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Managing Health Records in the Context of Service Delivery: Issues and Challenges

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Abstract: Records are considered as the memory of health organizations. Therefore, their management constitutes important component towards efficient delivery of service to clients. It is through records management that accurate data are made available for patients' care and administrative purposes. In spite of the roles of records in health organizations, the way they are managed in various health facilities is of serious concern. Accordingly, poor records management leads to the failure of health facilities to deliver efficient services. Health records in this article include detailed documented patient's information, which cover health problem, diagnosis and treatment over a period. This article therefore examines the issues and challenges associated with records management in the delivery of services to clients in health setting. In terms of methodology, the article employs secondary source of data/information where scholarly publications were reviewed to illustrate the subject matter. The article reveals that health records, if properly managed could perform important functions. These include provision of detail information about the patients' health conditions; serve as platform for detecting and neutralizing the incidence of medical errors and useful for health facilities in response to complaints from the clients about health services, among others. The article also discussed the challenges associated with records management in health sector. They include poor record keeping, inadequate/poor storage facility and ineffective medical records management policy. The article concludes that priority should be given to efficient records management to enhance appropriate service delivery in healthcare organizations.

Key Words: Records, Healthcare, Facilities, Service Delivery and Litigation

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Introduction

The main goal of health institutions is the provision of efficient services that enhance health and prolong life of patients. Achieving this goal therefore requires that there is presence of reliable and accurate health records. Records are used to hold health institutions accountable for the service delivery. Mogli (2009) considered health records as documents used by health institutions and caregivers to record patient history, illness, illness narratives and treatment. Luthuli and Kalusopa (2017: 2) conceived health records as written account of patients' examination and treatment that include the patients' medical history, illness narratives and complaints; the physician's findings; and the results of diagnostic tests, procedures, medications and therapeutic procedures. Connectedly, the World Health Organization (2006a) classified health records to include doctors' clinical notes; recording of discussion with patient /next of kin as regards disease; referral notes to other specialist(s) for consultation; laboratory notes; imaging reports; clinical photographs; drugs prescriptions; nurses' reports; consent forms; operation notes; video recordings; and printouts from monitoring records. Advancing the importance of health records, Adeleke (2014) stresses that health records are needed for delivery of services in health institutions. Among other purposes, records management provides availability of reliable and timely information to various end users. The International Records Management Trust [IRMT] (2009) defines records management as the task of ensuring that all recorded information, regardless of form and medium, is managed in a proper and efficient manner to enhance effective service delivery to the end

users. Luthuli (2017) also notes that records management involves accountability, security, integrity and comprehensiveness. Records Management is therefore considered as the process of controlling and governing important records of an institution in a comprehensive and complete cycle. The process includes identifying, classifying, prioritizing, storing, securing, archiving, preserving, retrieving, tracking and destroying of records. Health records management also involve appraisal, retention and disposal, which eventually eliminate ephemeral records that are no longer useful to healthcare institutions. The objectives of records management as highlighted by Feather & Sturges (2003) include cost reduction, improved productivity by quick access to needed records, enhanced litigation avoidance and support, increased audit compliance. The WHO (2006b) also illustrated that health records may be either in paper or in electronic forms. Where medical records exist in both paper and electronic forms, it is referred to as hybrid records. As a process, records management begins the moment a patient is admitted into healthcare facility until s/he is discharged. Delivery of service is central to the establishment of health care institutions. Mdluli (2008) conceives service delivery as activities performed by an organization, in line with its mandate aimed at satisfying, responding and resolving community or citizen problems. Service delivery in healthcare therefore, is considered as a contact between service providers and consumers. Service delivery in healthcare institutions manifests in forms of appropriate illness diagnosis, accurate laboratory tests, correct medication and follow-up treatment.

Connectedly, Kemoni & Ngulube (2007) opine that effective records management is a key factor in the delivery of service in health institutions. Thus, achieving service delivery requires that health organizations develop, promote and implement effective records management philosophy and ideology.

There are agencies and professional associations saddled with the responsibility of ensuring that records generated by medical practitioners involved in the provision and delivery of services to patients are efficiently managed in the best interest of patients and healthcare institutions. With reference to Nigeria, Osundina, Kolawole & Abolaji (2016) identify Health Records Officers Registration Board of Nigeria; Nigeria Medical Council, Nurses and Midwifery Council of Nigeria, among others as agencies and associations that regulate the practice of medical records management.

Against this background, this article provides proper knowledge and orientation of the subject matter of health records management in the context of service delivery in healthcare institutions. It is divided into six sections: the methodological approach towards understanding the subject matter, the historical development of medical records, issues of medical records management and service delivery in health organizations and the challenges associated with medical records management in healthcare institutions. The last section is the conclusion.

Methodological Approach towards Understanding Issues and Challenges of Managing Health Records in the Context of Service Delivery

The article adopts integrative approach of literature review. Through this approach, available publications focusing on health records management in different health facilities were accessed and reviewed. The articles were sought from Medline, PubMed Science, Google Scholar and other online resources. While searching for articles, proper attention was given to diversity, coupled with comprehensive explanation of the issues and challenges associated with managing health records in different health institutions across different countries. This was done to provide readers with better ideas of the subject matter.

The Historical Development of Health Records

This section of the article illustrates the context that influenced the emergence of health records. For centuries, scholars have always been interested in understanding the need for systematic documentation of health records in various health facilities. Historically, Akuso (2014:3) attributed the emergence of medical records management to the seventh century through a hospital set up by Benjamin Franklin in 1752 A. D. The hospital is known as Pennsylvania hospital at Philadelphia, United States of America. The hospital introduced medical records by preparing file cases where patient's name, admission date, discharge date, etc were written. With this development, it was recommended that

no health facility should operate without establishing a medical records section. It also enabled health practitioners to analyze health data of patients. Consequently, the development encouraged hospital-accrediting bodies to insist on the availability of accurate, well-organized medical records as a condition for accreditation and certification. Similarly, Flexner's (1910) report on medical education in the United States and Canada was the first formal statement made about the functions and contents of health records. The report also compelled physicians to keep a patient-oriented medical record.

Health records are available either in paper or electronic formats. Garte (2007) explains that paper format health records management had been in existence for quite a long period. It manifests in forms of handwritten notes, typed reports and test results, usually stored in a file. The paper format health records management is fraught with many challenges. First, it is time consuming and difficult for different health workers to interact concurrently with patient facing complicated health conditions. Secondly, paper based medical records are easy to misplace, thereby leading to disruption or discontinuity of treatment. Third, moisture, water, fire and insects can easily damage paper records. With the emergence of computers in late 1960s, a new form of health records management evolved, thereby neutralizing the challenges associated with the manual medical records management (Weed, 1969). Today, more and more health facilities in the world and especially in

advanced countries are migrating from paper method of records management to electronic format characterized with the introduction of information technology (IT) resources, such as computer-based records, clinical information systems and telemedicine.

In the case of Nigeria, Akanji (2005) traced the act of health records management to the Second World War, which occurred in 1945. Following the devastating effects on the victims of the world war, it became imperative for the Nigerian government to collate comprehensive and systematic documentation of records and treatment received by the victims. This was considered as a motivating factor for the Nigerian government to introduce National Health Care Services for the war victims. In addition and having realized the importance of health records management, some Nigerian health researchers in collaboration with their Finnish counterparts in the late 1990s decided to expand their rudimentary hospital information system with the aim of developing efficient and comprehensive system suitable for use in all Nigerian Teaching Hospitals and medical centers'. The expectation then was that by 2001 all the Teaching Hospitals in Nigeria would have health informatics units, which could make use of standardized software. Unfortunately, the project was not successful, partly due to paucity of funds on the part of government to purchase the enabling software. It is worthy of note to state that in spite of the spread of modern technology globally, especially in advanced

countries, the management of health records in Nigeria is still characterized by filing of health records in paper format. This is largely because most of the health facilities in Nigeria have not yet embraced the use of modern technology for the management of health records.

Issues of Health Records Management and Service Delivery in Health Organizations

This section highlights the importance of records management in healthcare facilities towards better delivery of needed services to clients and for administrative purposes. Hospitals generate, receive and preserve records as part of their functions, activities and mandates. Record serves as an important source of information in order to enhance sustainability and continuity of organizations. Records management is therefore considered as integral component of health institutions used to facilitate the achievement of their routine activities. The purpose of records management includes the provision of relevant information to the end users. Relatedly, Huffman (2001) opines that health records are the lifeblood and essential tools in running the day – to – day services in health care institutions while Ngoepe (2004) considers it as the heart of service delivery, as interventions by healthcare providers rely on access to reliable and up-to-date records. Similarly, Osundina, Kolawole & Abolaji (2016) notes that health care institutions depend on health records for knowledge generation and dissemination, administrative and financial purposes. Dikopoulou,

Mihiotis and Dikopoulou (2010) also submit that health institutions keep records to enhance accountability and proper planning.

