**Socio-economic Factors, Digital Space and Voters: Evidence From Nigeria**

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**Abstract**

Civic participation often manifests in voting, protests, and contesting for electoral positions and activism. Theorists and empirics agree that the socio-economic conditions of the people can shape civic participation. Mixed results from previous studies relied on voter turnouts as indicators of voter behaviour. Our study analysed the relationship between digital space, socio-economic discontent, and voter behaviour among young people. Specifically, we undertook an empirical investigation to understand how discontent shapes voter behaviour in Nigeria using quantitative data from the sub-national level and across six geo-political zones in Nigeria. The analytical methodology of data analysis is novel to the literature, using statistical and qualitative techniques across different election cycles. Using key variables like voter registration and socio-economic factors, we found evidence of widening polarisation gaps among Nigerian voters, largely due to the influence of digital space and socio-economic discontent in the country. Our empirical data shows an inverse relationship between socio-economic factors and voter turnout in off-cycle elections, aligning with the underlying withdrawal effect theory. We also found socio-economic factors are negatively correlated with voter registration. The outcome can lead to voter apathy among young and middle-aged voters.

Keywords: Macroanalysis, Socio-economics factors; Voter registration; Digital space; Voter turnout; Polarisation

1. **Introduction**

Various scholars have documented how military rule, electoral violence and one-party dictatorships have shaped elections in Africa (Adigun, 2020; Szayna, O’Mahony, Kavanagh, Watts, Frederick, Norlen & Voorhies, 2017; Collier & Vicente, 2014; Collier, 2009; Siollun, 2009, 2013; Kellow, 2010). There has been less emphasis on the role of socio-economic factors and digital space. It was only after the Arab Spring that scholars began to study social media as an effective tool for African political mobilisation (Breuer, 2012).

African states were under military rule or one-party dictatorships in the 1970s and 1980s, making conducting elections challenging in the face of severe economic crises and state-controlled media. Due to Western pressures for democracy to return, dictators became difficult to remove, and their economies became uncertain (Riley, 1992; Tella, 2022). There is no objective way to measure the impacts of socio-economic factors on these developments, even though Nigeria (2015), Benin Republic (2016), Ghana (2016), Gambia (2017), Angola (2017), Ethiopia (2018), South Africa (2018), Sudan (2019) and Zimbabwe (2018) all experienced peaceful democratic transitions hitherto almost unknown on the continent.

Things appeared to change with the return of democracy to African capitals in the 1990s. Nigeria saw the return of constitutional democracy in 1999. Since then, the country has had six rounds of general elections. Even though critics said there had been severe electoral fraud in the 2003 and 2007 presidential elections, the electoral process appears to have improved since 2011. This development has been attributed to the introduction of technology such as smart-card readers, the Bimodal Voter Accreditation System (BVAS) for elections and the use of social media to mobilise young people (Agbu, 2016). Recent studies found that socio-economic factors did not shape the outcomes or turnout for the 2019 elections in Nigeria, despite the severe socio-economic challenges in the country (Adigun 2020). Perhaps, most significant is the seeming prevalence of the leading parties’ indulgence in vote buying during the elections (ibid).

Previous studies have suffered from one limitation – excessive aggregation. They relied on aggregated data such as GDP, unemployment and election results or turnout. To address this, we used Nigeria’s sub-national data from the gubernatorial elections in three states – Anambra in 2021, Osun and Ekiti in 2022. The sub-national and off-cycle elections provided an interesting perspective on the relationship between digital space, socio-economic factors and voter behaviour. We also included new variables such as the multidimensional poverty index (MPI), voter registration, internet usage[[3]](#footnote-4) and social media usage to provide fresh insights.

To go about this study, we ask:

1. Does socio-economic discontent influence young people’s voting behaviours in Nigeria?
2. How does the increase in digital space engagements influence voter registration?
3. What influenced voter turnout in the gubernatorial elections of Osun, Ekiti, and Anambra states?

As we attempt to answer the question, first, we delve into the literature.

1. **Related Literature and Underlying Theories**

Several studies have attempted to link socio-economic factors, digital space participation and voter behaviour changes using the Mobilisation-Withdrawal Model (MWM). The literature review highlighted that socio-economic factors and digital space affected voter behaviour similarly. In terms of methodology, several studies used empirical data and variables such as GDP, unemployment rates and voter turnout.

Recent studies have yielded mixed results, ranging from consonance to dissonance to no effects at all (Burden & Wichowsky, 2014; Martins & Veiga, 2014; Azzollini, 2021; Lynge & Martínez i Coma, 2022; Herodowicz, Konecka-Szydłowska, Churski & Perdał, 2021; Lewis-Beck & Martini, 2020; Vera, 2022; Schulz-Herzenberg, 2019; Martins & Veiga, 2013; Lee, 2020; Xenos, Vromen & Loader, 2014; Baumgartner & Morris, 2010; Hampton, Lee & Her, 2011; Schlozman, Verba & Brady, 2010). Only a few studies have considered socio-economic factors and digital space effects on voter behaviour in African countries (Lynge & Martínez i Coma, 2022; Tracey 2016; and Schulz-Herzenberg 2019). These studies largely relied on aggregated data that focused on national or presidential elections.

