Article

Mobile Internet and Contentious Politics in Nigeria: Using the Organisational Tools of Mobile Social Networking Applications to Sustain Protest Movements

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Abstract: This study investigates the impact of mobile social networking applications in the organisation of protest movements by examining how protesters documented their participation during the 2020 #EndSARS protests as well as evaluating the themes that emerged from online activists' tweets during the 2022 #EndSARSMemorial2 protests in Nigeria. Data for this study was obtained from a survey conducted in 2020 during the protests in Lagos and Port Harcourt, Nigeria (N = 391), and a qualitative content analysis of tweets and replies (N = 67,691) from the 2022 #EndSARSMemorial2 protest in Nigeria. Results show that there is a substantial relationship between how protesters document their participation and their day of joining the protest. Findings also demonstrate that protesters used social media platforms accessed via mobile phones to display their anger and anguish, imprecate the authorities, and rouse solidarity contagion, which ignited a memorial march for fallen activists in Nigeria. Finally, data illustrate that activists in Nigeria use these successive memorial protests to sustain the #EndSARS protest movements and their demands.

Keywords: mobile social networking applications; digital activism; social media; #EndSARS; #EndSARSMemorial; Nigeria

1. Introduction

Innovations in mobile technologies and social media platforms coincide with increased protest movements around the world (Bennett and Segerberg 2011, 2012; Castells 2012). These protest movements have been argued to have come about due to improved mobile internet and social media technologies (Bennett and Segerberg 2013). Mobile social networking applications such as WhatsApp, Eskimi, Telegram, Badoo, and 2go and social media platforms such as Facebook, Twitter, Instagram, and YouTube help mobile-enabled digital activists to participate in contentious politics. These platforms and applications act as vehicles for the protests as well as data points that aid in the organisation and coordination of protest movements, thereby inventing a deliberative arena for the citizenry (Baulch et al. 2020; Segerberg and Bennett 2011; Treré 2020; Uwalaka et al. 2018). These platforms also help escalate protest movements by disseminating enthusiasm, which brings about emotional contagion (Gerbaudo 2016) that sustains the protests.

The importance and ordinariness of mobile networks cannot be overemphasised. According to the 2020 data from the International Communication Union (ITU), only 17% (urban) and 2% (rural) of Africans accessed the internet from a computer (International Telecommunication Union 2020). This is startling, given that Africans were in a minority with such numbers. The data further show that internet users are increasingly surfing the web and performing other activities online via their mobile devices. While that is true for all subgroups and continents, the ratio is more pronounced in Africa. For example, 82 per 100 households in Africa subscribed to a mobile cellular telephone, and 33 per 100 households subscribed to mobile broadband (International Telecommunication Union 2020). Only 1 per 100 households has a fixed broadband in Africa. This is a meagre figure

and indeed shows that an overwhelming number of netizens in Africa engage online via mobile internet. In this study, mobile internet will be used to describe digital media accessed via internet-enabled mobile phones.

Many contentious political studies have uncovered that digital media platforms, such as Facebook and Twitter, and mobile social networking applications, such as WhatsApp, when used, facilitate the organisation and documentation of protests (Treré 2015, 2020). The puzzle that research studies have started to attempt concerns the platform effects of both social media platforms and mobile social networking applications. Treré (2020) has illustrated how activists in Spain and Mexico have integrated WhatsApp into their media ecologies to reinforce their collective identity, cement internal solidarity, and lower the pressure of protests. He further demonstrated that WhatsApp has been used as a robust organisational device and is firmly integrated into organisations and movements (Treré 2015, 2020). It has been noted that WhatsApp is used by activists and organisational networks for mobilising and coordinating protest actions (Johns and Cheong 2021; Pang and Woo 2020).

While mainstream digital media platforms are progressively studied, only a handful of scholars are interrogating the banality and mundanity of mobile social networking applications' roles within the media ecologies of contentious politics such as the 2020 #EndSARS protests and the 2022 #EndSARSMemorial2 protests in Nigeria. Even fewer studies have looked at how digital networks help activists to sustain protest movements over a period. Many studies (Fenton and Barassi 2011; Gladwell 2010; Morozov 2009, 2012, 2013) have argued that social media platforms do not hold sway in protest movements and that digital networks breed lazy activism. Recently, the enthusiasm around the promise of social media a decade ago during the Arab Spring has been gradually dissipating in the literature. Since the 2016 Brexit votes in the United Kingdom and the 2016 presidential election in the US, scholars have replaced their optimistic views of digital media platforms with increasingly dim views. Studies instead examine dis/misinformation online and how it breeds polarisation and the alleged destruction of liberal democracies (Allcott and Gentzkow 2017; Allcott et al. 2019; Tandoc et al. 2021; Uwalaka 2022a). This study attempts to recast the importance of digital networks, specifically for those with limited voices in the mediated public sphere.

Beside Tufekci and Wilson (2012), many social movement studies rely on protesters' recall ability to test what the protesters did and their perception at the time of the protest. However, this paper reports on data that was collected during the 2020 #EndSARS protests and during the 2022 #EndSARSMemorial2 protest in Nigeria. Understanding the media platforms that the protesters used at the time of the protests enables researchers to test if there are differences in protesters' recall ability. The data collected was used to examine the role of social media and mobile social networking applications in documenting the 2020 #EndSARS protests in Nigeria and analyse the themes that emerged from tweets by digital activists during the 2022 #EndSARSMemorial2 protests in Nigeria.