A study conducted by Polit, Beck & Hungler (2001) establish that there is a strong relationship between efficient records management and communication among clients and health professionals while in the view of Berg (2001) records management constitutes tool for monitoring and reporting patients' progress. Similarly, the World Health Organization (2006a) highlights that health records contain facts about a patients' health status with specific emphasis on events affecting them during their admission at the health care facility. Comeford (2003) also alluded that the purpose of medical records management is to provide evidence of the quality of patient care. Other important information accessible from health records provided they are properly managed include patient's history, medical prescription, medical processes adopted, decisions made, actions agreed and sometimes where there is disagreement, who is taking decisions and who is agreeing to the decisions, among others. When these are done, they provide a platform for continuity of care among several health practitioners to measure and determine the patient's past and current health conditions. By implication, when there is efficient records management, various individuals involved in the delivery of health services to patients will have a good understanding of challenges faced by patients, coupled with pathways towards neutralizing the identified

challenges. It also means that without proper records management, lives of patients are at risk; whereas physicians' practice may suffer and may also lose credibility and trust.

In addition, proper records management acts as legal document that gives details of a client's management, especially when patient treatment in healthcare facilities is questionable. In view of this development, medical records can be used to prove the innocence or otherwise of healthcare providers (Wetter, 2005). When this happens, documented health records become defense shields for the health practitioners in the court of law or medical tribunals. Importantly, medical records assist hospitals in identifying competency of medical practitioners. Therefore, medical negligence litigation is built around comprehensive and accurate health records; hence, proper maintenance of such records is critical.

Establishing the relationship between records management and patients' health conditions, Maponya (2013:6) reported that Polokwane Hospital in Limpopo, South Africa failed to provide medical records for a cervical cancer patient, thereby having negative impact on health conditions of the patient. Similarly, Marutha (2011:3) revealed that doctors could not operate on a patient because of missing file at Nkhensani Hospital, Limpopo, South Africa; thereby worsening the health condition of the patient. Marutha (2011) also established that, in the Limpopo Province, public hospitals are using manual records management systems, reported to be hectic and tended to

negatively affect the record retrieval process. The absence of efficient health records management therefore, can cause adverse effects including deaths and injuries that could have been avoided.

Challenges associated with the Management of Health Records in Health Care Institutions

This section of the article x-rays the challenges confronting the management of health records in different contexts. This is done in order to state in clear terms that managing health records in the context of service delivery requires clearly defined efforts and commitments from concerned individuals and healthcare institutions. One of the major challenges affecting the management of health records is poor records management by people who are saddled with the responsibility in various health institutions. Wong and Bradley (2009) reveal that an efficient medical records management is often lacking in most of the developing world characterized by lack of requisite infrastructure. A study conducted by Ojo (2009:95) also reveals that staff with inadequate or poor knowledge of information and communication technology manages health records in most of the health facilities in Africa, while some facilities are faced with inadequate well-trained personnel. Similarly, Gunnlaugsdottir (2008:33-34) documents that lack of management support, lack of effective system training to employees and resistance to change contribute to poor records management in various health facilities in developing countries. A study by Al-azmi, Al-enezi &

Chowdhury (2009) reveal that records officers saddled with the responsibility of managing health records in Kuwait took long time in locating records. A study by Zulu (2008) attributed epileptic electricity supply in various health facilities in Africa makes it impossible to maintain a conducive and sustainable technological environment suitable for electronic health records management. Thus, a country that is faced with epileptic power supply will not be able to deploy good Information and Communication Technology (ICT) services for efficient management of health records to its people.

The safety and security of medical records is a challenge to personnel in-charge of records in various health facilities. This is linked to abuse of patient information. Inadequate security in the management of medical records may expose the patients' records to several dangers including unauthorized access. Nicholson (1996) revealed that there were numerous instances where case notes were not kept in secure conditions, as they were found unattended to; left in clinic areas because records management unit had closed. In addition, the occurrence of disasters such as fire, water damage, ants and vandalism poses a challenge to proper medical records management in various health facilities. With specific focus on Nigeria, Yaya, Asunmo, Abolarinwa & Onyenekwe (2015) highlighted that preservation and conservation of hospital documents and records has posed a serious problem.

Conclusion

This article examines medical records management in the context of service delivery, where evidence from the existing studies affirms that medical records constitute a crucial segment of patients' management. The literature reviewed was in relation to the role of medical records management in the delivery of healthcare services in health facilities. The article shows clearly that the importance of accurate, comprehensive and objective management of health records cannot be over-emphasized. Health records are an integral part of healthcare and their proper management aids the performance of healthcare institutions. Medical records constitute tools for the promotion and sustenance of accountability, ethical and legal requirements in health institutions. Hence, the way and manner records are managed in healthcare setting has a significant influence on the ability of healthcare institutions to achieve their goals and optimize their philosophy. The article therefore submits that efficient management of health records will enhance the efficiency of medical practitioners, as well as welfare of patients. Thus, those individuals saddled with the responsibility of managing health records must be given adequate supports, such as the provision of routine training and technological facilities capable of promoting and sustaining proper records management to enhance effective service delivery.

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Nationalization and Privatisation of Petroleum Industry: An Evaluation of the Pros and Cons

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Abstract: The purpose of this piece is to evaluate the overall pros and cons of the nationalisation and privatisation of the petroleum industry. According to Georg Erdmann (n/d), the economists assume that nationalized companies are usually less efficient than private companies. This belief has been confirmed by HARTLEY (2007) for the upstream oil industry. But we see today that governments tend to take over the control of oil, gas, uranium and power industries by restricting energy business rights in the company to national companies or by controlling the businesses of private companies by a significantly more restrictive regulation; whereas in the last two decades, many Governments did just the opposite when privatizing state energy companies. Nationalization of the petroleum industry is a pertinent topic for several reasons. Today, state owned companies hold around 85 percent of oil and gas reserves (Erdmann, n/d). As of 2012, between 73 and 95 percent of global oil reserves are controlled by national oil companies (NOCs) (Mahdavi, 2014). In fact, and according to Francisco Monaldi (2010), there are various factors leading countries to nationalize their petroleum industries, such as the civil society, regionalism, and the potential conservation and economic benefits from nationalizing the industry. According to Carneiro et al. (2003), deregulation of the oil and gas industry has led to privatization of the former state-

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owned oil and gas companies, in several countries. As a result, the competitive environment has become more hostile. The changes of ownership, together with modification in the competitive environment, have caused significant modifications in the competitive strategies. Companies were not used to clear competitive strategies; but after privatization they started to follow clear patterns of differentiation strategies while at the same time they seek cost parity in the industry. (Carneiro et al., 2003). The methodology for this paper was based only on literature review, with a view to improving our knowledge on the pros and cons of nationalisation and privatisation of the petroleum industry. We conclude that countries which possess natural resources such as oil prefer to nationalize the companies in anticipation of the high revenues that come with the high fluctuations of price of this commodity. Of course this fluctuation of prices is driven by some factors such as high demand of the resource and industrialization. The World Bank estimates that privatization is either under way or being planned in at least 50 countries.

Keywords: Nationalisation, Privatisation, Evaluation, Pros and Cons.

1. Introduction

Nationalization and privatization are two very pertinent topics to discuss at the moment because with the price of oil increasing steadily since its collapse in 1998, oil is becoming a more expensive commodity and the organizational structure of that industry will always affect how it is extracted and distributed.

The present essay is meant to approach in a very simple manner the issues of nationalisation and privatisation of companies in the Oil Industry, and in the perspective of evaluating the pros and cons of such government decisions in pursuit of either of the options.

The structure used is also very simple, beginning with the conceptual framework of the main subjects: namely nationalisation and privatisation, from which we describe using a theoretical framework that leads to our methodology of study. In a comparison, two case studies will help us to bring up the pros and cons of each subject by

way of evaluation as well as the implications of government decisions in such economic environment.

2. Conceptual Framework

Concept of Nationalization – refers to when a government takes control of a company or industry, which generally occurs without compensation for the loss of the net worth of seized assets and potential income. This action may be the result of:

- A nation's attempt to consolidate power;
- Reduction of foreign ownership of industries representing significant importance to local economies; or
- To prop up failing industries.

According to Monaldi (2010), nationalisation is the policy by which an asset is placed under state-control. On a time scale, nationalization phases in the oil industry correspond to periods of high crude prices and high revenues. (Erdmann, n/d). The author emphasises a higher degree of nationalization in extraction than in refining, which

corresponds to the profitability differences along the value chain of the oil and gas industry.

According to John Wirth (1985), state owned control is defined as the policy by which governments own, control, manage and exploit natural resources for national ends, in the name of common good. Thus, in the definition alone, there is an implication of nationalization being for the benefit of the society as a whole. If one imagines a continuum of organisational structure, nationalisation and privatisation would be at opposite ends.

However, nationalisation could include joint ventures where the state controls the industry but allows for private companies to participate in the resource extraction and retain some of the profit.

It is also important to pay attention to the so-called creeping nationalisation; which is the impending threat of nationalisation before the policy is made official. This kind of nationalisation has not taken as drastic a form in the first two decades of the 21st century as outright expropriations have done in the 1970's, but it does seem highly prevalent. Actions indicative of creeping nationalisation include cumbersome labour and environmental regulations, taxation, and price and monetary controls.

Nationalisation of the Petroleum Industry

So why do leaders nationalize the oil industry? In line with a general utility-maximizing theory, (Mahdavi, 2014) argues that leaders nationalize to maximize state revenues while minimizing costs. According to this

author, the latter includes international retaliation and domestic political constraints.

Using a novel longitudinal dataset on the establishment of national oil companies (NOCs), the empirical evidence presented in Mahdavi's paper lends support to four primary findings. States are most likely to establish NOCs:

- In periods of high oil prices, when the risks of expropriation are outweighed by the financial benefits;
- In non-democratic systems, where executive constraints are limited;
- In "waves", that is, after other countries have nationalized, reflecting reduced likelihood of international retaliation; and, though with weaker empirical support,
- In political settings marked by resource nationalism.