* 1. ***Socio-Economic Factors and Voter Behaviour***

Studies using the MWM adopted inflation, GDP and other macroeconomic outlooks as variables to measure changes in voter behaviour. The central thesis of the MWM is that voter behaviour is shaped in one of three ways when linked to socio-economic factors. Voters voice their rejection of incumbents (mobilisation effects), refrain from participation altogether (withdrawal effects), or have no effects at all.

* 1. ***Mobilisation Effects, Withdrawal Effects and Zero Effects of Socio-Economic Factors***

Generally, unfavourable socio-economic factors have mobilising effects on voter behaviour. It has been said that unfavourable socio-economic factors ‘bring out the votes’ (Burden and& Wichowsky (2014: 897). Burden & Wichowsky (2014: 897) stated that unemployment ‘brings out more voters’. Martins & Veiga (2014) observed that local economic factors, such as recession, inflation and other macroeconomic issues, could significantly influence whether or not voters reward incumbents with re-election. Voters tend to remove incumbents due to challenging socio-economic situations. According to the study, voters rewarded incumbents with re-election more in favourable economic circumstances than in unfavourable situations.

Martins & Veiga (2014), & Frank & Martínez i Coma (2021) observed that socio-economic factors could shape voter behaviour in addition to factors such as compulsory voting, competitiveness, the ordering of elections and previous election outcomes. Azzollini (2021: 1008) noted that the ‘unemployment rate increases electoral participation’. He found that socio-economic scars affected each voter differently at the micro (individual) level because ‘micro-level scar effects are uniform across contexts with different unemployment rates’. However, at the macro level, ‘higher unemployment rates may *mitigate* or *exacerbate* the scarring effect on turnout at the micro level’ (ibid, 1023).

Herodowicz et al. (2021) analysed the relationship between socio-economic factors and political behaviour. Using factors such as voter polarisation, shifts in public opinion and economic development, they noted variations between the effects in different territories (east and west) and in relation to urban-rural characteristics in the country. Spoon & Klüver (2015) observed that party support, polarisation and critical policy issues shaped voter behaviour in Western European states. They noted that ‘issue responsiveness of political parties indeed increases with the polarisation of the immigration and European integration issues among voters’ (ibid, 354).

Lewis-Beck & Martini (2020) noted that potential voters’ perceptions of macroeconomic performance could shape their decisions on incumbent re-election. They noted that while voter partisanship tended to disrupt the link between socio-economic factors and voter behaviour, it did not ‘completely corrupt it’ (ibid: 5). This supports Burden & Wichowsky’s (2014: 897) study, where they contended that ‘unemployment, brings out more voters’ since the potential voter is ‘more likely...to select candidates based on economic performance’ rather than their current state.

Lynge & Martínez i Coma (2022) examined the relationship between economic downturns and voter turnout in 40 African states between 1960 and 2016. Their study analysed 317 presidential elections in Africa using macroeconomic indices such as economic growth on voter turnout. The study observed that GDP per capita directly contradicted African voter turnout. In periods of economic boom, ‘African voters are more likely to go to the polls. When it busts, they are more likely to stay at home’ (ibid, p.6). Their conclusions support the findings of Patel, Sadie, & Bryer (2019), who found that approximately 65% of South Africans viewed socio-economic factors as the primary reason for candidate choice in the 2019 elections over human rights, race, etc.

According to the withdrawal hypothesis, voter behaviour is negatively affected by unfavourable socio-economic factors. Rowe (2015) noted that voters would rather stay at home than cast their votes to legitimise incumbents during worrying economic downturns. Rowe (2015) noted that potential voters took care of more pressing socio-economic needs instead of enduring the long route to changing their situations by voting. In a study conducted in South Africa, Schulz–Herzenberg (2019) observed that voters who felt the incumbent had done a poor job handling their socio-economic wellbeing were more likely to abstain from voting during the 2014 elections. Whilst mobilisation and withdrawal effects are based on robust data and evidence, Azzollini (2021) noted that the effects of socio-economic factors on voter behaviour were statistically not significant enough to make a definite conclusion.

The two hypotheses – mobilisation and withdrawal – have not been fully tested in Africa. Lynge & Martínez i Coma’s (2022) study focused mainly on presidential elections. It did not consider local or sub-national elections that tend to have stiffer competition and are closer to the people at the grassroots. In many cases, Nigerian presidential elections are based on ethnic loyalty, violence and ethnoreligious considerations (Collier, 2009). In the period under review, only a handful of sitting presidents lost re-election bids (Fayomi, Salau, Popoola & Adigun, 2020). Several of them were removed from office through coup d'état or assassination.

