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Boko-Haram insurgency: A Conceptual framework for Information Sharing Strategies of Members of Vigilante in Adamawa State, North-east Nigeria.

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Abstract

The Study Examined the Information Sharing Strategies of Members of Vigilante in Adamawa state, North-East Nigeria. Embedded in the pragmatic philosophical assumptions and mixed methodology. The population of the study comprised of One Thousand Four Hundred Members (1400) drawn from Nineteen (19) local governments areas in the state. Krejcie and Morgan Table (1970) was used to draw (302) members as research sample while Walpole's (1982) formula for proportions was used in arriving at a sample for each stratum. A total of Three Hundred and Two (302) copies of questionnaires were administered, and Two Hundred and Forty (240) copies (79.47%) were returned. Four Commanders of the Vigilante were interviewed. The quantitative data collected was analyzed using descriptive statistics while the qualitative data was thematically analyzed. The outcome of the study revealed that Members were found to share Written, Verbal and Audio/Visual Information by forwarding, writing and Voicing through both official and unofficial Information Sharing channels often challenged by Poor GSM network, high cost of printing & distribution, high cost of radio air time, poor organizational Information Sharing protocol, Poor Information Literacy Skills as well as inadequate Government support. It is recommended that Members should establish an effective organizational Information Sharing protocol, acquire an effective Information Sharing infrastructure: Functional organizational website/portal, effective Internet access, customized ICT's such as phones, iPads, notebook computers, and walkie talkie radio. Activate social media platforms/handles as well as establish an internal collaborative information sharing framework with sister organizations.

Keywords: Framework, Information Sharing, Information Sharing Strategies, Vigilante,

Background

Arguably, one of the first studies on Information Behavior to draw attention to the role of Information Sharing or Information Exchange, as he coined it was perhaps Wilson in his base model of information behaviour (1981). Subsequently, a lot of attention have been given to the field by researchers such as Millen and Dray (2000), Widén-Wulff and Ginman (2004), Hall and widen (2010), Thursby, et al (2009), Pilerot (2012) Veinot (2009), Sonnenwald (2006) and Wilson T.D (2010) who have all explored aspects of Information Sharing in a variety of contexts. However, HIB models developed so far mostly focuses on Information Seeking Behaviour causing continued dearth of frameworks and models specifically conceptualizing Information Sharing environments (Wilson 2010). In all these frameworks we cannot escape from complexities. First, complexities related to choices of terms/words such as Information Sharing/Information Exchange, Information Use/Information Evaluation, Information Seeking/Information Search, Information Acquisition etc. Secondly, complexities related to attention given to constructs in information behaviour over Information Sharing.

This study is an attempt to focus on the Information Sharing Strategies of Members of Vigilante from the pragmatic world view drawing from Wilson's 1996 HIB Model, and conceptualizing their Information Sharing Strategies. The study departs from most studies in extant literature where there is rare application of pragmatic research paradigm in investigating research problems. Therefore the study may have a methodological influence on future studies in similar group or geographical setting by spurring interest in the use of mixed methodology in Information Sharing research.

Statement of the Problem

Most HIB models developed so far focuses on Information seeking behaviour and consider Information sharing as an element in Information seeking, causing continued dearth of frameworks and models conceptualizing Information Sharing of groups such as Vigilante (Wilson 2010).

Similarly, despite the echo from Wilson (2010), on the importance of studying the Information behavior of different groups in order to understand such behaviors, no attempt is made so far to study the Information Sharing Strategies of Members of the group (Vigilante) against the Boko-Haram in Adamawa State, Nigeria. No empirical work is available on the challenges they face in their field of operation in regard to Information Sharing Strategies. This is despite the role Members of Vigilante play in the on-going counter insurgency operations against the Boko-Haram and other criminal elements in Adamawa State, North-east Nigeria, Hence, the need to focus on these questions is the crux of the matter and informed the need for this research.

Research Objectives

The objectives of the study are to:-

1. Discover the Information Members of Vigilante in Adamawa State Share.
2. Examine the Information Sharing Strategies of Members of Vigilante in Adamawa State.
3. Identify the challenges associated with Information Sharing Strategies of Members of Vigilante in Adamawa state.

Literature Review

Information Sharing Strategy

Information Science Scholars offer various definitions of the concept of Information sharing. The variations can be related to differences regarding theoretical perspectives and to how authors connect the concept to their empirical materials. The most favored conceptualization of Information Sharing activities frequently coexists with wordings such as *Information exchange*, and sometimes with *Information transfer* or *Information flow*. It seems that the conceptualizations and how comprehensive they are meant to be, depend on what aspect (s) of Information Sharing the researcher is investigating (Wilson, T.D., 2010).