There is a lag in the protest movement and digital activism literature in Nigeria. For example, the 2020 #EndSARS protests in Nigeria has yet to be adequately studied. Some studies (Aniche and Iwuoha 2022; Dambo et al. 2020, 2021; Nwabunnia 2021; Uwalaka and Nwala 2022) have evaluated the hypothesis about the salience of online media and celebrity during the 2020 #EndSARS protests. Although these studies are vital to understanding some aspects of the hypothesis, they, however, have either looked at the spreadability of protest messages on twitter or used content analysis to ascertain meaning from tweets and Facebook posts or safety of journalists during the protests (Adeniyi 2022; Chinweobo-Onuoha et al. 2021; Talabi et al. 2021). These studies did not meet with the protesters on the streets and did not study an array of social media platforms and mobile social networking applications to ascertain the leading platform that protesters in Nigeria used the most during the protests. This study was conceived to add additional understanding to the protest movement literature regarding the peculiarities of both the 2020 #EndSARS and 2022 #End-SARsMemorial2 protests in Nigeria, particularly regarding the media that protesters used

to document their participation in the 2020 #EndSARS protests and the themes that emerged from tweets and replies from netizens during the 2022 #EndSARSMemorial2 protests.

Consequently, the purpose of this study is to locate the impact of mobile social networking applications and social media platforms in protest movements by evaluating the role of social media and mobile social networking applications in socio-political contestations in Nigeria and to situate the influence of digital media in sustaining protest movements and their demands.

2. The 2022 #EndSARSMemorial Protests in Nigeria

In October 2020, Nigerians engaged in civil disobedience as a way of coercing the Nigerian government into disbanding the Special Anti-Robbery Squad (SARS). Nigerians demonstrated due to the notoriety that the special unit of the Nigerian Police Force, SARS, achieved from actions such as killing, torturing suspects, erratic behaviour, and arrests of youths in Nigeria (BBC 2020b; Uwalaka 2021). The displeasure of Nigerians towards SARS started long before 2020. This unhappiness was a result of the "highhandedness" with which SARS handles their cases. Even with this displeasure, Nigerians did not pursue the disbandment of SARS. However, there was a change in early October 2020 when a video emerged and showed some SARS officers to be running away from a scene where they allegedly killed a man in front of the Wetland Hotel in Delta State in Nigeria (Dambo et al. 2020, 2021). The viral video enraged Nigerians, as they saw what they perceived to be inhuman and imperious behaviour from the SARS officers. The video illuminated the "callousness" of the SARS officers. This forced Nigerians to protest in many cities around the world and ask President Buhari to proscribe the police unit (Uwalaka and Nwala 2022).

Nigerians protested in cities in Nigeria as well as in cities in the United Kingdom, Germany, Australia, Canada, the United States, Ireland, and South Africa, among others (Uwalaka 2022b). After sustained protests for four days, the Nigerian Police Command announced that it has disbanded the police unit. The announcement was well received, as protesters felt vindicated and heard (Aljazeera 2020). It was further reported that instead of proscribing and uncoupling SARS, the presidency rebranded the unit into the Special Weapons and Tactics (SWAT) team. Nigerians felt betrayed and continued the protests.

On 20 October 2020, military officers shot and killed some protesters at the Lekki tollgate in Lagos, Nigeria (Dambo et al. 2021; Uwalaka 2021). This set off a chain of events that led to the death of over 69 persons. Of those that were killed, 51 were protesters, 11 were police officers, and seven were soldiers (BBC 2020b). Thus, the killing of protesters gave birth to the memorial protests every 20 October. The first memorial protests were observed in 2021, where protesters and digital activists showed solidarity and respect for their departed colleagues. The 2022 #EndSARSMemorial2 is the second anniversary of the killing at the Lekki tollgate in Lagos Nigeria.

Like in 2021, on 20 October 2022, Nigerians again engaged in a peaceful protest to observe the two-year anniversary of the shooting of protesters at the Lekki tollgate in Lagos during the 2020 #EndSARS protests (BBC-Pidgin 2022; Ojigho and Arinze-Onyia 2022; Oloniniran 2022). The protesters carried many placards with inscriptions such as "we will never forget" and "always in our mind". The protesters waved the Nigerian flag and solemnly walked down the streets singing and chanting the names of protesters who were killed during the protests in 2020 (Daka and Musa 2022). The highlight of the protest was when a thirty-year-old graduate, Mr Stephen Ohaima, declared that he did not regret joining the 2020 #EndSARS protests despite losing his leg (Adefemi 2022).

It has been argued that the 2020 #EndSARS and 2022 #EndSARSMemorial2 protests attained their goals. For example, the SARS police unit was dissolved due to the protests in 2020. In the case of the 2022 protests, demonstrators who had been imprisoned since 2020 were being freed due to the sustained pressure from activist groups while the president signed into law the Start-Up bill (Daka and Musa 2022; Oloniniran 2022). This bill, now an Act, was designed to stop police officers from harassing young Nigerians with laptops.

Prior to the protest movement, many young Nigerians were arrested on suspicion of being internet fraudsters.

3. Examining Mobile Protests and Activism

The mobile activism literature is rife with research on how mobile phones have helped in coordinating protest actions. Some of these studies about mobile protests include *Smart Mob*, *Here Comes Everybody*, and *swarm intelligence* (Rheingold 2002; Shirky 2008). Smart mobs occur when the human propensity for cooperation is amplified by information and its dissemination through communication technologies (Rheingold 2002). Other studies (Hardt and Negri 2005; Shirky 2008; Wasik 2009) have eulogised the capacity of mobile technologies to organise collective action. Mobile technologies foster the rise of new forms of collective action. Like Shirky and Rheingold, Hardt and Negri (2005) argued that "swarm intelligence" is a fluid social formation arising from complex technical linkages that enable intelligent collective action out of heterogeneity and multiplicity without the need for centralisation.