* 1. ***Digital Space and Voter Behaviour***

Various studies indicate that the political engagement of young people is improved through social media engagement (Lee, 2020; Xenos, Vromen & Loader, 2014; Baumgartner & Morris, 2010; Hampton, Lee & Her, 2011; Schlozman, Verba & Brady, 2010). Xenos, Vromen, & Loader (2014), in their study of three advanced democracies – Australia, the USA and the UK – found a significant relationship between involvement in digital space and political engagement. They found that social media brought young people closer to political engagement in advanced democracies.

Lee (2020) noted that the determinants of social network site usage in terms of the need to belong, perceived ease of use, and perceived socio-economic factors positively impacted voter involvement with politics. This further affected voter attitudes toward voting and confidence in their decisions. Xenos et al. (2014) and Lee (2020) found direct links between digital space and voter behaviour. However, Hargittai & Shaw (2013) found no evidence that young people’s usage of social media networks affected their voting behaviour during the 2008 US presidential election. They found nothing to suggest that the young people who engaged with social media networks participated more than their counterparts who did not. There have been few attempts to conduct such studies in Africa and Asia. No comprehensive, elaborate studies have been conducted on the influence of socio-economic factors on voter behaviour at Nigeria’s sub-national level.

1. **Methodology and Data Sources**

We used descriptive and inferential data analysis. We used inferential data analysis to make generalisations. This included employing the ordinary least square (OLS) regression model, analysis of variance (ANOVA), KMO Bartlett Test and Commonality analysis.

The OLS regression provided the grounds to make impartial and exact generalisations. We used the data that influenced voter registration to develop a linear model and assess how well the model matched the data.

The above equation is the linear model, where is the dependent variable as voter registration per population. The sub-script represents the sub-national level of state governments. The dependent variables include the constant and the parameters of each independent variable . The independent variables are the unemployment rate (), multidimensional poverty index () and internet connection rate per person. We also used a full-factorial (two-way) ANOVA to assess variations across distinct groups’ means (or averages). The KMO Bartlett’s test and Communality analysis will indirectly check all the possible scenarios of factors that could influence higher voter registration. These methods show the strength of relationships between variables, boosting interpretability and avoiding information loss.

The data analysis allowed us to establish the relationships between the factors and voter registration. However, we know that such generalisations can be limited, as country characteristics, democratic systems and political behaviours differ. Thus, we used qualitative data and evidence from the off-cycle elections to triangulate. This allowed us to focus on the potential of the 2023 general elections in Nigeria.

* 1. **Data**

We retrieved demographic data from the Nigerian Bureau of Statistics (NBS) and the World Population Prospects. We relied on the Labour Force Statistics data of 2020Q4 on the NBS website for data on Nigeria’s unemployment rate. The values were estimated by dividing the total amount of employed people by the labour force figure. The data was extracted by taking those out of the labour force.

We retrieved the poverty data from Oxford Poverty and Human Development Initiative (2022). MPI measures poverty in developing countries by complementing the traditional monetary poverty measures (of $1.90 per day) and simultaneously capturing the acute deprivations in health, education, and living standards that a person faces. The MPI is calculated by multiplying the incidence of poverty and the average intensity of poverty. The multidimensionally poor share of the population is multiplied by the average proportion of dimensions in which poor people are deprived (Alkire, Kanagaratnam, Nogales and Suppa, 2022). The MPI reflects the share of people in poverty and the degree to which they are deprived of nutrition, schooling, cooking fuels, sanitation, drinking water, electricity, housing, and basic household assets like radio, computer, telephone, motorbike, etc. We used the published reports from the Independent National Electoral Commission (INEC) for the registered voters for 2019 and 2022[[4]](#footnote-5). The data for religion across subnational governments in Nigeria was adopted from the empirical estimates of Ostein (2012), as religion is not recorded in the country’s official population census.

Internet connection data was retrieved from the NBS publication of Telecoms figures for Q4 2021. We used the active internet connectivity at sub-national level. We estimated the internet connection per head by dividing the active connection by the population figures in each State. The social media user data was sourced from *Statcounter*. The website sources its data directly from the respective social platforms marketing APIs. Statcounter aggregate statistics are based on a sample of more than five billion visits each month collected from throughout the network of more than 1.5 million websites. Statistics are updated and made available daily. The lag in the data is subject to quality assurance testing and reviews for 45 days following release.