Therefore, 'Information Sharing embeds the notion of 'willingness to share.' And that distinguishes Information Sharing from Information Reporting. Information Sharing is a voluntary act of making Information available to others where the sharer could pass information on, but does not have to (Sumner 2015).

Information Sharing appears as a means to reach collective understanding regarding issues that stretches beyond the immediate Information practices and as a contributor to the enactment of organizational discipline (Pilerot Ola 2016). In any endeavor, sharing unique' information builds the available knowledge stock, directly improving the team's task outcomes, creating openness which relates to performance. Discussing information with greater breadth may permit more in-depth information processing, thus enhancing the quality of team decisions (DeChurch et al 2009).

The law enforcement agencies, like all organizations, operate according to specific goals and establish relevant protocols to accomplish these objectives. Hence, Information Sharing is ever more critical and routinized in the daily operation of law enforcement agencies. According to McCord (2013), one of the primary factors related to Information Sharing in law enforcement context is practice'. Keeping the peace requires personnel to move about and respond to criminal activity where it occurs and share the information.

Another primary factor related to Information Sharing is the mutual willingness of parties engaged. According to Pileot (2013), a serene atmosphere for Information Sharing seems more

likely to be a mutual relationship characterized by the willingness of parties to engage in a discourse on the information at hand.

However, contrary to that view is that of Almehmadi (2014), who characterize Information Sharing as a one-way process that include; responding to a request and proactive Information providing, further divided into **one-to-one** and **one-to-many**. One-to-one proactive providing of Information represented situations where Information was shared between two persons and where Information is given to another person who had not necessarily asked for such information.

In security related context, the use of interagency Information Sharing theories allow administrators to use frameworks to evaluate the risks associated with information sharing. It is therefore critical to understand the strategies of Information Sharing being employed in the course of providing security dealing regularly with Information through initial contact with Informants, through interviews, other personalized data sources (Manning 1992).

Another strategy of Information Sharing is Information exchange. That is, interactive or a two-way process and was further divided into information exchange in physical settings and information exchange in online settings. That according to Sumner (2015), represents situations where information exchange took place in physical settings: regular and incidental social interaction. Another strategy of Information Sharing is related to anticipating relevance from others as well as voluntary gestures towards others. According to Pileot (2013), eliciting others' interest, informing others, implicit motivations for sharing information, Saving time and effort, raising awareness, sharing common interest, Sharing one's story or experience are all voluntary gestures of information sharing strategies.

In a study by Almehmadi (2014), a range of strategies for sharing Information were identified. These include: oral-based strategies which included: face-to-face talking; telephoning, conferencing, and written-based strategies which included forwarding strategies including forwarding emails, SMS, and social media instant messages; and writing strategies including writing emails, SMS, online forum posts, and social media instant messages.

According to Du (2012), Information Sharing is an essential activity in all collaborative work. When working together, members must continually provide information to others and to some degree mutually understand and use information others provide. Du, revealed strategies of proactively distributing information to people from other units in the organization (O-D-P) and to colleagues in the team (C-D-P), discussing and consulting information with senior management upon request (SM-D & C-UR), and discussing & consulting information with people from other units in the organization proactively (O-D&C-P) were relatively common occurrences.

Therefore in any setting not only law enforcement, there is a need for free flow of information and effective Information Sharing Strategy. It was recognized by Best (2011), that there was a need to establish an organizational structure to ensure that Information Sharing was not just legally possible but institutionalized in routine agency practice.

Similarly, in vigilantism, various strategies are being employed in order to establish an effective Information Sharing activity. According to Abhishek & Ankita (2016), in east Delhi's NirmanVihar area, Members of local vigilante have been carrying out a "cow protection drive" Mongia (the Head of the vigilante group), says his informers can be just about anyone — the helmet seller on the highway, even the local ice-cream vendor as well can easily get and share that information through Whatsapp groups," he says. Three years ago, the group began uploading videos of its raids on YouTube.

On the application of Social media, Abhishek & Ankita (2016), further said 'sitting here, we got pictures of the Dadri cow slaughter". While they use technology as a way to connect and share information, they employ old fashioned methods too – meetings, posters, taking pictures, pestering to the point of harassment, anything to send the message. The vigilante group's Facebook page acted as an authoritative source of information, substituting for the government and traditional media on multiple occasions. In India over two hundred protection Vigilante groups working in the Delhi NCR region are on the social media sharing text & images, anyone who see any kind of suspicious activity raises an alarm and the others gather.