Concept of Privatization

When a government-owned business, operation, or property becomes owned by a private, non-government party.

According to Moye Ajao (2008), from The Technical University of Berlin, privatization is the sale of state owned assets; or the transfer of a majority ownership of state-owned enterprises to the private sector by the sale of ongoing concerns or assets following liquidation. The author adds also that privatization refers to the sale of all or parts of a government's equity in state-owned enterprises to the private sector. Define finally privatization as the divestiture by the state of enterprises, land or other assets.

URL <http://journals.covenantuniversity.edu.ng/index.php/cjoe>

Privatisation of the Petroleum Industry

According to Carneiro et al. (2003), in the oil industry, privatization represents a reversal of the nationalization processes that took place at the beginning of the last century, resulting from the advance of communist thinking and the restructuring of economies after the two World Wars. Privatized firms, once accustomed to a predictable environment - monopolistic or tightly regulated - come face to face with the challenges and opportunities of increased competition. As a result, these companies change their attitude and attitude towards the market and competition in order to adapt to the new environment.

Concept of Petroleum Industry

Petroleum is considered a global commodity and the main reason of the development of the world we see today. It is considered the biggest Industry sector in the world in terms of capital investment and value, and also its products are used in almost all the areas of industrialization globally. In addition to that, it drives thousands of hundreds of workers worldwide, generating hundreds of billions of dollars globally each year. The Industry is divided into 3 categories or sectors named **Upstream, Midstream and Downstream**, and the companies operating in this industry are divided into NOC (National Oil Company's) and IOC (International Oil Company's)

Concept of Profitability

Profitability is a financial and economic concept originated from the word profit, used to measure or determine the

efficiency, success or failure of a company or product. Some authors define profitability as a business's ability to produce a return on an investment based on its resources in comparison with an alternative investment.

3. Theoretical Framework

Utility-Maximizing Theory

Mahdavi (2014) is aligned with a general utility-maximizing theory, in which he argues that leaders nationalize assets to maximize state revenues while minimizing costs.

Leaders nationalize to maximize state revenues while minimizing costs. The latter includes international retaliation and domestic political constraints. Using a novel longitudinal dataset on the establishment of National Oil companies (NOCs), the empirical evidence presented in this paper lends support to four primary findings that state that States are most likely to establish NOCs:

- In periods of high oil prices, when the risks of expropriation are outweighed by the financial benefits;
- In non-democratic systems, where executive constraints are limited;
- In "waves", that is, after other countries have nationalized, reflecting reduced likelihood of international retaliation; and, though with weaker empirical support,
- In political settings marked by resource nationalism.

The Positive Theory of Nationalization

Erdmann (2007) is aligned with the positive theory of nationalization; which emphasizes on "the basic business of

politics, the transfer motive”; as well as the economic theory of firm.

This theory is based on a similar interest of private investors and the State in the cash flow of firms, and does not necessarily assume inefficiency in the state owned firms, nor a sudden, unexplained reversal in ideological preferences. Both private investors and the State are rational but their respective cost of capital can and will diverge over time, changing the private/public valuation ratio, the basic determinant of the exchange of firm ownership. Both the state and the private investors want to control firms in order to use their cash flows either for increasing the wealth of shareholders and managers, or for government consumption and transfers to politically influential clienteles.

It also provides a view of the privatization and the nationalization waves, the possible reversals of policy from one to the other, as well as differences in the allocation of ownership between the public and the private across countries. Other local political variables can also influence these policies, to amplify or dampen them since they reflect the ultimate redistributive aims of the government. But that influence will only be effective as far as the privatization or the nationalization does not decrease the government's overall resources. Otherwise, for instance, a government pursuing a nationalization policy in order to reduce unemployment, whereas the valuation ratio implies that the state valuation of firms is less than the private investors' valuation (due to a

higher public cost of capital), would implicitly be willing to overpay for the firms acquisition, thus accepting a loss of resources in the process (an unfavourable trade with private investors). This loss of resource, and the associated loss of political support that it determines, constitutes the opportunity cost of pursuing a political objective contrary to the rational, valuation ratio determined, policy of support maximization. The higher this opportunity cost, the lower the probability of a government following such an unconditional – or “uneconomic” – strategy.

Economic Theory

Carneiro et al. (2003) also applied basically the economic theory of firm, emphasizing Porter's competitive strategies; as well as economic regulation theory.

Here the concept of “externality” is considered unnecessary and the advantage of “detrimental effects” is emphasized, which can be examined as any other factor of production. Coase is not in favor of State action, since it assumes that it is related to high costs, although it admits the possibility that “most externalities should be allowed to exist if we want to maximize the value of production”. In this sense, for Coase (1994, 27) the concept of externality imposes a governmental intervention (tax and regulation), even before that other options, such as non-action, abandonment of previous government action or simply the facilitation of commercial transactions, may be considered

The new economy of regulation deals with the agency problem that arises as a consequence of an asymmetrical structure between the principal and the agent. In other words, regulation is an application of the principal-agent methodology in the contractual relationship between the regulator and the regulated agent, as proposed by Laffont and Tirole (1994). The principal is the State (the regulatory agency) that does not have all the information and holds the property rights of an asset or the most relevant administrative function. The regulated agent is the operator of the service that administers the ownership of the assets and is therefore the part informed about the details of its specific contents (inputs, technology and cost structure). Thus, the problem of regulation is related to transaction costs, problems of political economy and incomplete information. Economic regulation has its origin in the need to control market failures (normative approach). However, when the State intervenes to correct these failures, some difficulties arise, especially for the handling of information⁴ 2, the capture of the regulator by the private sector and inefficiency. These basic theories of economic regulation are briefly discussed below: (1) regulation based on public interest (normative approach), (2) private interest regulation or regulator capture) and, 3) the new economy of regulation from the position of the new institutional economy.

4. Methodology

Aiming to maximize the research and provide answer to the problem, we used the following methods:

- Nature – The research was theoretical and based on the collection of secondary data as well as reviewed bibliographies. Again, the archival study aimed to improve the extant literature in this knowledge area. Technical dimension involved the use of case studies.

4. Findings: Evaluation of Pros & Cons

An evaluation of the efficiency of a nationalisation policy requires an evaluation of the particular industry's industrial efficiency which requires very detailed information and a long time scale to collect the data, which are both beyond the scope of this project. Analysing the energy efficiency of a country proved too difficult due to the inability to disaggregate the inputs and outputs of energy in order to focus solely on the energy efficiency of oil and natural gas.

Nationalization

Pros:

- It ensures that a government can stay homogenized and the economy can be nationalized.
- Increases the chances of maximization of state revenues while minimizing costs. Reduces the likelihood of international retaliation and domestic political constraints.

Cons:

- Failure due to different political and economic objectives between government and state officials -

officials may rely on the natural resource revenue to fulfil their objectives.

- Natural resources are often located in areas where marginalized minorities live who have poorly defined property and user rights - marginalizing these communities further could result in repercussion.
- Governments suffering from budget deficits may have difficulty securing additional capital for the needs of the NOC.

Privatization

Pros:

- Privately-owned companies run businesses more economically and efficiently because they are profit incentivized to eliminate wasteful spending.
- These companies usually ensure they improve their operational efficiency in order to reduce their costs and improve on profits.
- Privatization reduces the government's political interference.

Cons:

- Government loses out on potential dividends after privatization;
- Exposure to strict local laws, regulations, taxes;
- Increased competition – existence of policies to allow more firms to enter the industry and increase the competitiveness of the market.
- These companies do not directly deliver the government revenue, and they also have more freedom to pursue their own interests, which may negatively affect consumers, without government involvement.

Comparative Analysis

The following two case studies are drawn from the work of Monaldi (2003), and we present them as they were initially presented by the author.

Case 1 – Venezuela

Ever since Venezuela began exporting oil in 1917, Venezuelan leaders have sought to extract greater compensation. In 1943, Venezuela worked out a “50-50” policy where private companies provided half of their profits to the Venezuelan government in exchange for long-term operating contracts. As time progressed, companies had to provide a greater share of their profits to Venezuela. According to Grayson, by the 1970's this partially nationalized system left Venezuela dependent on the international economy and aggravated income disparities within the country.

Venezuela's nationalistic policy was altered in 1998 when Venezuela increased privatization. After the oil boom of the 1970s, Venezuela began reform efforts leading to growth of state enterprises. These efforts began in 1971, when Congress passed the Gas Nationalization Law. In this law, Venezuela was entitled to collect all associated gas for which the concessionaire had no economic use for at the price of its collection cost. Reservoirs of free gas were also nationalized.

In 1973, Congress passed the Domestic Market Nationalization Law. Under the law, hydrocarbons were considered basic commodities. The 1973 law was different from the 1971 in that it increased the government's hold over the economy rather than expropriate

concessions as the 1971 law did. The state intervened in the domestic market to lower prices and protect national consumers from rising world market prices. Because they were owners of the natural resource, national consumers were not to be subject to the increase of the international ground-rent.

Venezuelan nationalization occurred on January 1, 1976. By the late 1970s, state enterprises accounted for 85.9% of all public-sector investment. Globally, nationalization had two consequences: the collapse of the rent capitalism (the rent that foreign companies pay for the use of the land in the oil producing host country) and the country left on its own could not find new energy infrastructures (the technological and structural capacity necessary for efficient energy production and distribution).