1. **Data Analysis**

In this section, we present the results of our findings using descriptive and inferential data to link socio-economic factors and voting in Nigeria. The World Population Prospects data (2022) estimates that Nigeria’s total population is 219,867,000. The share of registered voters across the states is 96,302,668. The figure is derived from the number of existing 2019 registered voters – 84,004,084 – and the number of newly registered voters for the 2023 elections (INEC, 2022). Given the polarised nature of Nigeria, we use the six geo-political zones to analyse our data. The geo-political zones are taken from the northern region and southern region, each divided into three zones. The northern geo-political zones comprise the North-Central (NC), North-East (NE), and North-West (NW). The southern geo-political zones are South-East (SE), South-South (SS), and South-West (SW).

The geo-political zones are divided within ethnic zones. The northern region is more religiously conservative, with the Hausa & Fulani people forming the majority in the NW & the Kanuri people in the NE. Women in northern Nigeria gained the vote decades later than women in southern Nigeria, with universal suffrage not achieved until 1979. The primarily Christian Igbo are the largest ethnic grouping in the SE, where traditions are less centralised and more egalitarian, and there is a tense history of separatism from the rest of Nigeria. The more religiously diverse Yoruba people are the largest group in the SW, where identity is heavily influenced by regional culture & values.

* 1. **Descriptive Data of Population, Registered Voters, Socio-Economic Factors**

Table 1 shows the population distribution across the sub-national governments (States), the share of the working population, the distribution of registered voters, the unemployment rate, MPI, share of internet connection across the states and the internet connection per head across each sub-national government and geo-political zone. We derived the data by applying the sampling weight in the respective dataset to the final sample used to compute the reported statistics. The data combines to give a national picture of the potential result of the upcoming elections through digital space voter mobilisation via online registration. The unemployment rate and MPI are factors that will likely influence voter behaviour.

Insert Table 1 here

Kano has the highest population share at 6.2%, followed by Katsina with 6%, Lagos at 5.9%, and Kaduna with 5.6%. The rest of the states have a population share of below 4%. Of these four states, Lagos is from the SW geo-political zone, while the other three are from the NW geo-political zone. Thus, the population share is higher in the NW, as seen in Figure 1. The average population share is 2.7%, with 23 states below the average, which means 38% of the states have a higher population share than the national average. Bayelsa has the lowest share of the population.

From Table 1, the average share of registered voter per state correlates with the share of the population per state – 2.7%. Lagos has the highest share of registered voters at 7.43%, followed by Kano at 6.26% and Kaduna at 4.58%. Four states have a higher than 3% share – Rivers at 3.83%, Oyo at 3.46%, Katsina at 3.71% and Delta at 3.5%. Six other states have an above-average share. These states represent 35% of the total states and have a share of 50.12% of the registered voters.

Figure 1 Distribution of Population, Registered Voters, Unemployment, MPI and Internet Usage by Geo-political Zones

However, considering the distribution across the geo-political zones in Figure 1, it can be seen that the NW has 23.5%, the SW has 19%, the NC has 16.3%, the SS has 15.9%, the NE has 13.3% and the SE has 11.9% of the total share of registered voters. The average share across the geo-political zone is 16.7%, which means that only the SW and NW have a higher-than-average share.

Internet usage across the states is represented by connectivity and connection per head. The average number of connections per head in Nigeria is 0.6., which means for every 10 people there are 6 connections available. Lagos has the highest share of internet connections, at 12.5% connectivity and 1.3 connections per head. Ogun has 6% connectivity and 1.33 connections per head, which is higher than Lagos due to its lower population. Abuja has 5.8% connectivity with 2.18 connections per head. Kano has 5.8% connectivity, Oyo has 5.3% connectivity and Kaduna has 4.6% connectivity. The other states with higher-than-average internet connectivity rates are Rivers at 3.7%, Edo at 3.6%, Delta at 3.5% and Anambra at 2.8%.

Figure 1 shows that the geo-political zone with the highest internet usage per head is the SW at and the NC with 9 out of every 10 people being able to use the internet. The SS and SE trail behind with 0.7 and 0.6, respectively. The NW and NE have the lowest internet connection per head with 4 out of 10 people connected to the internet.

As shown in Table 1, Imo has the highest unemployment rate among the working-age population. Imo has a 56.6% unemployment rate. There are six states with an unemployment rate of over 50% in Nigeria. These are Abia at 50.1%, Adamawa at 54.9%, Cross River at 51% and Yobe at 52.6%. The SE has the highest unemployment rate with an average unemployment rate of 44.5%, followed by SS with an average rate of 43.8%. The SW has the lowest unemployment rate of 22.1%, with four of its states – Ogun, Ondo, Osun and Oyo – having the lowest unemployment rates in the country. The NW follows with 25.5%, with three of its states – Zamfara, Kebbi and Sokoto – having unemployment rates lower than 20%. The NC also recorded a 29% unemployment rate, with Benue and Kwara having unemployment rates of 12% and 16%, respectively. The unemployment rates in these three geo-political zones are below the national average unemployment rate of 33.7%.