Similarly, residents and business owners in Michoacan and neighboring Guerrero Mexico, banded together to form self-defense Vigilante groups, or "auto defenses," to take on the notoriously brutal and powerful Knights Templar cartel. They said they were driven to action because they were fed up with the murders, rapes and extortion that were part of everyday life for areas under the control of cartels. They do posts on their Facebook page usually making requests to the public for some sort of action, such as attending a demonstration or reporting on a robbery. The page also encouraged community engagement by asking the public to help identify suspects in crimes. Popular posts also recommended safety measures and warned people in real time to avoid certain areas where shootouts were taking place (Trevor Stack 2014).

They would use their own coded vocabulary and set of acronyms to talk about events," said Monroy-Hernandez. "For example, instead of writing *balacera,* which means shootout, they would write SDR an acronym for *situación de riesgo* or risk situation. Social media is increasingly common with the younger generation of Vigilante members in Mexico; they use platforms such as Instagram and Twitter to boast their operations (Trevor Stack 2014).

There is no empirical study conducted on the Information Sharing Strategy of members of vigilante group in Nigeria. Although the literature review indicated that information sharing has been studied in different context both as a concept and as an activity within the field of information behaviour.

Challenges to Information Sharing

According to Barua et al., (2007), several factors have been shown to affect Information Sharing most of which are related to use of organizational systems, the interest of organizations in knowledge sharing, relationships between organization members and how information and knowledge are treated as assets. Moreover, organizational structure and individual positions within organizations may pose challenges to Information Sharing because lack of equity among organizational members makes it difficult for exchange or sharing of information to occur. McCord & kopak (2013), asserted that some of the local challenges to Information Sharing may include effectively collaborating with surrounding sister agencies with jurisdictional overlap as well as the lack of rewards or incentives for cooperation and shared investigations.

According to Barua et al (2007), often the skills needed and the medium used in sharing information may also be a source of problem than the willingness to share information among members in an organization. For instance, people may be willing to share information, but the effort of using technology to do so may be too great. Olivia (2005) identified fear as a challenge to Information sharing, that individuals are likely to withhold information from others if they perceive that sharing such information will lead to their loss of power, position of influence, or promotion. Similarly, other invisible challenges such as security, politics, regulations, and management decisions cripple the seemingly simple act of sharing information in organizations.

Another challenge to Information Sharing is poor organizational culture because there are two levels of knowledge within an organization: knowledge that resides within the individuals in the organization and knowledge that exists at the collective level, independent of individuals. Knowledge that resides at the collective level is easily shared among and between organization members. Information at the individual level is more difficult to access, especially in organizations with rigid social structures. However, organizations that support both formal and informal communication systems encourage information sharing among their members. The opposite is true for organizations that are traditional and has silo-like structures (Prusak & Borgatti, 2001).

According to Barua et al., (2007), Individual difference in levels of knowledge is another challenge to Information Sharing among members of an organization because information providers with higher levels of expertise are more likely to believe fewer others would provide the right information. At the same time, information seekers with less expertise are likely to believe that the information provided will solve their problems.

Also related to that is having more information to share than others, more knowledgeable people may feel less threatened by sharing since their knowledge supply is not greatly diminished by each act of sharing. Demographic factors such as diversity can also be challenges to information sharing (Drake et al., 2004).

Sonnenwald (2006), revealed the following four challenges to Information Sharing: (i) recognizing different meanings of shared symbols (ii) sharing implications of information (iii) interpreting emotions and (iv)re-establishing trust. These challenges to Information Sharing are influenced by inter-organizational, inter-cultural and inter-disciplinary differences which emerged in both face-to-face and remote communications.

People talk about a risk adverse culture and fear of the consequences of improperly sharing information, inability to appropriately assess and manage risk, understand the rules around sharing information, get clear direction and obtain training as challenges to information sharing. Others include access, timeliness and lack of compatible information technology platforms and standards around collecting, categorizing, storing and distributing information (Alberta 2012).

From the literature found, challenges associated with vigilante information use and sharing strategies has not received attention, although the topic has been extensively treated in different fields such as Psychology, Communications, Computer science and other fields. This research will therefore attempt to study the information sharing strategies of members of Vigilante.

Modeling Framework

The following conceptual framework is the researcher's position on the research problem and findings which guided the researcher in showing the relationships between the different construct investigated. The conceptual framework is also a reference point for choice of research instrument, methodology and data analysis in studying the Information Sharing Strategies of Members of Vigilante.