A report in 2008 by *The Economist* predicted that a revolt would come about because of the growing number of people, especially in emerging democracies, who are using mobile phones to access the internet (Economist 2008; Uwalaka 2017). This uprising had commenced long ago in developing countries where mobile internet was fostering political talk among the people and in Africa also, where the widespread endorsement of mobile phones with internet capabilities has led to new optimism about the potential mobile phones hold for stimulating political participation and broadening political debate (Wasserman 2011; Wei 2014).

Mobile internet capabilities influence how people access social media platforms. The significance of mobile internet connectivity and associated social media platforms is that they defy boundaries, challenge governmental media censorship, and provide an alternative voice to traditional media outlets (Ibrahim 2013; Khamis and Vaughn 2011, 2013). Mobile internet also enables the flow of information via a "virtually defined, emerging cyber world that knows no physical boundaries" (Salmon et al. 2010, p. 159). During the Arab Spring and Occupy Nigeria protests, messages transmitted through social media outlets such as Facebook, YouTube, Twitter, Instagram, and WhatsApp via users' mobile phones enabled peer-to-peer communication, thereby allowing users to transmit their ideas and images to a larg number of people (Khamis and Vaughn 2011, 2013; Uwalaka et al. 2018; Uwalaka and Watkins 2018). Mobile internet connection helps people, particularly those from developing countries, to access social media platforms. This helps them to mobilise, coordinate, and participate in social movements. For example, findings have uncovered how protesters utilise social networking applications such as WhatsApp and Telegram to coordinate their protest actions (Baulch et al. 2020; Pang 2021; Pang and Woo 2020; Treré 2020).

Howard and Hussain (2013) argued that mobile phone use consistently appeared as one of the key ingredients in parsimonious models behind regime fragility and social movement success during the Egyptian revolution. According to them, the use of mobile phones by the people during the Arab Spring in Egypt enabled the development of an information infrastructure that sustained the flow of information during the revolution.

Scholars are also evaluating the impact of the use of mobile phones with internet capabilities on other forms of movements and engagements, such as in exposing human rights abuses, crimes, and corruption and promoting political participation (Assmann and Assmann 2010; Ghannam 2011; Obijiofor 2011a, 2011b; Savinov et al. 2014; Warioba and Ally 2014). For example, Egyptians used their mobile phones to send photographs and videos to international news channels and YouTube during the Egyptian revolution.

These studies have been critiqued as unsophisticated and technocentric. Rafael (2003) critiqued Rheingold (2002) and argued that the crowd in Manila themselves acted as an alternative communication. Similarly, it has been noted that there is no evidence that mobile phones alone will create a measurable impact on political activism (Miard 2012).

Morozov (2012) challenged Shirky for his insistence on the emancipatory potential of new media, suggesting that the internet, including the mobile web, strengthens the surveillance capabilities of authoritarian regimes.

In general, these studies fail to reveal the role of specific mobile technologies in organising a social movement. Outside of the SMS specifically studied, no specific mobile application has been studied in the mobile collective action literature. Some other concepts, such as "complex dialectics" (Barassi 2013), "hybrid media" (Chadwick 2013), "new media ecology" (Tufekci and Wilson 2012), and "media cultures" (Costanza-Chock 2012), are relevant in the discourse on the compatibility of mobile technologies with other technological innovations, leaving a lacuna in the mobile collective action literature as to how individual mobile applications impact social movement organisation.

Overall, the studies discussed in this section emphasise and examine the role of digital media in protest organisation and planning. This can also be said in relation to studies about the Arab Spring and other political protests around the world. The present study was designed due to the dearth of research in the mobile activism literature in Nigeria regarding the relationship between the media platforms used and the type of messages that protesters received and forwarded during the 2020 #EndSARS and the 2022 #EndSARSMemorial protests in Nigeria. This study utilised two data collection techniques to answer its research questions.

4. Research Question and Method for Study 1

This study attempts to answer the following research question:

1. To what extent did the type of media used by protesters to document their participation during the 2020 #EndSARS protests impact the day that they joined the protests?

This study utilised data from a paper-based survey of protesters during the 2020 #EndSARS protests in Nigeria. A survey of media used by Nigerian protesters was taken over a 3-day period, beginning on Friday, 9 October 2020, which was one day after the 2020 #EndSARS protests started in Nigeria to 11 October 2020. The survey was collected in the protests' venues in Port Harcourt, Rivers State, and Lagos, Lagos State, Nigeria. To manage the rowdiness and chaos as well as the sensitive situation informing the protests, the research team used a snowball sampling approach in which protesters were recruited through referrals in the protest venues (Tufekci and Wilson 2012). The interviews were conducted in diners, by the side of the road, inside a hall in Mile 1 in Port Harcourt, and inside two vans that were prepared for the interviews.

A total of 450 interviews were conducted with Nigerians who were participating in the protest. Any questionnaires not completed due to security concerns, yelling that distracted the participants, and unintelligible responses were dropped, yielding 391 valid surveys. The research team estimated a response rate of 87%. This is impressive given the tumultuous environment from which this was gathered. Although it was impossible to access the representativeness of the sample because of the conditions at these protest venues, the best that can be said is that the research team believes that the sample was similar in demographic terms to those they witnessed protesting at the Lekki tollgate in Lagos and in Mile 1 and in front of the Government House in Port Harcourt. Of the 59 void survey responses, 27 were from Port Harcourt, while 32 were from Lagos.

