ($r = -0.773$) between the prevalence of organised violence and voter turnouts. The relationship is defined by the regression equation:

$$t_v = -1.090V + 57.885$$

Having analysed the various data to suggest the relationship between organised violence and voter turnouts in the 2019 presidential election, we need to further disaggregate the data to find evidence of the possible relationship between the two variables. The table below analyses data for 13 states ($N = 13$) comprising the North-West (7 states) and North-East (6 states) and demonstrate the correlation between organised violence and turnouts. As we have previously seen, the two geo-political zones have the highest turnouts despite being some of the most affected by incidents of violence. They are also President Buhari's strongholds in the build-up to the election. The data show that there is a *weak negative correlation* ($r = -0.331$) between the two variables as shown in Table 3. This suggests there might be evidence of a

relationship since it is expected that organised violence will reduce turnouts. Hence, the negative correlation between them but the data suggests a weak relationship.

In the opposition candidate's (Atiku) strongholds – South-South and South-East – with 11 states (6 in South-South and 5 in South-East), the data points to a weaker relationship ($r = -0.192$) between organised violence and the turnouts as shown in Table 3. Though the negative correlation suggests evidence there might be a connection between the level of violence and turnout, it may be too weak to statistically significant to make such a connection.

In the battleground and swing states of the South-West and North-Central, the data provides stronger evidence that violence may be a strong factor in the low voter turnout in the presidential election. With a correlation coefficient of ($r = -0.677$) from Table 3, which is stronger than what was obtainable in both incumbent and opposition's strongholds, we might still take this as evidence (subject to further analysis) that violence might have been a factor in low voter turnout in the presidential election.

The data for the battleground and swing states is therefore suggestive concerning our C-V model. The weak correlation in the leading candidates' strongholds could mean both leading candidates did not deploy violence in each other's strongholds but did so in the battleground and swing states in desperate attempts to outdo each other in those states. The fact that the incumbent won narrowly in 8 of the 13 states in these geo-political zones may have gone ahead to confirm the assumptions of the C-V model.

So, using the C-V model, we can see that both the incumbent (B) and the challenger (A) set the certainty of violence, i.e $v=1$ in our proposition:

If Candidate B set $v = 1$, i.e there is a certainty of him resorting to violence, then, α_B , increases if $[(1 - v)C]$ is reduced to the barest minimum which must be greater than the cost of swing voters' abstentions,

$$\frac{[(1 - \beta)B - \beta A]C}{(A + B + C)(A + B)} > \delta$$

This means the turnout for swing and battleground voters was $(1 - v)C$, because the leading candidates deliberately made them the main targets of electoral violence. With the stronger connection between electoral violence and turnout established in the swing and battleground states and weak correlation coefficients in the leading candidates' strongholds, that the incumbent won the votes in the regions narrowly provides clear evidence electoral violence may have been used by the incumbent for electoral advantage.

Even though there are national variations in the relationships between the level of violence (v) and voter turnouts, disaggregating the show that there is evidence for the claims that violence and voter intimidations may have influenced the turnouts. The violence noticed that both leading candidates' supporters carried out various degrees of voter intimidations in their strongholds. In Lagos for instance, APC thugs reportedly attack Igbo traders⁷ for failure to vote for their presidential candidates. Some hoodlums also reportedly set ballot boxes ablaze and chased electoral officials and voters away⁸ in the Oshodi area of Lagos. Also, in Delta state gunmen reportedly stormed some polling units⁹ at Amukpe (near Sapele) killing three persons in the process.

Having established that voters in swing states who saw some of the highest levels of electoral violence, intimidations, killings, and outright brutalities, may have been persuaded not to vote because the cost of their abstentions (δ) is less than the degree of violence as the data show. As we saw, the turnout in APC candidate's stronghold –North-West and North-East, α_B , were the highest in the country. This confirms the assumptions of the C-V model.