Wilsons (1999), Information Behavior Model is adopted with some modifications and influence by Chatman **(1996)** Information Poverty theory. Wilson theory was employed due to its integrative approach of incorporating the relevant constructs. Wilson (1999), points out that the scope of the model is much greater than merely the concept of Information Needs and it is intended to cover all vital elements or variables involved in the Information Behaviour process such as Information Use & Information Sharing. The model does not only specify sequences of events, but it goes further to depict a whole sequence of human behaviour by referring to relevant variables.

Wilson (1999), stipulates that models can be depicted conceptually or theoretically and it allows the general objectives of the study to be accomplished and the research questions to be answered successfully. The following conceptual framework illustrates the relationships between the constructs by describing the relationships between Information Sharing Strategies as well as challenges to Information Sharing Strategies of Members of Vigilante in Adamawa state North-east, Nigeria.
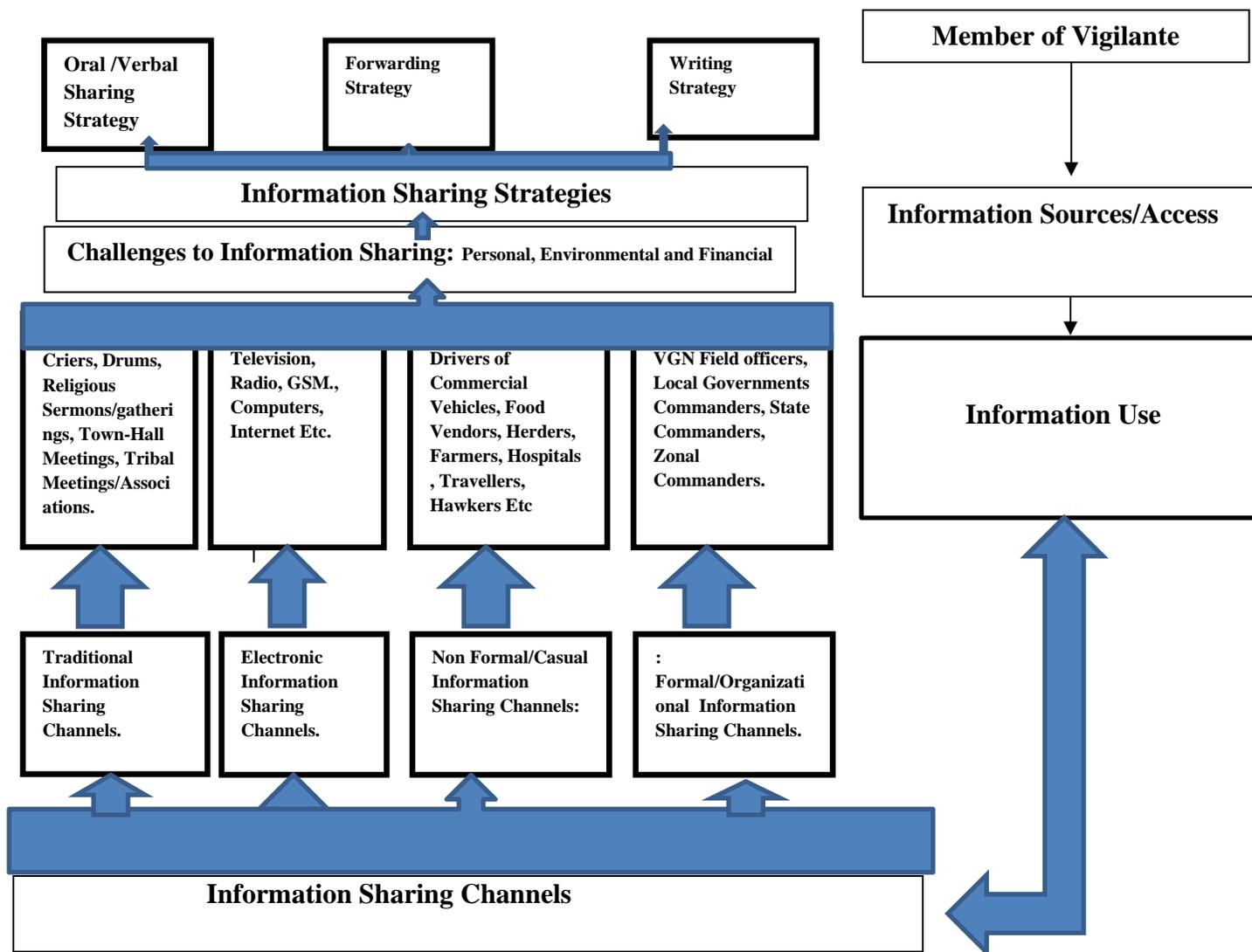
Figure 1: Vigilante Information Sharing Model.