Eight interviewers and eight logistics personnel were used during the interviews. The eight interviewers had previous survey and research experience. The lead researcher was also on the phone and on Zoom explaining the research essence and clarifying issues regarding the study to some participants that wanted further information. The questionnaire was conducted in English. It required 25 min to complete and consisted of 35 close-ended questions. The survey consisted of three sections, including general information, media use, and documentation. Outside of descriptive statistics, binary logistic regression was conducted to predict the connections between media used to document protest participation and joining on the first day of the protests. Gender was measured dichotomously as 1 = male and 0 = female, age was measured categorically, protest experience was measured

dichotomously as 1 = has previous protest experience and 0 = has no previous protest experience, and day of joining the protest was measured dichotomously as 1 = joined on the first day of the protest and 0 = joined on subsequent days. Finally, media platforms used for protest documents were measured with a five-point Likert scale (1 = strongly disagree 2 = agree, 3 = neutral, 4 = agree, and 5 = strongly agree).

5. Results for Study 1

Before answering the research question, the researcher first evaluated the descriptive statistics regarding the research, as it assists in the interpretations of the logistic regression model. In this study, male participants were in the majority (53%), compared with female participants (47%). About 83% of the protesters reportedly accessed the internet and digital platforms via their mobile phones. Only 17% of the protesters reported accessing their internet from a computer. This result shows that the 2020 #EndSARS protesters overwhelmingly used mobile phones for the majority of their online needs.

The majority of the participants were from 25 years of age and above. Those who were 24 and younger accounted for 10% (34) of the participants. This is important, particularly given how studies with anecdotal evidence refer to this protest movement as youth-led. This finding, while not outrightly disproving such assertions, has put a dent in such unsubstantiated generalisation. The participants of the protests are quite educated, with about 91% of the participants having at least a bachelor's degree. Protesters used Facebook (97%), WhatsApp (92%), SMS (87%), Face-to-Face (82%), and Twitter (37%) to communicate about the protests. This shows that mobile social networking applications and digital media platforms were crucial in the organisation and mobilisation of the protests.

A binary logistic regression was conducted to evaluate the influence of different media platforms used to document protest participation on the probability that protesters would state joining on the first day of the protests. The model of the binary direct logistic regression contained thirteen independent variables (media used for protest documentation, including SMS, newspaper, television, radio, Face-to-Face, Facebook, YouTube, WhatsApp, 2go, Twitter, and Instagram; age; gender; and protest experience). The complete model having all the predictors was statistically significant, $[X^2 (19, N = 391) = 378.433, p < 0.001]$, implying that the model was able to differentiate between respondents who reported participating on the first day of the protests and those who joined on subsequent days. As indicated in Table 1 below, four of the independent variables made a unique statistically significant contribution to the model (Media used for documentation: WhatsApp, Facebook, Instagram and YouTube). The strongest predictor of reporting protest documentation and participating on the first day of the protest was WhatsApp, recording an odds ratio of 7.24. This indicates that those who used WhatsApp for protest documentation were 7.24 times more likely to report participating on the first day of the protest, controlling for all other factors in the model. Using Facebook for protest documentation is the second strongest predictor of reporting documenting participation and joining on the first day of the protest, with an odd ratio of 4.72. This reveals that protesters who used Facebook for protest documentation were 4.72 times more likely to report joining the protest on the first day.

Furthermore, the odd ratio of 3.16 for Instagram means that those who reported having used Instagram to document their participation during the 2020 #EndSARS protests were over 3.16 times more likely to report joining on the first day of the protests. Finally, using YouTube to document participation in the protest is the fourth strongest predictor of reporting protest participation on the first day of the protest, recording an odds ratio of 1.12. This means that protesters that reported using YouTube for protest documentation were 1.12 times more likely to report participating on the first day of the protest, controlling for all other factors in the model.

Table 1. Media used to document protest participation and joining on the first day of the protest.

Variables	B	S.E.	Wald	Exp(B)
Age	2.153	0.108	0.151	6.133
Prostest Experience	−8.422	28,411.433	0.008	0.000
Gender	0.024	0.123	0.132	1.208
SMS	−1.351	0.113	5.417	0.259
TV & Radio	−0.324	0.131	1.080	0.816
Face-to-Face	0.087	0.342	0.042	2.077
Facebook	0.377	0.196	7.082	4.72 *
YouTube	4.21	0.261	0.008	1.12 **
WhatsApp	0.221	0.580	3.797	7.24 *
2go	−0.429	0.728	0.348	4.23
Twitter	0.183	0.369	1.311	0.566
Instagram	0.028	0.267	0.019	3.16 **
Constant	169.092	365,326.611	0.000	1.151
Nagelkerke R^2	0.369			
−2 LL	382.164			
X^2 for Hosmer-Lemeshow	4.876 ($p = 0.784$)			
X^2	61.311 *			

N = 391. Logistic regression coefficient ** $p < 0.005$, * $p < 0.001$.

6. Discussion of Results for Study 1

Findings from this study revealed that protesters used mobile social networking applications (WhatsApp) and digital media platforms (Facebook, Instagram, YouTube, etc.) that they accessed via their phones to communicate about the protest. This result shows that the 2020 #EndSARS protests were conceived and organised via mobile-phone-enabled digital networks and applications. The importance of mobile-phone-enabled digital networks and applications is evident when one considers that 83% of the protesters reported to have accessed their internet from their mobile phones. This result is not too surprising as it has been uncovered by Bailard and Livingston (2014) that many countries in Africa leapfrogged from copper wire internet to mobile internet. This means that protesters coordinated the protests via mobile-phone-enabled digital networks and applications. This illuminates the vital role of mobile internet in protest organisation and sustenance.