⁷ Hoodlums attack Igbo traders on Lagos Island for failure to vote for Buhari, *This Day* <https://www.thisdaylive.com/index.php/2019/02/28/again-hoodlums-attack-traders-in-parts-of-lagos/>

⁸ Ballot boxes set ablaze in Lagos, INEC officials, voters run away, *Leadership* <https://leadership.ng/2019/02/25/agbaje-condemns-attack-on-voters-in-lagos/>

⁹ 3 Dead in Election Violence in Delta *This Day* <https://www.thisdaylive.com/index.php/2019/02/23/delta-police-confirm-2-persons-died-in-election-violence/>

6.2 Socio-Economic Factors (SEF) and Voter Turnouts in the 2019 presidential election

The Nigerian 2019 presidential election seems to provide evidence of the relationship between socioeconomic factors (SEF) and voter turnouts in elections in which both leading candidates have the capacities to induce voters with money. Martins and Veiga (2014) concludes that incumbent governments tend to lose support with higher voter turnouts. Using the case studies of 10 national elections conducted in Portugal from 1979 to 2005, they noted that incumbents tend to lose popularity due to key domestic micro and macroeconomic variables, arising from an economic recession, inflation, unemployment, and corruption which make voters cheer or boo the government at the polls (Martins and Veiga 2014:284). Data from Nigeria's 2019 presidential may not completely support Martins and Veiga (2014)'s conclusions, but the result of the 2019 election shows the incumbent candidate Buhari lost his 2015 "goodwill" among swing voters was strongly manifested in the tough contests and loss of votes for the ruling parties in those areas he conveniently won in 2015 as an opposition candidate. Also, a deeper look at the results and turnouts for the 2019 presidential election critically, there is ample evidence to suggest that SEF may be a factor in the turnouts.

With urban and rural poverty at 47% and 59.5% respectively according to the Oxford Poverty and Human Development Initiative (2017), Nigeria has one of the highest incidents of poverty in the world. The World Poverty Clock (2018) reports that Nigeria has more people living in extreme poverty "than any other country in the world" as of June 2018, which is projected to increase to "3 people per minute" by 2030 (ibid). This means that currently over 86.9 million or nearly 50% of the country's estimated 180 million population living below the poverty line of \$1.90 per day (Kazeem, 2018). With the prevalence of acute poverty in the country, it becomes easy for leading parties to weaponise poverty where many people susceptible to selling their vote for immediate gratification. Frontline PDP member and former Governor of Jigawa state, Sule Lamido, accused the ruling APC of impoverishing Nigerians and turning it into a campaign weapon with which it intended to win the presidential election (Osauzo, 2018). Opposition candidate, Atiku, accused the incumbent, Buhari, of hiding unemployment data because his government was in panic mode due to the "unprecedented unemployment numbers" in the country and desperate to hide that information from the public ahead of the 2019 presidential election (Terzungwe, 2018).

While the North-West and North-East overwhelmingly voted for the incumbent and had the highest voter turnout, the South-South and South-East voted for the opposition and had the lowest turnouts in the presidential election. The battleground and swing states of the South-West and North-Central even though they were tight contests, were won by the incumbent.

From the figure above, the North-West and North-East have the highest turnout (42.94% combined) have 24.13% unemployment rate and 60.97% rate of poverty (which is higher than the national poverty rate). When compared to South-South and South-East which have the lowest voter turnout (27.66% combined) with 27.72% unemployment rate and a poverty rate of 42.83% as shown in Figure 11.

Since the disaggregated data is still not suggestive of any relationship between SEF and voter turnouts as our model suggest, we analyse the variables using the correlation and regression models to see if it will fit our hypothesis that SEF determines voter turnouts.

$$\text{Voter Turnout } (t_v) = -0.208U + 0.575P + 11.999$$

The equation shows there is a relationship between voter turnouts (t_v) and two socioeconomic factors (unemployment, U , and poverty level, P ,) with the equation $t_v = -0.208U + 0.575P + 11.999$. The regression equation, however, does not give the direction or the strength of the relations between the variables. It will, therefore, be difficult to predict how they all affect each other. To solve this problem, we ran multiple correlations on the three variables to find out the strength of the relationships as shown in the table below.

At a subnational level when the data were disaggregated using the 6 states of the South West and the 7 states of the North Central (including the FCT), $N=13$, the data shows that the tendency for voter turnout to depend on unemployment rate and poverty level is weak with correlation coefficients of 0.1 and 0.132 respectively from Table 4. This simply means that, in the battleground states, both poverty level and unemployment rates - did not lead to a reduction in voter turnouts. Rather, the data shows that turnout slightly increased in the battleground states partly due to socioeconomic considerations other factors held constant.

Table 4: MCA of socioeconomic factors (SEF) and Voter Turnouts in the 2019 presidential election.