The study identified "Information Sharing" taking place only after overcoming personal and organizational challenges of access to Information and Information Use. Processes from Information evaluation/assessment up to actual application could be categorized as Information Use. Information Sharing is regarded as an activity that draws attention to the element of gesture or a call of duty in the context of members of Vigilante or reciprocity in other settings of human interaction. The idea of reciprocity may include sharing information that is recognized as being of potential relevance to the need of other person (s) and consequently may be transferred to such a person (s). In this context, Information Sharing Strategy involves the intentional action of distributing Information to others. Therefore, 'Information Sharing here embeds the notion of both willingness to share and a duty to Share.

The Framework also identifies various channels of sharing Information to Include: ***Traditional Information Sharing channels*** such as Palaces, Town Criers, Drums, Religious Sermons/gatherings, Town-Hall Meetings, and Tribal Meetings/Associations.

Electronic Information Sharing Channels such as the Television, Radio, GSM., Computers and the Internet.

Casual/Non-formal Information Sharing Channels such as Drivers of Commercial Vehicles, Food Vendors, Herders, Farmers, Hospitals, Travellers, Hawkers and Forest Rangers.

Formal/Organizational Information Sharing Channels such as the VGN Field officers, Local Governments Commanders, State Commanders, Zonal Commanders and other sister security organizations.

The Framework identifies challenges to Information Sharing to emanate from Personal, Financial and Environmental obstacles. Several environmental factors have been shown to affect Information Sharing most of which are related to organizational Information Sharing protocols and the interest of the organization in knowledge sharing. Personal Information Sharing skills may also be a source of problems rather than the established protocols. For instance, people may be willing to share information, but the information literacy skills of using technology to do so may be lacking or limited. Fear can also be a challenge to Information Sharing. Individuals are likely to withhold information from others if they perceive that sharing such information will lead to their loss of power, position of influence, or promotion. Challenges such as personal security, politics, regulations, management decisions as well as lack of rewards or incentives may impede personal Information Sharing activity. Funding in information infrastructure could also be a task so profound and challenging.

The Framework also identifies that Information Sharing Strategies employed by members to include: *Information Sharing by forwarding*, *Information Sharing by writing and Information Sharing Verbatim/oral.*

Information Sharing by forwarding*: this could include forwarding print& non-print text such as official MEMO, posters, leaflets, fliers as well as newspapers. Forwarding Audio/ video materials on electronic platforms such as Tv, Radio, as well as the Internet/ICTs.*

Information Sharing by Writing*: involves initiating the actual writing process. This entails the both forms of writing: electronic & non electronic.*

Oral/Verbal Information Sharing*: this is Information Shared Verbatim. It involves inter/intra personal, inter/intra agency/organisational verbal Information Sharing activities.*

Research Methodology

A pragmatic philosophical approach and mixed research methodology was adopted. The pragmatic approach presents itself as a practical solution to the dichotomies and tensions prevailing in the scientific community particularly in the social sciences between constructivist and post-positivist paradigms (Mertens, 2010). The choice of mixed methodology is because according to Creswell and Plano Clark (2011), it enables a greater degree of understanding to be formulated than if a single approach were adapted to specific studies.

Population, Sample Size and Sampling Technique

The target population for this study is all registered members of Vigilante group in Adamawa State totaling one thousand four hundred (1400) members. The table for determining sample size for a given population by Krejcie and Morgan (1970) is used to determine (302) members as sample for the research.

Stratified random sampling technique was used in collecting the quantitative data whereas purposive sampling was used for collecting the qualitative data; in collecting the quantitative data, members of the population were first divided into strata and then were randomly selected to form the sample. It involved the division of the population into smaller groups known as strata. In this case, each local government is considered a stratum. A random sample from each stratum is taken of a number proportionate to the stratum's sample size. In arriving at the sample for each stratum, Walpole's (1982) formula for proportions is used to obtain a sample for each stratum used in the study.

The instruments for data collection were a self-developed questionnaire and an interview schedule.. The instruments consisted of a series of questions for the purpose of gathering information from respondents and participants. For the qualitative data, the researchers used interview schedule to elicit information from the commanders. Therefore, the qualitative aspect of the study was facilitated by use of an interview schedule which covered the information sharing strategies and challenges to information sharing of members of vigilante.