To answer RQ1, the researcher conducted a logistic regression to evaluate the effect of several factors on the likelihood that protesters would report joining on the first day of the protests. Results show that protesters who used WhatsApp, Facebook, Instagram, and YouTube to document their participation, controlling for all other factors, were more likely to report participating on the first day of the protests. This means that protesters who used mobile social networking applications (WhatsApp) and social media platforms (Facebook, Instagram, and YouTube) to document their participation also reported joining on the first day of the protests. The fact that these digital media platforms were the media of choice for protest documentation is understandable. This is because it is inherent in these platforms to be used for documentation. This finding correlates with findings from other studies. For example, Tufekci and Wilson (2012) and Wilson and Dunn (2011) found that Facebook was the most used platform to document protest participation during the Arab Spring. Furthermore, in Nigeria, studies (Uwalaka 2020, 2022b; Uwalaka et al. 2018) have shown that Facebook and Eskimi during the 2012 Occupy Nigeria protests and WhatsApp and Facebook during the 2020 #EndSARS protests were the platforms used by protesters to document their participation. In particular, Uwalaka (2022b) revealed that Facebook was

used to receive protest documentation while WhatsApp was used to mainly create protest experiences. Findings from this study go one step further to show that those who used the above-mentioned platforms to document their participation were likely to participate on the first day of the protest.

While protesters' total degree of involvement in the protest was not measured, this study suggests that joining on the first day of a protest is a critical pointer. Conventional wisdom proposes that the riskiest kind of dissent is that which fails, and the most dangerous protest is one that is small. According to Tufekci and Wilson, "smaller protests have a higher likelihood of being effectively censored, isolated, or repressed in authoritarian regimes" (2012: 375). Robust participation on the first day is often crucial to initiate the larger cascade that eventually results in the protest's success. This study suggests that the resolve required to join on the first day of the protest demonstrates courage and a promise for change. This is why this study attempted to understand the impact of the media choices for protest documentation on the likelihood that respondents would report participating on the first day of the protest.

Results further indicate that mobile social networking applications and social media platforms were the most-used platforms to document protesters' participation. The production and sharing of videos and pictures of the protests enticed those who may not have wanted to join the protests but were convinced to participate due to the videos and photographs. This is because the more videos and images that show the progress of the protest and common concerns that the protesters are espousing, the more neutral people are tempted to join the protests. Such images show the success of the protests, thereby, giving cover to prospective protesters who may have been afraid to join the protests. Protest documentation also helps to reduce violence against protesters from the government and expose the government when they attempt to muzzle the protesters, as was the case during the 2020 #EndSARS protests in Nigeria.

Findings from this study validate and coagulate the importance of mobile social networking applications and social media platforms in protest mobilisation as well as documentation. This study shows that social media platforms and mobile social networking applications' utilitarian potential, such as in WhatsApp, endears the applications to protesters. The study illustrates that the closeness intrinsic in WhatsApp debate threads boosts trust-building and eradicates protest lethargy and misgivings from the users. This increased trust and companionship improves protesters' perception and responses to protest news and messages. This reflects the argument about how connections surge when users are active on the same social media page (Mercea 2022).

7. Research Questions and Method for Study 2

It is not good enough to simply study how mobile and digital networks are used to organise protest movements. It is also not good enough to only study a particular protest movement and move on without evaluating how the protesters have sustained the protest movement. In the case of the 2020 #EndSARS protest, the protesters have continued to organise memorial protests after the main protest. To understand the role that mobile internet and other digital networks play in organising the subsequent memorial protests, an additional study (Study 2) was conducted to extend and explicate the findings of Study 1.

8. Study 2 Attempts to Answer the Following Research Questions:

2. What are the themes that emerged from the tweets and replies from Twitter users in Nigeria during the 2022 #EndSARSMemorial2 protests?
3. What do the diameter, density, reciprocity, centrality, and modularity measures reveal about the conversation around the 2022 #EndSARSMemorial2 protest in Nigeria?

Study 2 adopted a qualitative content analysis technique and specifically utilised social media network analytics. Using Netlytic (https://netlytic.org/, access on 13 March 2023), the researcher analyzed tweets and retweets from the hashtag "#EndSARSMemorial2" to determine first the nature of conversations and crowds that used the hashtag, the number of

tweets and retweets, and the themes that emerged from the tweets on how digital activists in Nigeria showed their solidarity to their colleagues that died during the 2020 #EndSARS protests as a way of sustaining their protest movement.

According to Figure 1, this study analyzed 67,691 tweets and retweets from the hashtag #EndSARSMemorial2. These tweets were collected between 12 October 2022 and 26 October 2022. Tweets were scraped and some parts analysed using Netlytic. In this analysis, keywords, were highlighted. Also, network properties were identified, analysed and visualisations were observed and discussed. For the social network visualisation, the study used the Distributive Recursive Layout (DrL) which is a "forced-directed graph layout, effective for visualising large networks" (Pascual-Ferrá et al. 2022). In this layout, long edges are hidden to highlight clusters or communities of conversation. Clusters are groups of nodes that share a particular characteristic (Pascual-Ferrá et al. 2022). These communities appear on the graph as round or oval shapes.