The oil-exporting countries raised ground-rent and prices which hurt the oil-consuming countries. The state enterprises were criticized for lacking clear objectives, technocratic expertise and coordination in planning, and unsuccessful implementation and evaluation of projects. Lack of control over spending of public monies and absence of bureaucratic accountability led to low-level corruption and mismanagement.

In Venezuela, the assured flow of oil revenues to state managers left little incentive to maximize efficiency of state enterprises. When nationalized, the oil industry could not tax multi-nationals to pay for their mistakes, as they could only tax themselves. Domestic consumption on a whole was

a loss to Petroleum de Venezuela, S.A. (PDVSA). Prices eventually fell below technical costs after 1983. Prices in the domestic market were the sole domain of the government. Prices were disassociated from the international market and were lower for domestic consumers. Venezuelan consumers as resource owners felt they did not have to pay ground-rent.

Furthermore, since the country had abundant energy resources, low prices were supposed to foster development of energy-intensive industries. The issuance of low prices made it difficult for governments to decide on reasonable prices. After 1986, due to mismanagement and failure, there was no link between fiscal oil revenues and development. Thus, in the mid-1990s Venezuela made efforts to privatize its national industries leading to the Oil Aperture policy.

In 2002, Hugo Chavez, however, took political control of PDVSA. He diverted funds of PDVSA to finance government's social programs. In 2004 the job of Energy and Oil Minister and PDVSA Chairman became the same increasing presidential control of company. As a result, PDVSA is currently underinvesting (investing insufficient amounts to adequately perform a task) in exploration and production. PDVSA is even underinvesting in comparison to other state-owned oil companies.

This recent creeping nationalization that Chavez has been employing since he took office is seen as an affront to the U.S. Chavez is, moreover, using Venezuelan oil as a foreign policy

instrument to form regional alliances with his neighbours by offering them preferential oil leases. With a possible energy crisis ahead, analysts believe that Chavez is trying to position Venezuela (which has the largest oil reserve in the Western Hemisphere) into a spot where an energy thirsty world would be forced to integrate according to Venezuela's terms. If Venezuela were to stop selling oil to the U.S., an \$11 per barrel crude oil price spike could result. PDVSA is still considered to be one of the most successful large national oil companies in the Third World.

Case 2 – Bolivia

On May 1, 2006 Bolivia's president, Evo Morales, issued an executive decree (#28701) declaring the "nationalization" of Bolivia's oil and gas reserves. The decree was accompanied by a set of images aired worldwide of Bolivian troops sent to many of the nation's oil fields by Morales to "protect" the nation's oil and gas.

The popular demand for gas and oil nationalization is a long-standing one in Bolivia, and has been at the forefront of national politics for three years. In July 2004 more than 90% of the voters in a national referendum supported a measure to recover control of Bolivia's gas and oil reserves. Nationalization was also a central pledge by Morales during the 2005 elections.

In general, foreign media coverage of Morales' announcement has significantly overstated what the decree actually does, and painted the move as one far more radical than is evidenced by the content of the decree and the

government's actions. This brief seeks to explain what the decree actually does to explain what the decree actually does provide some historical context; discuss some of the issues the decree raises; and note what developments to watch for in the months ahead.

Bolivia privatized its oil sector in the mid-1990. Prior to that, the state owned oil company Yacimientos Petrolíferos Fiscales Bolivianos (YPFB) divested most of assets. After privatization, foreign companies owned most of Bolivia's oil sector. Bolivia also privatized its natural gas sector in the mid-1990's which resulted in more foreign investment leading to an increase in exploration resulting in an increase of 600% of proven natural gas reserves between 1997 and 2005. In May 2006, Morales declared the renationalization of the country's hydrocarbon reserves giving control of reserves back to YPFB.

On May 1, 2006 President Morales gave the oil companies 180 days to sign new contracts with the state guaranteeing public control and management of activities. He also issued a profit sharing arrangement where companies that have operation in the biggest fields will resign 82% of their profit to the state and keep the remainder and companies in the smaller fields will resign 60% of their profit to the state and retain the remaining 40%.

The Spanish company Repsol-YPF and the Brazilian company Petrobras will be the companies most affected by arrangements in Morales' proposals for nationalization. In the case of Bolivia, this recent nationalization of its natural gas industry on May 1, 2006 might have

serious repercussions considering that foreign companies accounted for 20% of the country's gross domestic product and approximately 20% of its tax revenue. Bolivia had previously nationalized oil production in 1937 and 1969.

However, this time around, Bolivia has not kept to its six-month timeline that it laid-out to restructure its state oil company in its current nationalization process, though it seems likely that Bolivia will follow through. One theory behind President Morales's motives is that he is trying to embrace a regional perspective, combining forces with President Chavez of Venezuela, ignoring a more global one⁸⁸. Rising earnings from natural gas exports is the driver of Bolivia's economic growth.

Nationalization reportedly deterred foreign investment in natural gas sector in 2005 after the approval of a referendum calling for renationalization of the once state-owned Andina and Chaco oil and natural gas operators. The referendum also declared greater taxes on foreign Hydrocarbon producers.

Bolivia had 440 million barrels proven crude oil reserves in 2006. Bolivia also possessed proven natural gas reserves of 24.0 trillion cubic feet (Tcf) in 2006. It produced 64,000 barrels per day of oil during the first three-quarters of 2006 and consumed about 48,000 bbl/d of oil in 2006. Bolivia has two refineries but both are operated by Petrobras (the Brazilian oil company). Due to the nationalization decree, YPF is seeking to appropriate the majority stake in both refineries.

Looking at a general picture of nationalization, Asher poses a number of reasons for why the policy often seems to fail. One particular cause for the failure is different political and economic objectives between government and state officials. Even among government officials there is disunity in objectives. When there is such a difference, officials may rely on the natural resource revenue to fulfill their objectives.

Furthermore, a problem for natural resource extraction regardless of the organizational structure is that natural resources are often located in areas where marginalized minorities live who have poorly defined property and user rights. Marginalizing these communities further could result in a backlash as has occurred in Nigeria, where communities who have been neglected by the profits made from the resource in their land demand a greater share of said profit.

Since officials can easily direct financial flows, government officials that are trying to increase accountability and transparency in the industry find it difficult to do so. Thus, many of the reasons for nationalization's failure are due to human actions and not necessarily policy failures. Even so, nationalization enables government and state officials to manipulate the revenues easier than they would be able to if the industry were privatized and where financial institutions and governance are weak there is no means of ensuring proper accounting.

The difficulty lies in finding the proper control measure. Too much government control means that a NOC is just an

extension of civil service, but insufficient control means a NOC may lose interest in non-commercial objectives and become like any oil multinational company that focuses solely on commercial success but not necessarily on a larger socio-economic and nationalistic objective.

However, without competition, a NOC may become complacent and lazy and develop goals of its own as opposed to those which it was created for. It is generally found that NOCs are likely to be: overstaffed and pay more than market wages, located in politically desirable rather than economically desirable regions, charge prices either significantly below marginal cost to win political support or monopolize prices when political objectives dictate it to do so, lack environmental concern and are often the worst polluters.

Furthermore, NOCs tend to lack managerial and technical expertise because NOCs recruitment policies are more governed by tribal and religious considerations than merit. However, the inefficiencies of NOCs cannot all be blamed on the companies themselves. Governments have been found at times to provide insufficient resources to NOCs hindering the companies' ability to undertake tasks and halting production or any increases in production.

Governments suffering from budget deficits may have difficulty securing additional capital for the needs of the NOC. It is difficult to say though, whether governments are the culprits for the challenges facing NOCs or whether NOCs are adversely affecting the

government. Suffice it to say that both the state and the national oil company need to work together to achieve efficient operations in either entity.

6. Findings

From the cases of study, we found that both states are highly reliant on oil or other minerals for their economic, and the low human development ratio contribute to weak political policies and decisions. They also rely on old and weak fiscal or regulatory institutions. This association with the international high prices contributed positively in the nationalization of Oil companies in Bolivia and Venezuela. In addition to the high oil prices, the governments of these countries began to act with authority in minimizing the freedom of expression; thereby fueling extremist protests and the power of other companies in their soil. Again, the budgeting for public spending on education diminished.

Furthermore, it seems that the governments of these countries were fooled by high revenues of these nationalized companies due to high prices of oil, forgetting their main goal as a state is increasing Gross Domestic Product and human capital). and started to act more as a company (with the single objective of making profit).

Maybe this is the main reason that the Dutch Disease is well known all over the world, especially on underdeveloped countries. This is probably the reason why many authors consider the Gift of Oil as a curse, and it is clearly shown as an example here.

7. Implications

As a result of the overall instability of supply, oil became an instrument of foreign policy for oil-exporting countries. Nationalization increased the stability in the oil markets and broke the vertical integration within the system. Vertical integration was replaced with a dual system where OPEC countries controlled upstream activities such as the production and marketing of crude oil while oil companies controlled downstream activities such as transportation, refining, distribution, and sale of oil products.

The nationalization of oil supplies and the emergence of the OPEC market caused the spot market to change in both orientation and size. The spot market changed in orientation because it started to deal not only with crude oil but also with refined products. The spot market changed in size because as the OPEC market declined the number of spot market transactions increased. The development of the spot market made oil prices volatile. The risks involving oil investment increased. To protect against these potential risks, parallel markets such as the forward market developed.