Data analysis

Table 1.1   Demographic Data

Educational Background	Frequency	%
Adult Literacy Certificate	30	12.5
Primary school certificate	36	15.0
Secondary school certificate	106	44.2
Diploma	27	11.3
Degree/HND	15	6.3
Others specify	6	2.5
None	20	8.3
Total	240	100.0
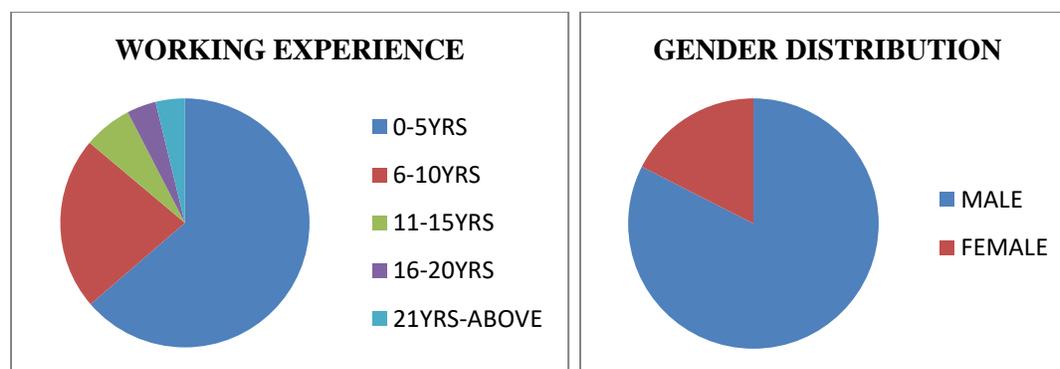
The analysis of the result presented in Table 1.1 showed that 82.5% of the respondents were Male while Female members constitute 17.5%. This shows that men were more engaged in vigilantism in Adamawa state and might be related to the nature of the job and other socio-cultural issues that consider security related jobs as purely 'masculine'. Moreover, because the study was conducted amid the Boko-Haram insurgency, low participation of women in Vigilante operation might also be attributed to other roles women had to play during insurgency such as attending to the sick and taking care of the orphaned as well as certain cultural practices which excludes women from using certain protective charms as well as issues of sexual violence against women during security operations.

On working experience, members with 0-5 years working experience constituted 63.8% while 6-10 years constituted 22.5% of the respondents, 11-15 years 6.3%, 16-20 years 3.8% while 21 years and above constitutes 3.8%.This has indicated the influx of people into vigilantism from 2013 to 2018 which can be attributed to both security challenges in communities at the height of the insurgency as well as the bill on establishing the vigilante group of Nigeria that has passed second reading at the national assembly. Similarly, as revealed on the age groups, the working experiences indicated that majority of Members were young with less working experience mostly 18-29 years constituting 51.3%, followed by another active age group of 30-39 constituting 45%

of the respondents. Ages group 40-49 and 50-59 constituted only 1.2% and 2.5% respectively. This shows that majority of members were young people that came out to defend their various communities in Adamawa state as a result of the deterioration in security situation in the state in 2014. On the educational background of respondents, majority of them were literate as 44.2% had secondary school certificates 15% had primary school leaving certificate, 12.5% had adult literacy certificate, 11.3% had Diploma while 6.3% had Degree/HND. This therefore contradicted the notion that Vigilantism is mostly practiced by the jobless and illiterate people as the result here indicated that majority of respondents had formal education. This might be related to the job requirement set out by the state command that a minimum of primary school certificate must be obtained by a one to be registered as a member. Presently, the State commander is a Phd holder.

1.2 **Information Shared by Members of Vigilante in Adamawa State**

S/N	Item statement	Responses	Frq.	%	Mean	SD
1	Information on security	SA/A	132	70	42.6	35.65
		U	36	15		
		SD/D	36	15		
2	Information on Sports	SA/A	63	26.3	43.3	23.32
		U	90	37.5		
		SD/D	87	36.8		
3	Information on Personal Development	SA/A	168	70	36.2	37.76
		U	30	12.5		
		SD/D	42	17.5		
4	Information on Health	SA/A	114	47.5	47.0	9.1
		U	45	18.8		
		SD/D	81	34.0		
5	Information on Politics	SA/A	154	64	41.0	28.26
		U	20	8.3		
		SD/D	66	27.5		
6	Information Welfare/allowance	SA/A	169	70.5	37.0	38.7

		U	17	7.1	
		SD/D	54	22.5	
7	Information on Family	SA/A	165	68.8	36.0	32.81
		U	30	12.5	
		SD/D	45	18.8	

Overall mean		40.4	

Key: 0.5 to 24.9 = Low Extent, 25.0 to 34.9 = Great Extent and 35.0 to 44.9 = Very Great Extent

Key: **SA**= Strongly Agreed **A**= Agreed **U**= Undecided **SD**= Strongly Disagreed **D**= Disagreed.