After analyzing the tweets on Netlytic, the scraped tweets and replies were downloaded from Netlytic and stored as CVS. The downloaded and stored dataset was then exported into Leximancer 4.5 (https://www.leximancer.com/, access on 13 March 2023) and analysed. The aim here was to evaluate the themes that emerged from these tweets about the second anniversary of the killing of protesters at the Lekki tollgate in Lagos State, Nigeria during the 2020 #EndSARS protests in Nigeria. Concepts emerged based on their frequency of occurrence as the most prominent concept emerges as the theme of the cluster (Dambo et al. 2021). Leximancer allows the user to rename themes. This feature was used in this study to appropriately summarise the concepts within clusters. The software also gives the number of each response from the CVS sheet. Thus, to screen and improve the interpretive approach and to capture the implied tone of voice, the data was further exported into NVivo 12 Pro (Sotiriadou et al. 2014). The themes were then manually checked and refined with direct quotes extracted from the NVivo.

Figure 1. Word cloud and data collection dates.

9. Results for Study 2

Contents from Twitter (Tweets, replies and retweets) concerning the 2022 #EndSARSMemorial2 protests were examined to know key themes that arose from the tweets and retweets by online activists during the 2022 memorial protests, which were organised to pressure those in government and to remember those that died during the 2020 #EndSARS protests in Nigeria. Figure 2 highlights ten keywords that were prominent in the tweets and replies from netizens in Nigeria. The keyword that was most used in tweets was "#EndSARSMemorial2". This was followed by "#LekkiMassacre", "#EndSARS", "forget", "Lekkitollgate", "rest", "peace", etc. The "forget" keyword refers to how the protesters will "never forget" the sacrifices of those that were killed during the protests in 2020. It was more of a solidarity sentence to stand with those that were killed. Other keywords such as "rest" and "peace" were words that were decoupled by Netlytic. What the protesters were really saying was "rest in peace". These were mourning and tribute-paying words

that were meant for those who were killed in 2020. Those who were killed were constantly referred to as heroes (10,000). This shows how much digital activists in Nigeria respect and honour the murdered protesters.
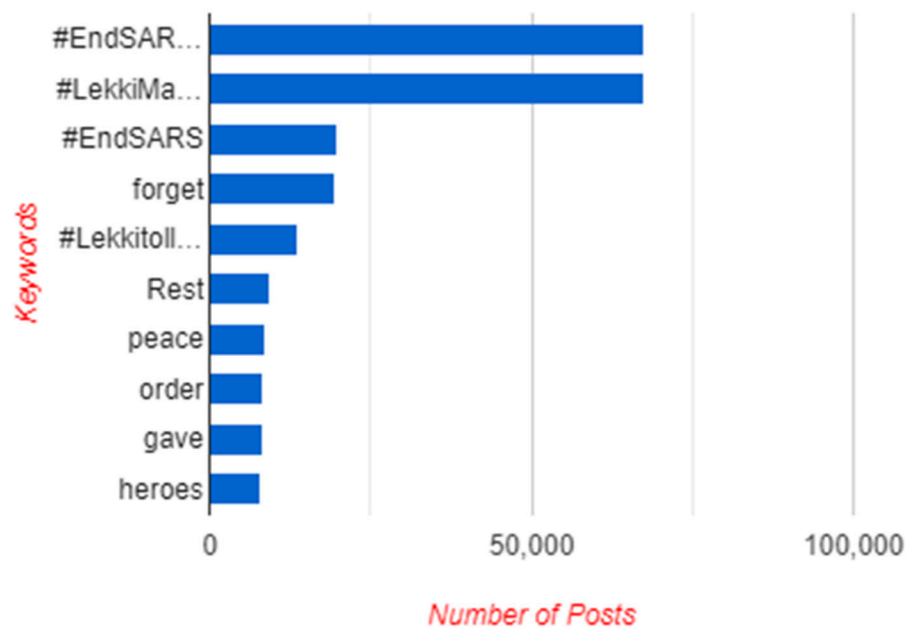

Figure 2. Keywords from tweets and retweets.

Table 2 indicates that the bulk of the tweets were filled with "anger" and "disgust", with about 38% of the tweets and retweets being related to this theme. For example, one Twitter user tweeted, "I still have nightmares. my encounter with the police two years after #EndSARS protests, is still a gory one". This tweet, like many others, reveals how angry the activist was against Nigeria's leadership for not doing enough to alleviate the pains of the people. In unmistakable terms, what this tweet and tweets of this nature demonstrate is that the government has not reformed the police enough to enable the security agency to competently carry out its duties. Furthermore, the tweets indicate that justice has not been served in the killing of protesters during the 2020 protests. This inaction and lack of movement on the part of the government frustrated many of the protesters online. This frustration surfaced in a sombre mood in the tweets. For example, 30% of the tweets and replies were sombre in nature. These tweets showed that the protesters were in anguish and agony. They were exasperated that their chants and continuous stand for justice and reform of the police have not broken through to those in authority as they would like. Their more sombre tweets reflect their horror and irked stance.

The theme of remembrance was evident in the tweets. More than 15% of the tweets were made in honour of those that were killed during the protests in 2020. A user retweeted a 2021 post that reads, "the bullets, the blood and tears. We will never forget". Another tweeted, "two years after, I can't believe that this happened in Nigeria. Never forget". Another activist retweeted a picture with the words, "who gave the order? We will not stop until we prevail". These tweets highlight the solidarity of the activists with their murdered friends. The tweets demonstrate the reverence that online activists have for their colleagues who were killed during the protests. These tweets illuminate the love and respect that the protesters have for the dead and show how the protesters have sustained the protests. Finally, it illustrates that online protesters have not forgotten the killing of their colleagues in Lagos, Nigeria.

Table 2. Broad themes from the 2022 tweets about the memorial protests.