The share of the population in poverty and deprivation (MPI) is shown in Table 1. Also, Kebbi – 58.5% and Sokoto – 55.5% have the highest MPI which is over 50%. Figure 1 shows the NE and NW have the highest MPI with 42% and 45.5%, respectively. These two geo-political zones, from the northern region, are the only regions that have a rate that is higher than the national average of 25.4%. The NC has a rate of 20.6%, while the southern region has an MPI rate lower than 10%.

Figure 1 also breaks down the unemployment rate across age groups. Age groups are important as they form the country’s voting and disenfranchised groups, as reported in the 2019 elections (INEC 2019). The younger age group aged 15–34 have the highest unemployment rate in the country. The middle-aged and the older generation have an unemployment rate of around 50%. The information about the poverty and unemployment rates explains the social class of the population, which is predominantly poor and it is likely they will be voting because of their circumstances.

Figure 2 Unemployment Rates across Age Groups

Table 2 shows the share of the population (based on age groups) who are legally eligible to vote – those who are aged 18 and above. This data was taken from the record of the 2019 registered voters and added to the list of newly registered voters for the 2023 elections. The share of eligible voters, based on Nigeria’s population, is 50.3%. Registered voters account for 43.8% of the population & 87% of those eligible to vote in the 2023 elections.

Insert Table 2 here

Those aged 18–39 account for 23.5% of Nigeria’s population and 46.8% of those eligible to vote. The total share of this group of registered voters for the 2023 elections is 53.7%. This group of voters are also part of the unemployed group and the most active social media users in Nigeria. The INEC Report (2019) showed young people aged 18–35 constituted over 51% of the registered voters. It also noted that those in this age group were some of the country’s most disenfranchised voters. In Nigeria in 2022, there are 36,880,400 Facebook users, 29,933,600 Messenger users & 10,053,700 Instagram users. Those aged 25–34 constituted the largest user group.

Figure 3: Share of the Population and the Number of Social Media Users within the Age Demography

Figure 3 shows the share of the population and the number of social media users within the age demography. The age demography of the population shows that 38.4% are children between 0–13 years old who do not use social media. The median age of the population in Nigeria is 18.2.

Religion is a factor that is used in Nigeria to polarise voters. The issue of religion is used to mobilise voters, and the sub–national government also uses religion whenever there is a need to mobilise the electorate. The voter registration exercise has used civil society organisations and religious bodies to mobilise voters to register, and the buildings of religious organisations are used as venues to attract voter registration (NAN, 2022).

Figure 4 Religion by Population Across the Geo-political Zones, based on Ostien (2012)

Figure 4 shows the distribution of religious affiliation across Nigeria. The distribution follows the assumption of Ostien (2012), and we follow Burr, et al (2015) that religion was intergenerational.

The NC and the SW geo-political zones have a religious population of Christians and Muslims above 40%, which means one of the major religions will find it hard to dominate if religious polarisation is considered. The other geo-political zones have one major religion and one minor religion. Religious leaders have mobilised voter registration across the country (Fred, 2022) and are expected to influence voting behaviour in the 2023 elections.

Figure 5 Share of Religion by Registered Voters

Table 5 shows the share of religion by registered voters in Nigeria. We derived the data by applying the sampling weight in the dataset to compute the reported registered voters’ statistics. We assumed that voter disenfranchisement was minimised, and the percentage of religion by population was replicated for voter registration in every geo-political zone without any form of voter suppression. Given its population and registered voters share, the NW has the highest percentage of Muslim registered voters, and the SE has the lowest number of Muslim registered voters. The SS has the highest number of Christian registered voters, and the NW records the lowest number of Christian registered voters.

* + 1. **Pearson Correlation**

We use the Pearson correlation to measure the linear relationships between our key variables. Table 3 shows the Pearson correlation and the p-value in parenthesis.

Insert Table 3 here

In measuring the relationship between variables, we find no significant correlation between registered voters share and the unemployment rate (). There is a positive correlation between registered voters share and internet connection per head (), which is significantly strong. The relationship between share of registered voters and poverty rate at sub-national level is significantly negative and strong (). The result explains why we have lower voter registration share in NE and NW due to the high poverty level in the two geo-political zones as seen in Figure 1. There is also a strong significant negative relationship between internet connection and poverty level at the sub-national level ().

* 1. **Inferential Analysis**

Insert Table 4 here

Table 4 shows the ordinary least square regression results of the share of voter registration as the dependent variable, with unemployment rate, poverty headcount rate and internet connection per head as the dependent variables. The results show a statistically significant effect of internet connection per head on the share of voter registration. The coefficient is positive, meaning a one-unit increase in internet connection will increase voter registration by almost seven times. The coefficient of the poverty index shows that for every rise in the poverty rate in a State, there will be a decrease in voter registration by 14.1%. That means voters are unlikely to vote because of the deprivation of basic needs like mobile phones, education, and other household assets. The coefficient of poverty shows that a one-unit rise in those living below the poverty line will reduce voter registration in the respective state. The unemployment rate is not statistically significant.