Source: Field Survey 2018

The result in table 1.2 on the types of information respondents share, the result revealed that they share information on security as 47.5% strongly agreed, 22.5% agreed. 15% are undecided, 8.8% strongly disagreed and 6.3% disagreed. On information related to sports, as revealed in table 1.2 where respondents seemed not to need and use such information. Similarly, only 12.5% strongly agreed that they do share, 13.8% agreed, while 37.5% undecided, 12.5% strongly disagreed and 23.8% disagreed. Similarly, on personal development 50% strongly agreed that they share such information, 20% agreed 12.5% disagreed. Similarly, respondents seemed not to share health related information as only 25% agreed, while 25% undecided, 15% strongly disagreed and 12.5 disagreed Furthermore, on information related to politics, 41.7% of respondents strongly agreed, 22.5% agreed, 8.3% undecided, 14% strongly disagreed 12.5 disagreed. Also, respondents indicated sharing information on family as 43.8% strongly agreed that they share such information 25% agreed, 12.5% undecided, 15% strongly disagreed and 3.8% disagreed. The overall mean 40.4 with a standard deviation ranging from 9.1 to 37.7 on a benchmark of three.

Qualitative Findings on Information Sharing Strategies

Zonal commandants of vigilante group of Nigeria from the three senatorial districts of Adamawa state were asked on the information sharing strategies they employ and the findings are as follows:

P1, RQ2: *According to the participant (1) the strategies he employ in information sharing among members include by verbally talking to the receiver directly or on phone, by writing notes or MEMO, by forwarding received information. However, when sharing information to the general public he usually uses the community leader, leaflets, posters, TV or the Radio. Other channels of sharing information include: Colleagues, Security agents, Friends, Official meetings, Workshops/seminars, Personal conversations, Drivers of commercial vehicles.*

P2. RQ2: *According to the participant (2) the strategies he employ in information sharing among members include writing text messages, whattsapp audio messages and telephone calls. To the general public, the participant said he shares information on radio, fliers and with community leaders. Information is usually shared to colleagues, security agents, radio, internet, community leaders, hawkers/traders, neighbors, clubs/associations, mosque/churches, friends, informers, official meetings, workshops/seminars, personal conversations, drivers of commercial vehicles.*

P3, RQ2: *According to participant (3) the strategies he employs in sharing information among members is by sharing on their whattsapp social media platform as well as writing notes, phone calls and forwarding received messages. Similarly, when sharing information to the general public he also uses the facebook account, fliers, community leader's palace as well as the radio.*

The findings of the study indicate that information sharing strategies employed by members include orally sharing information by face-to-face communication, telephoning. By using social media platforms such as Facebook, whattsapp, SMS, hand written MEMO, radio as well as community leader's palaces. This outcome corroborates Abhishek and Ankita (2016) who found that while vigilante cow slaughter use technology as a way to share information, they employ old-fashioned methods too – meetings, posters, taking pictures, pestering to the point of harassment, anything to send the message. The vigilante group's Facebook page acted as an authoritative strategy of sharing information, that is why in India over two hundred Vigilante groups working in the Delhi NCR region are on the social media sharing text & images, anyone who see any kind of suspicious activity raises an alarm and the others gather.   Similarly, the finding corroborates Trevor Stack (2014) who also found that residents and business owners in Michoacan and neighboring Guerrero Mexico, banded together to form self-defense Vigilante groups and share information on their Facebook page usually making requests to the public for some sort of action, such as attending a demonstration or reporting on a robbery. The page also encouraged community engagement by asking the public to help identify suspects in crimes. Popular posts also recommended safety measures and warned people in real time to avoid certain areas where shootouts were taking place.

4.6   Qualitative Findings on Challenges to Information Sharing

P1. RQ3: *According to participant (1) the challenges he faces in sharing information among member are: poor GSM network in remote areas, low availability of social media supporting GSM devices, paucity of funds to buy office stationeries as well as lack of electricity in remote communities. On challenges faced in sharing information to the general public, the participant identified cost of paying for public announcements on the radio, risky nature of the information, low use of social media in remote communities, cost of printing fliers, posters and leaflets.*

P2. RQ3: *According to participant (2) the challenges he faces in sharing information among members include the cost of airtime, poor internet connectivity, and cost of stationeries. When*

sharing to the general public, the participant said he is challenged with the cost of printing posters, fliers, leaflets as well as public announcements.