8. Conclusions & Research Agenda

Although Privatization and nationalization are most likely to maximize social and local employment benefits, it must balance between the various objectives of privatization. Financial, economic, social and technological considerations are an essential component of this process. They should form an integral part of the design and implementation of

privatization policies and programmes. Privatization works most successfully where it is backed up by social consensus and support and not just political or economic will. Therefore, whether from the point of view of political commitment to giving higher priority to social and employment goals or from that of creating the right environment for the economic success of privatization and restructuring programmes, it makes sense to incorporate the technical, social and employment dimensions throughout the process, from goal-setting to implementation, evaluation and follow-up.

Also in parallel it must be built on strong fiscal and regulatory institutions. These institutions will increase transparency and accountability and create a check on the government to ensure that it does not spend the revenue frivolously and ensure that the economy is not vulnerable to the volatile nature of hydrocarbon prices.

The resource will still remain under domestic control and it is believed that a privatized environment with competition and no barriers to entry will foster transparency and since the government will want to tap into the revenues of those private organizations it will develop rules to regulate the private sector. In economics we can find various suggestions on how to improve Human development and GDP levels:

- One is increase production of other goods, reducing external dependence of the products and importations.

- Investing in education, will create an impact on the man force at all levels, reducing importation of technology and man intelligence;
- Lead by example by creating very rigid and effective politics to discourage corruption and impunity;
- Create partnerships and chamber of commerce and exchange in various areas (education, agricultural production, mineral resources, etc.).

Looking specifically at the experiences of both Venezuela and Bolivia, we can conclude that the empirical evidence presented by Mahdavi apply consistently: States are most likely to establish NOCs (1) in periods of high oil prices, when the risks of expropriation are outweighed by the financial benefits; (2) in non-democratic systems, where executive constraints are limited; (3) in “waves”, that is, after other countries have nationalized,

reflecting reduced likelihood of international retaliation; and, though with weaker empirical support, (4) in political settings marked by resource nationalism.

Mahdavi’s statistical findings show that results from empirical analysis lend strong support for the revenue maximization, resource nationalism, and diffusion (international retaliation) hypotheses, and weak to modest support for the domestic constraints hypothesis. We also keep in mind Erdmann’s conclusion that the appetite of governments to nationalise or regulate energy industries increases with the profit rate. He adds that by extrapolating the determinants for nationalization and privatization, we can predict the associated trends for different energy sectors and the associated productivity developments. Even more important is the identification of conditions under which trend changes are likely.

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Social media marketing and consumption of nutrition and dietary information among youths in Abia state, Nigeria

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Abstract: Malnutrition has persisted due to lack of nutritional information. Social media (SM) provides a platform to narrow communication/information gap world over. The overall objective of this study is to examine the effect of the use of social media platforms and consumption of nutritional and dietary information among youths. The central idea is that SM platforms can leverage to improve nutritional and dietary outcomes. Therefore, specifically, the study seeks to ascertain the information need of youths from the use SM platforms; various SM platforms and effect of SM platforms on consumption of nutritional information. The study was conducted in Abia state, using a sample distribution of 240 respondents. Statistically, descriptive and inferential statistics were adopted. Results revealed that youths mostly seek most information about fashion and news report. The major factors that motivate youths to seek information from social media in the study area were learning and personal development. The regression analysis revealed that Facebook, WhatsApp, Twitter and Instagram were the most widely used medium and could be vital in enhancing nutritional and dietary information. The logistic regression analysis revealed that sex, marital status and awareness of nutrition and dietary information on social media, though significant, had negative signs indicating a negative influence, while location and recommendation by experts were significant and positive variable influencing the use of social media for the consumption of nutritional and dietary information. The major militating factor in the study area are lack of awareness of nutritional information and poor economic power to buy internet data bundle. The study recommends that since the influence of SM is positive, firms can tap its

youthfulness to improve knowledge and exposure. Therefore, experts can leverage on it, but must find a strong appeal that mesh into youths existing lifestyle to relate nutritional and dietary information to promote consumer familiarization, knowledge and change behaviour for a positive outcome.

Keywords: consumption, dietary transition, nutrition information, marketing and social media

1.0 Introduction

Besides climate change, insecurity and hunger, malnutrition is one of the major challenges facing the world today. The consequences of poor food and nutrition manifest in malnutrition and/or hidden hunger - an extreme consequence and far more dangerous than mere hunger. According to Meenakshi, Banerji, Manyong, Tomlins, Hamukwala, Zulu and Mungoma, (2010), more than 2 billion people around the world, that is one in three people globally, are affected with micronutrient deficiencies which are the major causes of hidden hunger. This causes death and low productivity with spiral effect on social, economic and other performance indicators. Micronutrient deficiencies lead to the death of between 3.5 – 5.5 million children world over. In Nigeria, more than 14 million people representing over 8.5% of the total population are undernourished. Micronutrient deficiencies are linked to poor productivity as it causes increased mortality rates, especially in women and children; poor pregnancy outcomes; increased morbidity; impaired mental and physical development in children; and reduced work productivity in adults (Black, et al., 2008). This situation persists due in part to poor awareness of dietary requirement, feeding practices and high level of poverty in societies

(Agwu, 2011; Pambo, Oheno & Okello, 2014).

In order to address this challenge, government and donor agencies have intensified awareness creation to deepen information dissemination at both upper and lower level especially among the most vulnerable in the society. Unfortunately, most of the platforms have not resulted in the desired outcomes. This implies that these vehicles are not adequate to steer participation in dietary transition and deepen information penetration (Ezeh & Nwachukwu, 2007). Information is important to create positive responses and in addressing the challenges caused by malnutrition. Information is vital in dietary transition especially in knowing what exactly to eat and what not to eat in order to live a healthy life. Informing youths on how to make choices about food, and drink could give them the confidence to make the nutritional decisions that can influence the rest of their lives (Marks, Campbell & Ward, 2006). Information is crucial in terms of influencing the way youths perceives and consumes healthy food items as it has been confirmed that perception is fueled by information available or provided to the decision maker (Robbins, 2008; Agbonifoh, Ogwo, Nnolim & Nkamnebe, 2007). Information that is provided to consumers can play an important role in

their perception of products especially for products with unobservable attributes such as nutritional and dietary products (Smed, 2012). The absoluteness of decision is dependent on the limit of information available as provided information can increase people's knowledge about the product/services concerned (Schaar, 2016).

Conventionally, companies have used traditional communication methods such as face to face meeting, written communication, print adverts, television, radio, newspapers and so on, which has limitations such as lack of two-way communication flow or immediate feedback (Karimova, 2011; Nwachukwu, Obasi & Oteh, 2015). These methods are increasingly being replaced and complemented by technological innovations leveraging on identified limitations of old system to enhance value of information, thus enhancing access to information and pushing for transition from poor dietary orientation to rich, good and adequate nutritional and dietary information/orientation to promote healthy living. New information and communication technologies have increased the possibilities for how people can send and receive information. The use of computer and Internet-based technologies has intervened in the promotion of healthy nutritional diets (Hersey, Khavjou & Strange, 2012). This has helped enhance consumer knowledge, perception and acceptance of nutritional items with high risk and uncertainties. It is perhaps difficult to think of product decision

process without consideration of resources from Information and Communication Technology (ICT). Infact, ICT is now a revolutionary information machine and SM is one of its revolutionary tools. This tool has been widely accepted among millennials as not just a revolutionary technology but as an educational platform. According to Oteh and Eleodinmuo (2016), the core benefit of this educational vehicle is its ability to bring about behavioral change by providing a platform for shared information and experience. This transfer of information is akin to flow of electricity current that supplies power to an object. Therefore, social media and other communication platforms have advanced understanding and attitude towards sustainable living practice around the world (Andrew, 2015). It is now an acceptable platform to promote and advance knowledge about products and services globally.

Generally, SM platforms are group of online applications that allow for the creation and exchange of user-generated content use in promotion of product, idea, person, service etc. This includes collaborative projects, blogs or microblogs, content communities, social networking sites and virtual gaming or social worlds. These tools are a part of what was, in 2004, termed Web: the utilization of the World Wide Web as a platform where content is continuously modified by all users in a collaborative fashion (Kaplan & Haenlein, 2010). There are different social media platforms; the popular ones are Facebook, YouTube, Instagram, Twitter, WhatsApp and MySpace

(Hughes, Rowe, Batey & Lee, 2012; Taggart, Grewe, Conserve, Gliwa and Isler, 2015). These networking sites are used for diverse purposes like for chatting, connecting or making new friend, uploading pictures and sending of messages. It is increasingly used in modern days to create, advance and promote product or services among people. The advent of this new media has solved the geographic problem of distance that usually impact on marketing communication. This is because users can connect with one another for hours irrespective of their distance (Kaplan and Haenlein, 2010; Hughes et al., 2012). The powers of SM platforms have gone beyond social to include economic, political, education and more resourcefully, health issues. Many institutions and organizations are leveraging on the power of SM platforms to promote their brand and image. SM is a super highway information block that advance value beyond the recognition of many SM addicts. It is a widely recognized fact that SM platforms give impetus to viral marketing and brand visibility (Nwachukwu et al., 2015). The list is endless; thus, experts project that more advances in technology will see to further refinement and improvement on this information gateway in promoting business value especially in marketing of products and services. Already, most SM platforms have continued to make changes in their offering to enhance user-generated contents that are real with improve security features to position them for greater value for subscribers and competition.