Poverty, Unemployment and Turnouts (National Figure)			
	Pearson Correlation		
N	Turnouts	Unemployment	Poverty
37	1	-0.176	0.66
Poverty, Unemployment, and Turnouts in the 2019 presidential election: Battleground states (North Central and South West)			
	Pearson Correlation		
N	Turnouts	Unemployment	Poverty
13	1	0.1	0.132
Turnouts, Unemployment, and Multidimensional Poverty: North-East and North-West (Incumbent stronghold)			
	Pearson Correlation		
N	Turnouts	Unemployment	Poverty
13	1	-0.139	0.139
Turnouts, Unemployment, and Multidimensional Poverty: South-South and South-East (Opposition stronghold)			
	Pearson Correlation		
N	Turnouts	Unemployment	Poverty
11	1	-0.054	0.02

Urban Poverty 47% Rural Poverty 59.5%

Figure 11: Unemployment, Poverty, and Voter Turnouts (2017-2019). Sources: Unemployment figures were drawn from the National Bureau of Statistics, *Labor Force Statistics - Volume 2: Unemployment and Underemployment by State*, Qtr 3, 2018. Poverty data are drawn from Oxford Poverty and Human Development Initiative (2017). "Nigeria Country Briefing" Multidimensional Poverty Index Data Bank. OPHI, University of Oxford. Available at: www.ophi.org.uk/multidimensional-poverty-index/mpo-country-briefings/. Turnouts are data drawn from INEC.

In the incumbent's strongholds – North-West and North-East, the data shows weak correlations between socioeconomic factors and voter turnouts. The Pearson Correlation figure of -0.139 between turnouts and unemployment means a high rate of unemployment slightly led to a reduction in voter turnouts. On the other hand, the positive correlation figure (0.139) shows poverty – especially in the North-East may have accounted for higher turnouts in the two regions than other places. On the other hand, in the opposition stronghold, the correlation is extremely *weak*, almost statistically insignificant. This means that SEF may not account for the low voter turnout in the opposition strongholds. This also provides some evidence that the incumbent may have used poverty, unemployment, and other socioeconomic factors to his advantage in his stronghold and to the disadvantage of opposition in their strongholds.

6.3 Candidates' Popularity and Voter Turnouts in the 2019 presidential election

The VtrackerNG survey shows that 249 (60.0%) of the respondents have their Permanent Voter Cards (PVCs) –the instrument that qualifies anyone to vote under the INEC guidelines and 166 (40%) do not have PVCs for various reasons which include those who turned 18 after close of voter registration, 45 (27.1%); are not interested at all, 30 (18%); INEC did not produce their PVCs, 24 (14.5%); said the registration process was tedious, 44 (26.5%); cited other reasons including relocation to another area etc, 23 (13.9%) as reasons for not having their PVCs. Of those who had their PVCs, 200 (80.3%) voted in the 2019 presidential election and 49 (19.7%) did not. The preferred candidates of the respondents are as follow Atiku (PDP), 159 (38.3%); Buhari (APC), 209 (50.4%), Others, 27 (6.5%). A total of 20 respondents (4.8%) said they are not interested in any of them.

The respondents stated the reasons for their preferences for the candidates as follow: Same tribe with candidate, 38 (9.2%); Same tribe with candidate's running mate, 51 (12.3%); Share same views with the candidate on issues, 116 (28%); Support the candidate's party, 69 (16.6%), Really don't care, 30 (7.2%); Trust the candidate's capabilities, 71 (17.1%); Others, 40 (9.6%). Figure 12 further breaks down this variable.

Unlike in previous elections, Nigerians were left with the choice between the two leading -Atiku and Buhari – who do not have “contrasting attributes” that led *The Punch* to describe them as the “woes of a nation” (Orji, 2017) because they do not “represent the finest choices of the people, and chosen based on broad electoral volitions”. The incumbent relied largely on his traditional strongholds – North-West and North-East based on strong ethnic appeal and loyalty to win votes while the opposition maintained its traditional bases –South-East and South-South – partly due to strong ethnic and separatist agitations and heavy anti-Buhari propaganda. There is little to show that the few voters who ended up turning up to vote did so based on candidates' manifestoes.