Insert Table 5 here

Table 5 presents the analysis of the variance result of the regression model. We considered three socio-economic factors as predictors: internet connection per head, unemployment rate and poverty headcount rate. The variables were tested on the dependent variable – voter registration. The sample size covers all the 37 States, obtained from the sub-national governments of 36 states and the federal capital in Nigeria. We rejected the null hypothesis of equal population means since the test statistic was significantly bigger than the critical value. We concluded that there was a statistically significant difference between the population means. The test statistic was significant at the level of 3.523, as indicated by the p–value of 0.026.

We measured the strength of the relationship of the variables via an extraction method of principal component analysis (PCA), following Costello & Osborne (2005). Tests were performed to measure the strength of the relationship among the variables using the Kaiser-Meyer-Olkin (KMO) and Bartlett tests.

Insert Table 6 here

The Kaiser-Meyer-Olkin test of sampling adequacy is a statistic that shows the amount of variance in the variables that underlying factors could explain. Table 5 displays two tests that indicate the viability of the data for criterion-related validity. The KMO measures showed that the responses provided by the sample were adequate for a PCA. Kaiser & Rice (1974) recommend a value of 0.5–0.8 to be acceptable, with values over 0.9 to be excellent. We found a KMO value of 0.558, and the Bartlett test showed an indication of strength among the variables, which rejected the test (*p=0.003*, *df=6*), concluding that there was a statistical significance among the variables.

Insert Table 7 here

Table 7 shows the communalities with extraction by PCA. The middle column, initial, explains the proportion accounted for by each of the other variables, with the initial value as 1. A 68.6% variance is accounted for by the poverty headcount ratio in each state. The unemployment rate accounts for 81.7% of the change, while internet connection explains 75.8% of total voter registration in the country. The extraction is the estimated variance in each variable derived from the PCA solution, which can be interpreted as R2 in multiple regression. Values lower than 0.5 mean that the variables do not fit well with the solution. Therefore, the variance of the share of total registered voters was accounted for in every respect.

Using the KMO Bartlett’s test and the communality analysis, we can now analyse the effects of socio-economic factors on voter registration across the sub-national governments. These tests have empirically determined the partial correlation strength and how the variables explained each other.

* 1. **Discussion of Results**
     1. **The Impact of Internet Usage on Civic Participation**

Empirically, we observed that four out of six regions have a higher voter registration share than their population share from Figure 1. The two geo-political zones, NE and NW, with a lower share of voter registration than their share of the population appear to have the highest poverty and deprivation rate in the country. There are two explanations for the low voter registration, a fact and a theory. First, the low internet connection per head, which can be due to their high population density. Our result further confirms a negative relationship between voter registration and poverty level. Second is the possibility that the two regions have higher numbers of ineligible voters, which means they have a population under 18 years of age. If the second assumption is correct, then the NE and NW will continue to have lower voter registration despite having a high population as the population grows.

Internet usage has increased over time, which has influenced freedom of speech in the social media sector. Internet connectivity has increased across the country, mostly in the SW. As seen by its actions during the 2020 #endSARS protests, the government has been repressing the free press. Following the protests, Twitter was shut down for seven months, while major media outlets closed and journalists left, reducing the opportunity for open discussion. Security issues are generally not reported or falsely reported due to fear of retaliation by the government. The youths are one of the groups, together with women and the disabled, who have been disenfranchised (INEC, 2020).

* + 1. **The Effect of the Electoral Act (2022) and Social Media**

The Electoral Act (2022) has given hope to voters that they can elect candidates who will represent them at various national and sub-national levels. The key point of hope is the approval of the use of technology in elections. INEC has legal backing to use electronic accreditation of voters[[5]](#footnote-6). The Act has also given legal backing to the electronic transmission of the result during elections. Before the ascent of the Act, in August 2020, INEC introduced the result viewing portal. INEC has the power to maintain a centralised electronic elections register for e-collation[[6]](#footnote-7).

Voter fraud is challenging for voters, but the Electoral Act (2022) will mobilise voters to vote to elect their candidates. The Act[[7]](#footnote-8) states that the total number of accredited voters will become a factor in determining over-voting at election tribunals. To ensure that voter disenfranchisement does not continue, the Act[[8]](#footnote-9) states that voters with visual impairment and other forms of disability or incapacitation can choose someone to assist them at the polling unit. The commission ensures they will provide suitable means of communication such as braille, large embossed print, electronic devices, sign language interpretation or off–site voting in appropriate cases.