As a result of its acceptance and high utilization by youths, social media and its platforms are becoming a suitable platform to share information about burning issues such as health information and communication (Mpofu & Salawu, 2014). The use of these platforms for health information purposes will no doubt continued to gain momentum as more institutions and organization subscribe to its use thereby increasing on its influence on health awareness campaign (Fox & Jones, 2009). However, inspite of its popularity in Nigeria, there are still increases in the number of people vulnerable to malnutrition and nutrition related diseases (UNICEF, 2015). The World Health Organization (WHO) (2012) reported that nutrition-related diseases account for about 60% of all deaths, and 43% of the global burden of disease, and that by 2020, the impact of nutrition-related non- communicable diseases is expected to rise to 73% of all deaths and 60% of the global burden of disease. This a major concern among nutrition and health practitioner, because aaccording to WHO (2011), the conditions that promote unhealthy eating practices among individuals is mainly due to lack of and/or inadequate access to health and nutritional information and knowledge, and the acquisition of misinformation about health and nutrition matters.

Although, SM platforms provide an important vehicle to transmit nutritional information, one of its challenges is the poor utilization of social media platform as a medium for information and proliferation of fake news due to poor

checks and effective control. This technology is prone to abuse and have been somewhat misused by youth in terms of seeking relevant information as regards healthy living (Njoroge, 2013). The pivotal role of SM and influence among youth is of major interest to researchers and hence this study examined the effect of social media platforms on the youths in terms of accessing and consuming nutritional and dietary information from marketing firms and institutions in the food industries.

In the light of the above, the study objectives specifically seeks to:

- i. ascertain the various SM platforms available in the study and their level of usage among youths to access promoted nutritional and dietary information. This objective is anchored on the fact that you cannot use, what does not exist. It prepares the study to highlight the important platforms of influence among youths in the study area, which will form the basis for strategic decision,
- ii. ascertain the kind of information these youths seek out of SM platforms,
- iii. factors that motivate their choice of information need from SM platforms. This is a key block in designing appeals that can change behaviour and desire for information.
- iv. effect of SM platforms on the consumption of nutritional and dietary information among youths

and factors that determine the influence.

2.0 Concept of Social media marketing

SM is a 21st century information revolutionary and communication, which has gained wide acceptance all over the world enhancing the communication flow between people, business and society (Okoye, 2011). Consequently, over the years, several conceptual and empirical literatures have focused on SM and how it influences beliefs and action on a wide range of issues. Many businesses have found this platform a veritable tool to promote their business and generally commerce. In marketing, SM platforms are technologies that create, facilitate and share contents on social media platforms, with the purpose of enhancing marketing objectives and brand goals. It also involve social interaction and possible collaboration by stakeholders across boundaries, time and space. It includes but not limited to the use of blogs, wikis, media (audio, photo, video, text) sharing tools, networking platforms and virtual worlds (Bryer & Zavatarro, 2011) to achieve both economic and non-economic goals of marketing.

With improvement in this communication technology, and its wide acceptance, there is a proliferation of SM platforms in the last decade attracting millions of users especially youths who has since identified this platform as an effective way to promote fashion, entertainment and other business interest (Boyd, & Ellison, 2007). Today, SM platforms are

veritable tools and outlets for promoting news, information, business and other issues of concerns to youth ranging from health, politics and education. The structure of these sites is same from allowing users to create personal profiles, while connecting with other users, posting and uploading of contents such as information and photographs at any given time (Pempek, Yermolayeva, & Calvert, 2008) and creating values for businesses. The social media platforms by their nature have the capabilities of promoting, educating, informing, entertaining and inflaming the audience. Above all, they possess a contagious and outreaching influence which the conventional media lack. This potential is most likely what Osahenye (2011) refers to as unstoppable power of the social media.

In recent time, the transformational power of SM has advanced beyond for social interaction to include promotion of business, education and politics to healthcare and other information need. The concomitant realization is that institutions and organization have discovered this platform to be a key vehicle to promote, transform, enhance and change consumer behavior in society. The increasing acceptance and participation of greater number of youths has altered its intent, hence it is has become a powerful source of other information today. Although there is a great deal of interest in using social media platforms as a tool for public health communications, the research evaluating its utility is still in its infancy. There is an abundance of both informal health conversations related to

public health issues and organized health-related activities on leading social media platforms such as YouTube, Twitter, and Facebook. The quality of health information available to users on these platforms is highly variable raising some concerns that social media users are exposed to unopposed viewpoints that counter core public health recommendations and contemporary medical science, such as those opposing immunization and promoting smoking (Obukoadata & Abuah, 2014). These concerns are endless more because of unrestricted access to post contents that contradicts established protocols.

2.1 Youth participation in the social media

Based on United Nations classification, youths constitute people less than 35 years of age. Demographically, youths make up bulk of developing country population with the highest prevalence of malnutrition. In addition, they provide potential demand and pool of skills to confront challenges and meet sustainable development goals such climate change, reduction in environmental waste among others. According to 2008 Nigeria Demographic and Health Survey, they represent more than 55% of the total population and constitute a large consuming population and market for goods and services. This by implication means that their consumption power could negatively affect the environment in either positive or negative way. Given this, they are the power of sustainable development. To effectively do this, they require knowledge of what

works, and social media provides a vehicle to access large amount of information following deregulation of many developing nations telecommunication sector.

Evidence has shown that the youth constitute a bulk of social media users (Wiley & Sisson, 2006). This apparently is a direct result of the fact that the internet is dominated by young people (Salako & Tiamiyu, 2007). Statistics globally have continued to show a positive link between youth and technology especially use of internet. This fact may be attributable to early exposure to technology and dynamic multimedia character which lends itself to all manner of uses and users. And given that the youth are naturally adventurous, willing to experiment on all manner of innovations, the internet mesh perfectly into this lifestyle. The validity of this fact has been empirically demonstrated in relation to various climes including Nigeria. Even a mere casual observation is likely to convince one that Nigerian youths constitute the core of the internet-using population in the country. A significant segment of the youth users of the internet in Nigeria are students, both of secondary and tertiary levels of learning (Salako & Tiamiyu, 2007).

Given the above and its implications on national development, it will be suicidal to consider a growing appeal to harness the resourcefulness of SM in promoting nutritional and dietary information without shared cooperation and responsibility from younger generation. This is because youth represent the hope of the future of any nation or society.

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2.2 Empirical review

The influence of SM on behaviour has been a subject of interest among social policy makers. Several researchers have written extensively on the subject matter. Njoroge (2013) conducted a study that sought to find out the impact of social media among the youth on behavior change in Kenya. The goal of the research was to address the impact of SM on the Kenyan youth especially university students on various SM platforms and its consequences on their behaviour. The study revealed that the youth in Kenya use social media a lot and they spend more time on the computer (on an average they spend 2-5 hours a day on the computers). Majority of the student spend more time surfing the internet, and more time is expended on Facebook, WhatsApp and Twitter. Most of these respondents used their mobile phones to access the internet especially on WhatsApp - a mobile phone application. Furthermore, the result shows that younger people prefer technology enabled means of communication than the traditional method. This is because messages are received real time, faster and more convenient.

The study further revealed that social media had various effects on the behavior of the respondents. For instance, it is indicated that, 63% either agreed to a large extent or to a very large extent that social networks help them in maintain contacts with old friends and create new friends. This finding is consistent with Livingstone (2008) who posited that, social networking sites enable communication

among ever-widening circles of contacts, inviting convergence among the hitherto separate activities of email, messaging, website creation, diaries, photo albums and music or video uploading and downloading. One major negative drawback to this finding is the revelation that SM makes the youth lazy and most of them admitted to a waste of time that would otherwise have gone into other productive activities like reading.

Adum, Ekwugha, Ojiakor and Ndubuisi (2016), investigated social media participants' response to health posts on epidemics. The study seeks to measure influence of information obtained from SM platforms on participants beliefs and actions regarding epidemics in South-east Nigeria. The study revealed that the influence of SM, going by the position of the media system dependency perspective, would be even stronger in urgent, threatening and uncertain situations such as epidemic outbreak, as people are likely to be under pressure to relieve their uncertainty, hence their ready recourse to the media for information and guidance (Baran, 2010). The experience of Nigerians about salt therapy during the 2014 Ebola epidemic reinforces the influence of SM during emergency situations (Obukoadata, & Abuah, 2014). Consequently, there is an urgent need for health communicators and policymakers to begin to appreciate the place of social media in informing and influencing the health choices of people. Larsen (2010) conducted a research to examine the ways adolescents find and make sense of nutrition information,

giving special attention to the role of the internet in that process. Adolescents' behaviors and opinions relevant to finding nutrition information were investigated using Kuhlthau's (1993) iterative model of information-seeking as a theoretical foundation. Since many skills are required to search, engage with, and use online information sources and information, the information-seeking process was investigated in relationship to an applied context of eHealth literacy (Norman & Skinner, 2006), referred to as eNutrition literacy. From six in-depth interviews and a brief paper-and-pencil questionnaire with seventy-nine adolescents aged 12-16 two trends emerged: 1) these adolescents were primarily presented with and fulfilled nutrition information needs in formal settings such as school and 2) these adolescents used the internet to fulfill primarily personal needs. Therefore, a conflict existed between the ways they used the internet and the ways they were presented with a nutrition information-seeking task. Nutrition-specific information literacy, media literacy, health literacy, and scientific literacy, created challenges in stages of the information-seeking process as well. Fundamentally, this affected their overall engagement with online nutrition information and their ability to receive the maximum benefits from the online information-seeking process.