As shown in Table 5, our data shows some *strong* negative and positive correlations (-0.577 and 0.682 for Atiku and Buhari respectively) between the candidates' popularity and voter turnouts. The data also show that the pattern may be due to the following popularity indicators – candidate's tribe, the candidate's running mate's tribe, voter sharing same view(s) with the candidate, voter's support for the candidate's political party, and voter's trust in candidate's abilities.

The first indicator *candidate's tribe* gave a clue to this pattern. The data shows a *strong positive correlation* (0.674) between candidate's tribe and voter turnouts. This pattern was noticed with most of our respondents basing their reasons for their preferences on the tribe of the candidates in the North-West and North-East geo-political zones. Being two of the largest voting blocs in the nation, voting along tribal or ethnic lines confers any winning candidate in these regions a serious electoral advantage.

The negative correlation between Atiku's popularity and low voter turnouts especially in his strongholds – South-South and South-East – can simply mean his popularity did not bring out the votes in the region. The votes he got, may have been due to the heavy anti-Buhari propaganda in the region since the incumbent has historically performed poorly in these two regions. The fact that Atiku, like Buhari, is Fulani under the guise of “killer Fulani herdsmen” may have contributed in no small way in the low turnouts in these regions where ethnic rhetoric against the Fulani tribe was at the peak during the campaign. This meant Atiku's Get-Out-The-Votes efforts in the regions faced herculean tasks mobilising the voters in a South-East region (which produced 65.58% and 37.3% in 2011 and 2015 respectively) where he was supposed to be very popular. Buhari's popularity to turnout correlation figure, on the other hand, shows positive (0.682). Unlike Atiku, Buhari's stronghold and fortress is his home region – the North-West – which is also the largest voting bloc in the country. Even though many voters in this region may show some displeasures about the poor security situation in Zamfara - a key Buhari stronghold – it appears the voters kept faith with him because of his reputation for

Table 5: MCA of candidates' popularity and Voter Turnouts in the 2019 presidential election for 12 states.

Turnouts and Candidates' Popularity		
	Pearson Correlation	
N	Atiku's Popularity	Buhari's Popularity
12	-0.577	0.682
Turnouts and voters' candidates' preferences		
Indicator	Pearson Correlation	
Candidate's tribe	0.674	N = 12
Running mate's tribe	-0.466	N = 12
Same views with candidate	0.346	N = 12
Support candidate's party	-0.459	N = 12
Trust candidate's abilities	-0.168	N = 12
Others	0.212	N = 12

Figure 12: Reasons for voters' preferences for presidential candidates by states. Source: VTrackerNG's Field Survey

discipline and integrity which the opposition worked so hard to question during the campaigns. Also, in the North-East which had the second-largest voter turnouts despite being the poorest and the worst hit in the area of insecurity, saw Buhari emphatically winning 4 out of the 6 states despite Atiku hailing from the zone. As seen from the Table 6 below, the sharpest decline in voter turnout in the past three presidential elections – 2011, 2015, and 2019 – shows the South-East and South-South states witnessed the sharpest declines in voter turnouts from 65.58% and 73.8% in 2011 to 24.5% and 29.2% in 2019 respectively. These two zones recorded the highest turnout rates in the 2011 presidential elections largely because of the popularity of PDP candidate and sitting president Goodluck Jonathan, who had a lot of goodwill among people of these regions. The introduction of card reader machines and President Jonathan's general loss of

Table 6: Voter Turnout Per Geopolitical zone in 2011, 2015 and 2019 Presidential Elections in Nigeria.

Zone/Year			
South East			
	2011	2015	2019
Average	65.58	37.3	24.5
South-South			
	2011	2015	2019
Average	73.82	54.55	29.23
South West			
	2011	2015	2019
Average	32.12	37.92	32.65
North Central			
	2011	2015	2019
Average	46.17	40.72	36.95
North East			
	2011	2015	2019
Average	53.03	42.48	42.48
North West			
	2011	2015	2019
Average	51.96	51.2	44.86

Source: Election Monitor www.election-monitor.org

goodwill were largely responsible for the far lower turnout in the South-East (37.3%) even though the South-South region recorded 54.55% in the 2015 presidential election. This, however, was not enough to return the president for a second term. The strong positive correlation provides evidence that voter turnouts tend to be higher among voters of the candidate's ethnic group in an election.