P3. RQ3: *According to participant (3) the challenges he faces when sharing information include total lack of Gsm network in remote communities and the risk of letting out sensitive information in written letters. When sharing information to the public the participant said he is faced with the cost of reaching out to remote communities since in some communities there is no network to enable the use of Gsm or social media platform and the cost of printing leaflets or paying for public announcements on radio is exorbitant.*

The outcome of the study revealed challenges to information sharing to include: Poor internet access, poor Gsm network, cost of producing different formats of information in order to enable sharing (repackaging), low use of social media in remote communities as well as cost of paying for public announcement on radio.

On information sharing strategies, the outcome of the research revealed that majority of members of vigilante share information on security, welfare and information on family related issues. However, the study revealed that members don't share information on politics, health and sports. The strategies employed in sharing information by members include:

Oral-based strategy: face-to-face talking, telephoning and radio announcement. Forwarding stategy: Including forwarding emails, codes, SMS, and social media instant messages. Writing strategy: Emails, codes, SMS, online forum posts, and social media instant messages.

This buttressed members often utilize any means available for them to share information including use of oral/traditional means of inter personal communication as well as by employing modern ICT devices such as the Telephone and the Internet. Members were found to share information through several partners such as their colleagues, security agents, radio, internet, community leaders, hawkers/traders, neighbours, clubs/associations, mosque/churches, friends, informers, official meetings, workshops/seminars, personal conversations, drivers of commercial vehicles. This outcome is similar to that of Almehmadi (2014), who found that the strategies employed in sharing Information: oral-based strategies such as face-to-face talking; telephoning, conferencing, and written-based strategies which included forwarding strategies such as forwarding emails, SMS, and social media instant messages; and writing strategies including writing emails, SMS, online forum posts, and social media instant messages. Similar finding is that of Abhishek & Ankita (2016) who found that in India over two hundred vigilante groups that work in the Delhi NCR region are on the social media sharing text & images on a network.

Challenges to information sharing include: Poor Gsm network in remote communities, cost of repackaging information that enables easy sharing in certain communities, low use of social media in remote communities, risky nature of the information, cost of sponsoring public announcements on the radio as well as cost of office stationeries and producing leaflets and fliers. The outcome of the research in relation to challenges to information sharing strategies

corroborated the findings of a research by Prusak and Burgatti (2001) and Barua et al (2007) as well as Olivia (2005) that individuals are also likely to withhold information from others if they perceive that sharing such information will lead to their loss of power, position of influence, or promotion as well as invisible challenges such as security issues, cost of sharing the information.

Implications

This study has achieved its aim of Examining and Conceptualizing the Information Sharing Strategies of members of vigilante in Adamawa state. It has shown the importance of gaining an understanding of the information behaviour of members of vigilante and the dynamism of their information behaviour in relation to Information Sharing Strategies.

This study departs from studies in extant literature on Information Behavior where there is rare application of pragmatic research paradigm in investigating research problems. Philosophically, it is grounded in the pragmatic world view. Similarly, the study adopted mixed research methodology that allows for the use of triangulation of qualitative and quantitative method to gain a deeper understanding of the different perspectives of the research problem being investigated and to allow for conceptualization of the framework. No study is conducted on the subject from these philosophical and methodological points of view. Moreover, studies found in extant literature did not focus on all the variables and constructs at once. This study has conceptualized a framework, combined the three variables and studied them.

Lastly, previous studies mostly concentrated on the developed world with little or no attention given to African countries, Nigeria or Adamawa state. This study has taken care of that gap and may serve as a foundational study on the subject in Africa, Nigeria and Adamawa state.

For the smooth operations of members of vigilante, Information Service Providers need to know the context in which members of vigilante operate so that their Information Service Provision can be enhanced. NGO's and governments should work together to improve Information Sharing Strategies of members in Adamawa State by removing all challenges as follows.

Members should be provided customized ICT's such as phones, iPad, notebooks and other devices which support the use of social media applications as well as an actively functional website. This will facilitate Collaborative Information Sharing Activities among members of vigilante.

Governments at all tiers as well as private organisations should increase funding to the group and provide free internet access to members and give members free air time on the Radio thereby enhancing Information Sharing Capabilities of members in their respective communities. The vigilante group in Adamawa state should establish and institutionalised a more effective organizational Information Sharing Protocol in their routine operations. Ward/Unit whatssap groups, walkie-talkie radio, websites, bulk SMS., routine engagements in local radio programs are some of the areas to be exploited.

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