Ayodele, Wambui, and Ndeti (2017) carried out a study to evaluate factors that affect use of social media for HIV and AIDS communication among federal university undergraduates in

South western Nigeria. The study seeks to examine the usefulness of social media in HIV and AIDS information and communication machinery. The study adopted a cross-sectional research method and revealed that blogs (41.1%), twitter (25.4%) and WhatsApp (17.7%) were the social media sites preferred by male and female respondents for sharing and accessing HIV and AIDS information. The use of these social media sites for HIV and AIDS information communication was influenced by privacy and neutrality. It also showed that majority of the undergraduates affirmed that HIV and AIDS information on social media platforms was very useful because it facilitated access to quality tips on HIV. A significant percentage of the respondents also affirmed that the use of social media was hugely affected by epileptic nature of power supply, poor network connectivity, ICT skills and cost of subscription. The study suggested the campaign on prominent HIV/AIDS discussion sites and ICT skill acquisition to enable youth to connect and effectively make use of social media for HIV information communication

3.0 Methodology

The study adopted a survey research design given its insight into behavior of the respondents of interest. The study was carried out in Michael Okpara University of Agriculture, Umudike (MOUAAU), Abia State, Nigeria. The University is one of the three specialized universities of agricultural in Nigeria established in 1992. The choice of this MOUAAU is both for convenience

and strategic reasons. It is a federal university that comprises students from various cultural and ethnic background, which gives the study the needed diverse opinion to make informed conclusion. This is also one public institution where it is possible to find youths from varying background. Importantly, more than 90 percent of students in MOUAAU fall within the age bracket of youths. This makes the choice of the university very apt for this study.

In addition to the above, MOUAAU is surrounded with other sister federal and state institutions such as National Root Crop Research Institute (NRCRI) and National Open University of Nigeria (NOUN) and Abia State University, Uturu (Umuahia Campus). This therefore makes this location very important and strategic for this study.

Given the large population of MOUAAU and to ensure that all students have equal chance of selection, the study adopted a multi-stage sampling technique. The first stage involved a purposive selection of six (6) Colleges from the nine (9) Colleges in MOUAAU. The second stage involved a random selection of four (4) departments, one from each of the six Colleges, while the third stage involved the selection of forty (40) students from different levels comprising 20 students for each gender. This aggregates the total sample size for this study at 240. This method no doubt involved element of authors discretion in order to select youths that are competent to give the right information on the subject matter. This did not in any way invalidate the outcome of the

study. Out of the total of 240 questionnaires distributed, the study makes use of only 149 (62.08%), after analysis of the responses. Data was sourced with the use of questionnaire designed, pretested and validated by experts to ensure reliability with instrument and subject of interest.

Analytically, the study adopted multiple regression and descriptive statistics to analyze data obtained. The data was analysed with the aid of the computer software, statistical package for social science SPSS version 20. The explicit form of the regression equation is given below

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_8 + U$$

Where

Y = Consumption of nutrition and dietary information (Mean Score)

X₁ = Facebook usage (Mean Score)

X₂ = Whatsapp usage (Mean Score)

X₃ = Twitter usage (Mean Score)

X₄ = Instagram usage (Mean Score)

X₅ = Youtube usage (Mean Score)

X₆ = Google+ usage (Mean Score)

X₇ = LinkedIn usage (Mean Score)

X₈ = Snapchat usage (Mean Score)

U = Error term

4.0 Result and discussions

Available social media platforms and usage among youth

There are various social media platforms available on the internet that specializes on their kind of activities. Their usage depends on a lot of things which includes awareness of such platforms, recommendations from friends/family, personal interest (hobby) etc. Like any other information, it is necessary to identify the most used to enable decision makers design strategies to reach a wider spectrum of the youth with message about a given phenomenon. Table 1 presents the various SM platforms and usage among youths.

Table 1: Social media platforms and usage among youth (n =149)

| Platforms | Very Often | Often | Not Often | Mean | |
|-----------|------------|-------|-----------|------|--------|
| Facebook | 56.8 | 31.8 | 11.5 | 2.45 | Accept |
| WhatsApp | 59.3 | 35.2 | 5.5 | 2.54 | Accept |
| Twitter | 68.4 | 19.5 | 12.0 | 2.56 | Accept |
| Instagram | 37.3 | 41.8 | 20.9 | 2.16 | Accept |
| YouTube | 35.3 | 38.3 | 26.3 | 2.09 | Accept |
| Google+ | 33.3 | 45.0 | 21.7 | 2.12 | Accept |
| LinkedIn | 23.0 | 30.1 | 46.9 | 1.76 | Reject |
| Snapchat | 23.9 | 26.1 | 50.0 | 1.74 | Reject |

Source: Field Survey Data, 2018

Cut-off score: If > 2.0 = Accept as more used, < 2.0 = otherwise reject

Kinds of information youths seek from SM and factors that motivate them

Table 1 indicated that fashion, news report and business are the three major

information these youths seek for in SM. This result is not surprising given that youths are the target of most fashion and entertainment industry. Fashion and entertainment support

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youth positive vibes and lifestyle. Most youths learn their styles from their role models and other celebrities on SM. Observable evidences on the internet shows that most youth finds SM as a platform to showcase their talents and business. They are using such platform to advertise their businesses and look for contacts too. This has severe implication on harvesting nutritional information for positive outcome. This

is because you do not dedicate time and resources to ventures you are not interested in. This may have been partly responsible for negative lifestyle of youths in our society. The energy of the youth is important in the fight for malnutrition. Hence it is vital to understand what appeals they seek for in SM and redesign strategies that will enrol them into the path of dietary transition for the good of all.

Table 2: Information need of youths from SM

| Information | Mean | Rank |
|----------------------|-------------|-----------------|
| Fashion | 1.3379 | 1 st |
| News Report | 1.3379 | 1 st |
| Business information | 1.3356 | 3 rd |
| Health | 1.3333 | 4 th |
| Education | 1.3239 | 5 th |
| Relationship | 1.3219 | 6 th |
| Chat | 1.3169 | 7 th |
| Entertainment | 1.1879 | 8 th |

Source: Field Survey Data, 2018

Of course, nothing happens in a vacuum. Certain forces motivate and change behaviour to action (Kotler & Armstrong, 2008). The decision to seek for more information is motivated by certain forces which is presented in Table 2. The major reason is learning. According to Nto, Mbanasor and Ihendinihu (2010), education is a propelling force to the adoption of an innovation and leads to positive change in the environment. This reinforce the view of Kotler expressed above about learning. Experience is acquired through the process of learning and doing things. Although there may be seemingly difference between experience and education, their relationship is not in doubt. Experience is acquired through formal and informal education. This

implies that millennials acquire experience through learning, consciously or unconsciously. This result is anchored on the importance of carrying out this study in a higher institution of learning to highlight the goal of literacy and education qualification of these youths. The importance of education in achieving the learning process cannot be over-emphasized. Education is the pathway through which the goal of awareness creation can be realized. The finding is in line with other studies such as Oteh, Ibok and Nto (2017) and kolkaih, Chio and Hume (2012). Other factors that motivates their information search are personal gain, recommendation by experts, community and social engagement.

However, it is important to note that learning is a relative word. Its meaning is peculiar to situations. Students are exposed to many activities that may not be nutritionally related. It becomes important to optimize nutritional information channels that meet their information need. The ranking of learning and personal gain makes the consideration of emarketing tools to ensure visibility of nutritional information very vital. Importantly, recommendation by expert remains one pathway to bridging information gap due to the trust and power element in the expert.

The implication of the recommendation from expert is that a product/service information source is key in consumer perceptual learning development. This is because channel of product information is assumed to provide inputs on product description, which aids in evaluation of the product based on the following source characteristics - expertise, trustworthiness, and attractiveness. The source of a product message affects its credibility and image (Kotler & Armstrong, 2008). From the perspective of persuasion theory, source is important given that it enhances the value of information in a message (Solomon, 2011).

Table 3: Factors that motivate youths to seek such information

| Factors | Mean | Rank |
|---------------------------------------|-------------|------------------|
| Learning | 0.95 | 1 st |
| Personal gain | 0.95 | 1 st |
| Recommendation by experts | 0.93 | 3 rd |
| Community interest | 0.88 | 4 th |
| Social engagement | 0.86 | 5 th |
| Altruism | 0.84 | 6 th |
| Empathy | 0.83 | 7 th |
| Social Network (peer group influence) | 0.83 | 7 th |
| Enjoyment | 0.81 | 9 th |
| Reputation | 0.56 | 10 th |
| Reciprocity | 0.50 | 11 th |

Source: Field survey data, 2018

Social Media platforms and their effect on nutritional information consumption.

Table 4 is a reconfirmation of Table 1. It highlights the platforms that will guarantee the best outcome for nutritional and dietary information among youths in the study area. The

result posted R^2 of 0.947, which implies that about 95% of the variations observed in the dependent variable (consumption of nutritional and dietary information) were accounted for by the independent variables included in the model, with an equally statistically significant F-value of 310.228.