* 1. **Evidence from Off–Cycle Elections: Anambra, Osun and Ekiti Gubernatorial Polls**

Our results point to strong mobilising effects of social media usage and socio-economic factors on voter behaviour. Our main findings remain consistent, as seen in our three case study off-cycle elections – Anambra (2021), Osun (2022) and Ekiti (2022). Even though they showed consistencies, we observed countrywide variations in the behaviour of these variables.

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| Figure 6 Voter Turnout for Off-Cycle Elections | Figure 7 Winning Percentage during the Off-Cycle Elections |

Tables 7 and 8 show the voting responses during the off-cycle elections during three different periods in three different states across two geo-political zones. The turnout, vote distribution and results in these states reflect some interesting details. First, the mixed influence of socio-economic factors on voter turnouts in Nigeria in Figure 6. Anambra gubernatorial elections have manifested declining turnouts since 2013. The voter turnout showed an inverse relationship with one socio-economic factor, the unemployment rate, but not with the poverty headcount rate. Anambra state with a 44.2% unemployment rate had the lowest voter turnout of 11.3%. The unemployment rate is above the national rate and the turnout rate is below the national turnout rate of 2019 of 34.8%. Ekiti state recorded a 32.2% unemployment rate had a 38.2% voter turnout rate. Both rates are similar to the country’s average. Osun state has a low unemployment rate of 11.7%, below the national average. The turnout rate recorded for the off-cycle election was 43.8%. The turnout rate of Anambra’s off-cycle election seems to reflect the withdrawal effect theory (Rowe 2015, Schulz-Herzenberg 2019, Lynge & Martínez i Coma 2022), which maintains that voters are unlikely to punish incumbents for unfavourable socio-economic factors.

If this pattern were to be repeated in the 2023 general elections, the states with lower unemployment rate will have a higher voter turnout than that with higher unemployment rate. From Figure 1, three geo-political zones will have lower voter turnout due to low unemployment rate: SE - 44.5%, SS - 43.8%, and NE - 41.3%. Following on from Figure 3, the younger and middle-aged voters (18-24, 25-34, and 34-35) will have a lower turnout due to high unemployment rate. That means States with high unemployment rates may not have a high voter turnout. As witnessed in the Osun gubernatorial election, increased voter turnout tends to cancel out the incumbency advantage during elections. The reverse is also true under similar conditions. Incumbents standing for re-election often show more desperation in the face of increased voter turnouts and stiff competition. Dawson (2020) notes that the incumbent will resort to rigging when the race is tightly contested. Most of the time, the incumbent can force the election to lead to run-offs where the challengers may stand no chance of a victory, as was the case with the 2018 Osun gubernatorial election.

Although Ekiti showed a decline in voter turnout from 43.7% in the 2019 presidential election, Osun state showed a slight improvement of 0.012% in the same period. Ekiti, like Anambra, saw the incumbent party winning the gubernatorial election while the incumbent party candidate, Gbenga Oyetola, lost to the opposition in his bid for re-election by a narrow margin as seen in Figure 7. This may explain the higher voter turnout in Osun state. This is in agreement with the mobilisation effect of socio-economic factors. The outcome of elections can be affected by more than just socio-economic factors. As Frank & Martínez i Coma (2021) observed, voter turnout may also be influenced by other factors, such as the competitiveness and order of elections and previous election outcomes. We saw these patterns in the three elections studied. Anambra state has had a historical record of low voter turnout since 2013. In addition, the same party, the All Progressives Grand Alliance (APGA), has won the state gubernatorial elections since 2006. Also, the gubernatorial election falls in the off-cycle election season, which could shape the voter attitudes. The Ekiti and Osun gubernatorial elections seem to provide the opening for the election season in Nigeria, which may explain the relatively higher turnout than seen by their Anambra state counterpart.

The introduction of technology to the voting process seems to have increased voter confidence in the electoral process by increasing the number of newly registered voters. Anambra state increased voter registration by 362,609 in 2022, the highest number of registered voters in the three states. The rise can be attributed to the momentum of the off-cycle gubernatorial elections, given they happened a few months apart from the elections in Ekiti. The numbers of registered voters for Anambra & Ekiti states stand at 313,471 and 124,844 – that is 2.5% and 1% of the total numbers, respectively. Osun state has 2.9% of the country’s new registrants. A key attribute of this was a successful digital mobilisation effort to get more young people to register to vote along with the optimism around the Electoral Act (2022). However, encouraging young people to register and then vote on election days are two different things altogether. The new voter registration shows no correlation between unemployment and poverty headcount rate.