The second indicator pointing to this clue is *candidate's running mate's tribe*. Under the Nigerian electoral guidelines, a presidential candidate is expected to nominate a running mate. Based on political expediencies, candidates normally nominate their running mates from outside their regions or tribes as a form of "vote-catching" strategy. Voting along the line of running mates' tribes were noticed in the Southern states where the APC presidential running mate, Professor Yemi Osinbajo (South-West) and PDP presidential running mate, Chief Peter Obi (South-East) hail from. Interestingly, the data shows a slightly *weak negative correlation* (-0.466). Respondents (57.14%) from Enugu, an opposition stronghold said they preferred the opposition candidate because of his running mate, Chief Peter Obi. By contrast, only 11.11% of Anambra respondents - where the PDP running mate hails from – claimed they voted for their candidates because of the tribe of the running mate even though he hails from their state. Respondents (12.5% and 18.9% respectively) from Oyo and Lagos claimed they voted for their candidates because of the running mates of their candidates. The reason for this may be simple: Oyo and Lagos are largely urban centres with a large number of the non-Yoruba population who may not necessarily have voted alongside the natives. In Lagos, for example, there were reports of thugs attacking Igbo traders for refusing to vote for President Buhari after the election. The negative correlation for this indicator shows that, except for a few instances, voter turnouts is not so much about the presidential candidates' choices of running mates.

The third indicator we noticed is that the voters may *share same view with the candidate* as reasons for their preferences. Whether voters vote for candidates based on election manifestoes in sub-Saharan Africa is open to debate.

But, this indicator provides something interesting. The data shows a *weak positive correlation* (0.346) between voters sharing candidates' views and voter turnouts. Since there is no evidence that potential voters in sub-Saharan Africa vote along the lines of candidates' manifestoes, there seems to be evidence that they vote according to the candidates' public views. The two leading candidates' views strikingly contrast each other. While Buhari's views are largely pro-state controlled economic management, Atiku is favour market-oriented economy. Even though the relationship between voters sharing candidate's views and turnouts is weak, it still provides evidence that candidates' views may influence turnouts in elections.

The fourth indicator for this pattern is the *voters' support for the candidate's political party*. While it is fairly normal for partisan voters to vote for their party's flagbearer most of the time, the data, in this case, show a *weak negative correlation* (-0.459) to their turnouts. The biggest challenge here is getting an up-to-date membership register – which most parties do not keep. This is one of the reasons APC direct primaries suffer serious setbacks in some states in the build-up to the 2019 elections. But since it is possible to support, without necessarily being a registered member of, a political party, most voters are simply “party sympathizers”. Most of our respondents may, therefore, be “party sympathizers” who only prefer candidates because they are the flagbearers of their favourite parties. The *weak negative correlation* only goes to show that party members may not have a direct influence on voter turnouts.

The fifth indicator for this pattern is the *voters' trust candidate's abilities*. Many of our respondents claim their preferences were based on their trust in the candidates' abilities and competences on the job. Even though a good number of them made this claim, the data shows a *weak negative correlation* (-0.168) between voter's trust in candidate's abilities and voter turnouts. The correlation coefficient only means that since most of those who made this claim may not have voted in the presidential election due to reasons previously stated, voter's trust in candidate's abilities may not necessarily lead high turnouts or more data is needed to contradict this.

Aside from the five reasons analysed above, there are other reasons to explain the relationship between the candidates' popularity and voter turnouts. Even though the coefficient gave a *weak positive correlation*, 0.212, we may still make some important assertions.

A pre-election survey carried out by a digital polling agency, BioRegistra, found out that young Nigerians aged 18-35 are either completely uninterested in the elections for one reason or the other or lack the required motivation to participate in the voting process (BioRegistra, 2019: 12). This arose because “most Nigerians remain frustrated and concerned” according to *The Conversation* because “neither of the two leading presidential aspirants offer any real hope” which meant many potential voters preferred to stay away from voting altogether. Also, during the polls, several domestic and international observer groups including the International Republican Institute (IRI) and the National Democratic Institute (NDI) observers witnessed vote-buying at polling units as well as party agents assisting voters in marking their ballots and violating the secrecy of the vote (IRI/NDI, 2019). Despite the heavy Get-Out-The-Vote (GOTV) and campaign spending by the leading parties and candidates, the sharp decline in voter turnout points to the popularity of the candidates even in their strongholds.