Themes	Twitter (%)	Sample Tweets
Anger	25,723 (38)	• We say NO to police brutality. • One victim too many.
Sombre mood	20,307 (30)	• My heart goes out to the families that lost a loved one during the #EndSARS protest, they didn't deserve such treatment. • The leg of one of the victims of the shooting during #EndSARS two years ago has been cut off. May @OfficialAPCNg and their wickedness never happen to Nigeria and NIGERIANS again, Amen.
Remembrance	10,154 (15)	• In memory of our fallen heroes. Your sacrifice will never be in vain. • Today marks 2 years since the youth of our country came out en masse to protest police brutality and other ills in the society. We praise your resolve and sympathise with those who lost their loved ones.
Mourning	6769 (10)	• Two Years After #ENDSARS Still No Justice! 40 People Still in Custody. • R.I.P to our fallen heroes.
Imprecation	2030 (3)	• Are this people even learning? Are we still under slavery? Peaceful protest you shoot, killed, and arrested unarmed citizens, a peaceful memorial walk you are harassing and arresting your citizens? Are we being ruled by tyrant? • We saw evil face to face. We also saw courage, resilience, determination. The lies may travel a hundred times around the track, but the truth breasts the tape in the end. We remember. We will never forget. 20: 10: 2020.
Call to action	1692 (2.5)	• Gentle reminder. This happened. #EndSARS #endsarsmemorial2 We hope you all #VoteRight To prevent another one, or even a worst one. To the lives lost in the fight for our rights as citizens of Nigeria, may their souls continue to Rest in Peace. To honour them is to vote right come 2023. I have my PVC and I'm ready!!! Do you???
Others	1016 (1.5)	• I took this picture from the foot of the bridge at Alausa Express. • There's a thin line between sanity and obscene madness. But character and past actions speak louder than any manifesto ever could.
Total	67,691 (100)	

There were also themes of mourning, imprecation, and call to action, and others. Ten percent of the tweets and retweets related to the theme of mourning. For imprecation, about 3% of the tweets were cursing tweets. Protesters were invoking malediction and hexes at certain political leaders that they believed supported the killing of the protesters

during the 2020 protests. One activist tweeted, "look at their faces. These are our enemies" Also, about 2.5% of the tweets called Nigerian youths to action. Not to fight with guns but to fight politically in the voting booth. One protester tweeted, "only way we can make #EndSARSMemorial a real memorial is by getting our PVC and show these monsters how they messed up". Another protester tweeted, "to those who survived, get your PVC". These posts and tweets call on Nigerians to get their Permanent Voters Card (PVC) in order to vote out those that perpetrated the killing and to vote into office people with the best interest of the country at heart.

In Figure 3, the diameter is 11. In network properties, this means that the longest distance between two users in the network is 11. This is counted in the number nodes or unique Twitter user accounts that it takes to get from one participant to another. Density measures how close nodes are in the network. In this graph, the density = 0.8, reciprocity = 0.75, centralisation = 0.79, and modularity = 0.4329. Reciprocity measures two-way communication or how much nodes are talking to each other. Centralisation measures the extent to which a few nodes dominate the conversations. Each node has a centrality measure: indegree (based on times it has been mentioned or replied to) and outdegree (based on the number of times it has mentioned or replied to others). The sum of both is labelled "total degree". Modularity measures the fragmentation of networks into distinct communities. For all these measures, values range from 0 (lowest) to 1 (highest). Based on this, the modularity of the graph is less than 0.5. This suggests that the communities "overlap more; the network is more likely to consist of a great core group of nodes" (Pascual-Ferrá et al. 2022, p. 563). This graph shows that the conversation in this graph is centralised, has high reciprocity—meaning that participants were talking amongst themselves—and is a close-knit and homophilous network. This is a result of the low value of the diameter and the high density of the conversations. This means that the discussions that the digital activists were having were impactful as the majority of the participants were almost in agreement with what is being discussed.
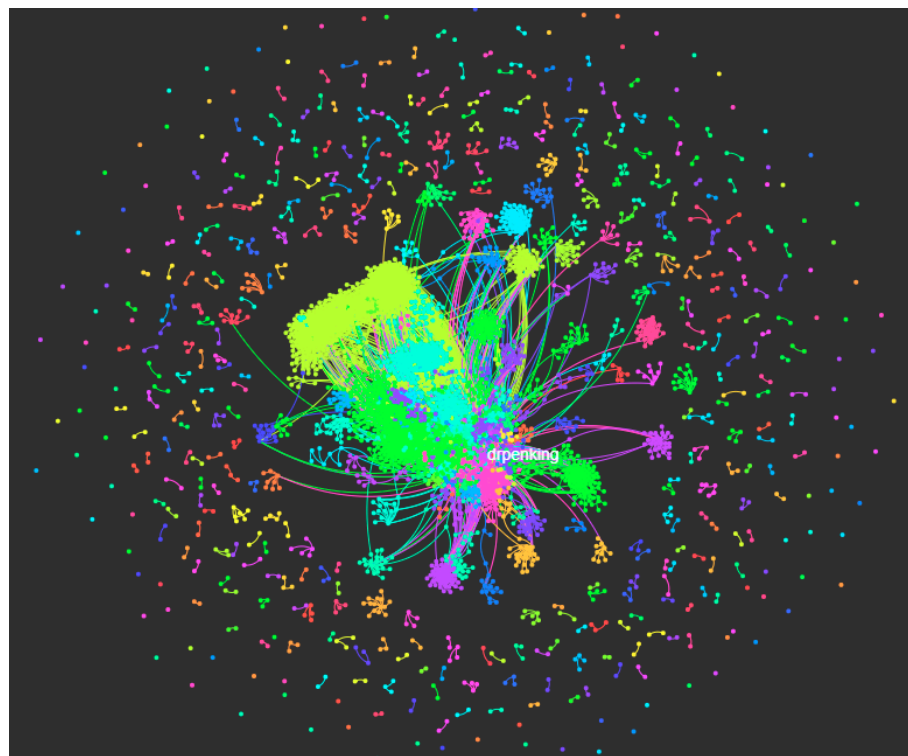
Figure 3. Network visualisation of tweets relating to #EndSARSMemorial2.