The third evidence observed from the results of these three states is that the more competitive the election, the higher the chances of increased voter turnout. In both Anambra and Ekiti, the ruling parties – aided by their outgoing governors – ensured victories for their parties in the elections. The outgoing incumbents showed more interest in retaining power for their parties than allowing the voters to decide. This contrasts with the Osun elections, where two equally matched candidates in terms of mobilisation capacities and financial capabilities squared against each other. The 2018 Osun gubernatorial election was decided after a run-off which saw the incumbent All Progressives Congress (APC) slightly edge out the opposition. The opposition Peoples Democratic Party (PDP) appeared better prepared not to allow the repeat of their defeat four years earlier.

The descriptive statistics from the three case studies still reflect some signs of ethnoreligious and party polarisation in Nigeria. This was evident in the cases of Ekiti and Osun in the SW – the most religiously diverse area in Nigeria. Even though Osun state has a Muslim population of 53.1% and a Christian population of 42.6%, there were attempts by supporters of the incumbent governor Oyetola, to make political capital out of the opposition candidate, Demola Adeleke’s, Christian beliefs. The opposition also played the religious card using the instance of the ruling party’s same religious faith ticket for the 2023 presidential election. The weaponisation of religion (Kolawole, 2022) in the Osun elections since 2007 shows signs of an increase of religion in the state. Although Anambra is a predominantly Christian state, there is still polarisation among Catholic–Anglican lines in state politics. Things reached a peak when the Pentecostal Fellowship of Nigeria (PFN) had to state politicians on the need to get them involved in the electioneering process in 2021 (Eleweke, 2021).

1. **Conclusions and Implications of the Study**

Our study has found that socio-economic discontents can influence young people’s voting behaviours in Nigeria. The empirical evidence shows that digital space engagements has played a part in increasing voter registration. The results of voter turnout in Osun, Ekiti, and Anambra states’ gubernatorial elections aligns with the withdrawal effect theory that socio-economic factors has an inverse relationship with voter behaviour in Nigeria.

We found that the geo-political regions with higher internet usage have increased voter registration across the country and a negative correlation between the poverty level and voter registration exists. We found an inverse relationship between the unemployment rate and voter turnout in Anambra, Ekiti, and Osun gubernatorial elections. When young people – who are often not part of the decision–making processes in candidate selection– are faced with limited choices, there is the likelihood they may not turn out to vote on election day, even with the seemingly successful voter registration drive (Adigun 2020). When uninspiring candidates characterise elections without clear alternatives (Vera 2022), there are higher chances of low voter turnouts and increased post-election violence involving young people expressing their displeasure with the outcome of the process.

Although social media has a positive correlation with political activity, there is little evidence to show it can influence the outcomes of elections. For there to be a discussion about voter turnout or accreditation, there should be a conclusion on voter registration first. Without increasing voter registration, it is difficult to have more turnout in the election, especially among first-time voters. The importance of social media was seen when the Nigerian government banned the operation of Twitter in the country after its successful mobilisation effort for the #EndSARs protests earlier in 2020. Social media can help raise awareness of issues affecting young people during the campaigns that may shape the election. Also, the major actors will respond to the charges posed by social media vigorously as the campaigns intensify.

There is strong support for a third party to be involved in Nigerian elections to break the traditional ‘two–horse’ race. Ekiti & Anambra show the increasing influence of third parties, which appear to be closing ranks & voting gaps between the main parties. The attitudes of third parties will either make or break the outcomes of the 2023 elections. During the 2018 gubernatorial election in Osun state, it took political negotiations between the APC and the third party, the Social Democratic Party (SDP), to guarantee victory for the former during the run-off. In 2022, the reverse was the case. As the results in the three states show, only parties with full mobilisation capabilities can win elections or influence the outcomes. The rise in third parties confers a slight advantage to the incumbents over the opposition.

The deployment of technology in elections will largely reduce the propensity to rig – from both the incumbent & opposition parties. The deployment of BVAS and other election-related technologies will reduce the propensity for rigging during the 2023 elections. The recently passed Electoral Act (2022) allowed the use of technology during the Ekiti & Osun gubernatorial elections. From the evidence from the Anambra, Ekiti & Osun gubernatorial elections, ethno-religious factors will still be visible in the 2023 elections.

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3. We have used internet connection and internet usage interchangeably to suit the discussion and clarify key points. [↑](#footnote-ref-4)
4. The voter registration for the 2023 election was closed on 31 July 2022. We used INEC’s published reports for the registered voters of 1 August 2022. We take into account that the number of registered voters is subject to verification, but we assume the numbers will not be significantly different. [↑](#footnote-ref-5)
5. Sections 47 and 50(2) of the Electoral Act, 2022. [↑](#footnote-ref-6)
6. Section 62(2) of the Electoral Act, 2022. [↑](#footnote-ref-7)
7. Section 51 Electoral Act, 2022. [↑](#footnote-ref-8)
8. Section 54 of the Electoral Act, 2022. [↑](#footnote-ref-9)