President Buhari has featured in all presidential elections since 2011. If a decline in candidate's popularity and goodwill can be used to explain the decreasing voter turnouts in the South-East and South-South since 2011, a decline in voter turnouts in the North-West and North-East has not been sharp. Except for Zamfara state (from 52.5% in 2015 to 34.8% in 2019) which has witnessed a high rate of banditry and insecurity since 2014, turnouts in the North-West states have remained almost the same. Borno state, which is one of the worst-hit with insurgency, saw its voter turnout rise from 28.6% in 2015 to 41.2% in 2019. An immediate interpretation of this is that while the incumbent managed to keep its traditional support base by maintaining fairly the same turnouts in their strongholds without doing much outside their “comfort zones”, the sharp declines in voter turnout in opposition areas meant the voters could not match their enthusiasm with their candidate's popularity which perfectly explains the condition for $\alpha_b > \alpha_A$ in our model.

7 Summary and Conclusion

This paper has situated and analysed the factors that determined voter turnouts for the Nigerian presidential election. Using data from several databases and media regarding the election, it has identified the violence, voter intimidations, ballot fraud, socioeconomic factors, and candidates' popularity as key factors that shaped the turnouts.

Based on the C-V model adopted for this study, we found out that, though there were national patterns for all variables analysed, there were variations when variables were disaggregated sub-nationally.

When the data between violent incidents and voter turnouts were analysed at the national level, we found a weak negative correlation between the two. But as the data were further disaggregated, the weaker their relationship became which makes it statistically insignificant to claim that violence may have been the primary factor responsible for the low turnouts for the 2019 presidential election. However, the data showed different results when tested in both incumbent/opposition strongholds and battleground states. Also, when the data were further disaggregated to be more election-specific incidents, we found stronger evidence to show that high election-related incidents of violence may have led to low voter turnout (-0.501). The higher MCA results in the battleground states (-0.773 for projected ten states and -0.677 for states in North-Central and South-West) confirm that violence may have been used to reduce turnouts among swing voters rather than opposition and incumbent strongholds which strengthens the assumptions of C-V. The weak negative correlation in opposition and incumbent strongholds means violent incidents were not orchestrated by the main actors in their strongholds as election winning tactic.

The effects of SEF on the voter turnouts show varying results at the national level. The MCA coefficient shows a weak negative correlation (-0.176) between the unemployment rate and poverty level to voter turnout. This unemployment figure negates the assumptions of Burderden and Wichowsky (2014) that unemployment should rather increase voter turnouts. That the MCA turned out to be very weak adds strengthens this position. On the other hand, poverty level shows a stronger correlation coefficient (0.66) means that poor people tend to turn up to vote. The data can also be interpreted as a positive correlation between the poverty rate and turnout rates.

In the North-Central and South-West states, data show that SEF may have been too weak - though positive- to influence voter turnouts in the region. In the opposition and incumbent strongholds, data show an extremely weak correlation between SEF and voter turnouts.

On the relationship between candidates' popularity and voter turnouts, the data provided some interesting dimensions. While there exists a fairly strong negative correlation between the challenger's popularity and turnouts (-0.577), the incumbent's correlation coefficient stood at 0.682. The indicators for these findings can be attributed to candidate's tribe, candidate's running mate's tribe, voters sharing same views with the candidate, support for the candidate's political party, and trust in the candidate's abilities.

The variables – violence, socioeconomic factors (SEF), and candidates' popularity were all dissected in this paper using the Multivariate Correlation Analysis (MCA). From the data, we observe that all aforementioned variables may account for – in varying degrees of significance - the decline in voter turnouts in the 2019 presidential election. Many scholars have attributed low voter turnouts in sub-Saharan African elections to either heavy violence (Collier, and Vincente, 2012; 2014, Chaturvedi, 2005, Bekoe and Burchrad, 2017) or SEF (Martins and Veiga, 2014, Stockemer, LaMontagne and Scruggs, 2013, Tracey, 2016 Burden and Wichowsky, 2014) there have been few studies (Hogan, 2013) done to establish the influence of candidate's popularity as indicated by voters' preferences for candidate's tribe, running mate's tribe, voters' support for the candidate's political party, and voters' trust in candidate's abilities provide stronger evidence of the declining turnouts in Nigerian presidential elections on voter turnouts as the data in this study points to.

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