10. Discussion of Study 2

This study demonstrates that online activists on Twitter were in anguish and agony, leading to a sombre mood during the 2022 #EndSARSMemorial2 protests in Nigeria. The study further revealed that the protesters were angry, in a mourning mood, imprecating the leaders, and showing reverence to their fallen colleagues in a form of remembrance. This showed great solidarity spirit even at the points of arrests. The study reveals that protesters are already planning how they will punish the Nigerian leaders in the next national elections. They are doing this by calling on Nigerians to pick up their Permanent Voters Cards. This reflects other findings where protest participation increased political engagement and efficacy (Uwalaka 2021; Wasserman et al. 2018). Results from this study also extend the findings of Uwalaka (2021) and Uwalaka (2022b) and provide further insight into how mobile social networking applications and social media platforms serve as solidarity vehicles for protesters.

A broad look at and interrogation of the coordinated way digital activists in Nigeria have tried to sustain the protests and to press home their demands opens a new window into how scholars can begin to study and appreciate the empowering nature of digital networks, particularly in an uneven mainstream media access environment such as Nigeria. Digital activists have for long been criticised for embarking on what critics label "feel-good activism" or a lazy type of activism as it allegedly does not bring much change (Gladwell 2010; Morozov 2009, 2012, 2013). Scholars have also viewed connective action as a flash in the pan that lacks the robust levers of more traditional social movements. However, after studying the #EndSARS protests, it is clear that this connective action has sustained the disgust and passion of protesters while still fighting for the issues that led to the protests in the first place.

The network visualisation in Figure 3 shows a tight crowd, interconnected by issues that the online activists are deliberating. This shows that the group is neither polarised nor in an echo chamber. Instead, this illustrates that digital activists in Nigeria who support the #EndSARS movements are "switched on" and engage with one another in a substantive way. A closer look at what they are deliberating online shows topics ranging from police brutality to corruption in Nigeria. The valence of the tweets is critical and robust. The tweets and replies have kept the issues on a front burner. This insistence and continuous prodding have not only sustained the protests but also piled pressure on the government to both seek solutions to the grievances of the people and seek justice for those that were killed during the 2020 protests. The closeness and interconnectedness of the networks show that this was not a polarised crowd but a tight crowd where all participants were talking to one another and engaging in substantive topics: police brutality and corruption in Nigeria, justice for those killed, and reform of the police force (Adamic and Glance 2005). The valence of the tweets, critical-cum-robust engagement kept the issues on the front burner, as well as sustained the protests and put pressure on the government. The key hobs were tweets from celebrities (Uwalaka and Nwala 2022) and techno-enthusiasts (Uwalaka 2020).

11. Conclusions

Using a mixed method and multi-study approaches, this study investigates the impact of mobile social networking applications in the organisation of protest movements in Nigeria by examining how protesters documented their participation during the 2020 #EndSARS protests as well as the themes that emerged from digital activists' tweets during the 2022 #EndSARSMemorial2 protests in Nigeria. The first protest in 2020 led to the dissolution of SARS (BBC 2020a; Orjinmo 2020). However, that did not solve the "highhandedness" with which youths in Nigeria are targeted by law enforcement agencies. Protesters marched again in 2021 in remembrance of those that were killed in 2020 (Agbo 2021; Uwalaka 2021). This led to the release of the interim report, which noted that protesters were killed in 2020. The sustained efforts of the activists led to the signing into law of the Nigeria Start-Up Act and the release of those who were arrested in 2020 (Daka and Musa 2022; Ojigho and Arinze-Onyia 2022; Oloniniran 2022). This law is designed to help Nigerians who are

in computer-based professions to gainfully utilise their skills without being hounded by security operatives as internet fraud suspects. This Act is another success story of the sustained efforts of these activists in Nigeria.

In addition to the emergence of the themes, this study has also shown the networked relationship among digital activists' groups in Nigeria. Figure 3 shows a tight crowd where information dissemination revolves around a few visible participants who then are placed in opinion leadership positions. The nature of this network shows that the topic under discussion was important and interesting. This demonstrates that protesters used the organisational tools of mobile social networking applications to sustain protests and to continue to demand what was due to the people of Nigeria. The high centrality, high density of reciprocity, and low modularity lead to fast diffusion of information and promise to encourage widespread adoption of the communique proposed by the protesters in Nigeria.

The present study illustrates that forms of digital media enabled by mobile internet act as solidarity platforms where protesters plan, coordinate, and show their reverence to fallen friends during protest action. Results show that protesters in Nigeria communicated their anguish and agony, remembered their fallen friends, reviled and cursed the authorities, and called for action against the political class. This study further uncovered that mobile social networking applications and social media platforms help activists organise further protests and memorials as a way to not only sustain the protests but also to ensure that their demands are met. In the 2022 #EndSARSMemorial2 protests, activists continued to use the memorials to remind the government to hold those that killed protesters in 2020 accountable and give justice to their departed colleagues. Findings from the study show that the sustained protests are bearing fruits with the signing into law of the Nigeria Start-Up Act.

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