Table 4: SM Platforms and their effect on consumption of nutritional and dietary information

| Variables | B | T-value |
|----------------|------------|-----------|
| Constant | 0.888 | 8.281*** |
| Facebook | 0.894 | 8.801*** |
| WhatsApp | 0.356 | 4.326*** |
| Twitter | 0.051 | 2.043* |
| Instagram | 0.096 | 3.641*** |
| YouTube | -0.486 | -4.636*** |
| Google+ | 0.002 | 0.200 |
| LinkedIn | 0.095 | 1.596 |
| Snapchat | -0.077 | -1.282 |
| R ² | 0.947 | |
| F-ratio | 310.228*** | |

Source: Field Survey, 2018

*** = Significant at 1%, ** = Significant at 5%, * = Significant at 10%

From the result, Facebook, WhatsApp, Twitter and Instagram were significant and positive in influencing consumption of nutritional and dietary information among youth while YouTube was significant but with a negative sign.

Both Facebook and WhatsApp were positively significant at 1% confidence level, implying that these platforms are strong in influencing information because users are mostly connected to sources that they trust who could be family, friends and others. This result is in line with Morris et al., (2011), who has a similar outcome. They posited that Facebook holds a great potential to influence individuals' health behaviors by shaping their perceptions of social norms and the expectations that they set for themselves, or by improving their access to personally relevant information. Again, Maged, Dean and Steve (2016) observed that WhatsApp could involve groups members who holds and receive information relevant to their health needs. This information could range from healthcare services

and health-related motivational messages on dietary transition, coaching lifestyle tips among others. Ayodele et al., (2017) confirms the use of SM in modifying behaviour and passing information about HIV/AIDS. The benefits are endless.

Although Twitter was significant at 10% level. It shows that it is equally has a strong relationship with consumption of nutritional and dietary information among youth. Many institutions that are waging war against malnutrition are active on Twitter such as Global Alliance for Improve Nutrition (GAIN), Bill Gates Foundation, Food and Agriculture Organization (FAO). Their presences have in no small measure continue to improve interaction and education about nutrition literacy, food safety and nutrition security. It is equally important to mention that these institutions are also active on other platforms such as Facebook. This agrees with studies by Freifeld *et al* (2014); and Han and Kavuluru (2016); who demonstrated Twitter's potential in

improving health literacy. The significant level of Instagram reconfirms the study by DeMers (2017) that the platform is very vital in engagement in contrast to Facebook. This may be due to the fact comparative study shows that age of Instagram audience is younger than users of Facebook based on report of 2nd Quarter Sprout-Social Index. Although this is controversial, it may be right to argue that both platforms are not mutually exclusive of each other in pushing for a better nutrition and diet outcome in their little ways.

The negative significant level of YouTube highlights that the platform may not be a good platform to consume nutritional and dietary information in the study area. The platform is mostly associated with movies and videos. In most cases, these youths are reluctant to expend their internet data watching video in this platform because of high data consumption. Therefore cost increases negative perception of streaming/watching videos. An average Nigerian is cost/price sensitive. This is also true about data cost.

Conclusion and recommendation

Today, SM and its platforms can be used for a lot of things; from business to politics, advocacy to marketing and not very recent nutrition promotion and health outcome. No doubt, SM platforms will continue to witness improvement and enhancement to promote SGDs and more specifically Agenda 2030. Among the many platforms, Facebook, Twitter and WhatsApp stand out as the most widely used in the study area. This is

complemented with YouTube and traditional methods of communication. SM has shown over the years that it is complementary communication machinery and effective tools in promoting and changing consumer behaviour and also a bridge in managing millennial expectation and modifying these expectations. However, unlike its utilization among youths for fashion, news report and business information, it can be use much more for other purposes such as promoting and advancing nutrition and dietary outcome in our society. SM platforms therefore provide a learning ground for promotion, educating youth and old about health and nutrition which is an important element of the SDG. It is however, important to highlight that expert advice is vital in pushing for nutritional information. This is because of their knowledge, credibility and expertise about subject matter and prevalence of fake news common in this platform. Unfortunately, one cannot give what does not exist hence it is important to create awareness about this information, source and link where necessary.

It is on the strength of the findings that the study recommends that since the influence of SM platforms are positive, firms can tap its youthfulness to improve knowledge and exposure. Therefore, experts can leverage on it, but must find a strong appeal that mesh into youths existing lifestyle to relate nutritional and dietary information to promote consumer familiarization, knowledge and change behaviour for a positive outcome. In addition, it is

important for government to improve regulatory policy and accommodate more network operators to create room for more competition that could improve service delivery and cost. Regulatory agencies and services operators and other stakeholder need to work together to improve image of SM especially with regards to fake news and

provide more trusted channels for nutrition literacy and education to achieve SDGs.

The youth as the future should look beyond fashion and be open to other possibilities that SM presents. The use of celebrities to highlights and recommends nutrition information is also recommended in this study.

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Accounting Software and Resolution to Financial Insolvency in Nigeria: A Meta Analysis

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Abstract: Financial insolvency is important for sustainable national growth. This can be resolved through liquidity management, which is very important in any organization in terms of the organization's current assets, current liabilities, short-term borrowings, and management of shortfall or surplus cash for short-term periods, which affects the company's profitability. Liquidity management should be the company's goal of working capital management. Such idle cash can be used to invest in another company or diversifiable venture that are profitable. Accounting software or accounting information system is a resolution to financial insolvency in which it captures and records the financial effects of transactions. Accounting Information System (AIS) assists managers in four problem-solving stages, which are recognizing the problem, identifying alternatives, assessing the alternatives and taking managerial decision. The methodology employed for this study is Meta-analysis. The sample size employed was 30 literatures. The overall combined relationship had a P-value of .0000 indicating an overall significant level. Insolvency practice and its regulation is critical to economic development. This is especially true in the light of the unintended consequences of globalisation that may result in economic shock and business failures. Nigeria can benefit from reforms in financial insolvency by benchmarking the reform and practice initiatives of the more advanced countries within and outside Africa.

Keywords: Accounting software, Accounting information system, Financial insolvency, Liquidity Management.

1.0 Introduction

The improvement of sustainable national growth and development in a progressive world is a continuous challenge for developing economies such as Nigeria. Globalization has brought about the internationalization of businesses, increased international trade, cross-border flow of credit, and the inevitability of some business failures and insolvencies (Okoye & Nwaigwe, 2015; Barnard, 2016; Omoregie, 2017). The institution of robust and efficient insolvency is thus another important tool for improving the prospects of development in Nigeria.

Financial insolvency occurs when a company or a person is in a situation of being unable to pay money owed. Financial insolvency can be categorized into cash insolvency and balance sheet insolvency. Cash insolvency occurs when a person or a company has enough assets to settle debts owed but does not have enough cash or appropriate form of settling the debt while balance sheet insolvency occurs when the company or person does not have enough assets to settle the debt owed. The difference between cash insolvency and balance sheet insolvency is that in balance sheet insolvency, the person or company may be declared bankrupt while cash flow insolvency may be resolved through negotiation of the debtor and the lender until the asset is sold and the debtor is willing to pay a penalty.

Liquidity management is very important in any organization in terms of the organization's current assets, current liabilities, short-term borrowings and management of shortfall or surplus cash for short-term periods, which affect the company's profitability. Liquidity should be the

company's goals of working capital management (Pandey, 2010; Orshi & Yunusa, 2016; Sandhar and Janglani, (2013)). It revolves around the component of working capital management which include management of inventory, receivables, cash and short term securities and also the organization's current liabilities.

It also has to do with the timely investment of excesses into short marketable securities after inventory and receivables have been timely converted into cash for the timely payment of accounts payables. Lamberg, and Valming (2009) supported that it involves eliminating unnecessary and expensive short term financing, speedy collection and investment of excess cash and receivables. The scholars opined in the process of speedy collection and investment of excess cash when it entails liquidity management, organization should avoid illiquidity or excess liquidity. Zygmunt,(2013) supported that illiquidity is highly risky in any organization in which it creates a company's bad image in the business world and even loss of creditor's confidence leading to high cost of debt for the organization. In the banking sector in Nigeria, illiquidity makes the depositors to lose confidence, which may result in the disruption in the going concern of any banking institution. The banking sector is the pillar of any industrial sector because it is an institution that serves as a link between the surpluses of cash and providing such funds as debts to the industrial sectors. Excess cash is also not good when it comes to liquidity management or working capital management of an organization. Management efficiency and profitability management are positively related such that any poor or inefficient

management of current profitability of the organization may threaten current management efficiency and vice versa and also lead to bankruptcy (Sandhar *et al*, 2012; Owolabi & Obida, 2012).

Furthermore, in Nigeria, there have been huge corporate financial distress in the industrial and banking sector of high non-performing loans, insolvency and illiquidity, low capital base, overdependence on public sector deposits, poor assets quality and weak corporate governance system. According to Okorie and Agu (2015) cited in Campbell and Asaleye (2016) the banking sector depicted a system of low depositor's confidence at 25percent of the national gross domestic product compared to Africa's average of 78% and 272% for developed countries

The problem of bankruptcy according to Ramana *et al* (2012) is that of poor or inexperienced management, fraud changes, the taste of the management and changes in the taste and preferences of customers. Viasta and Jasenka (ND) opined that accounting software or accounting information system (AIS) is a resolution to financial insolvency in which it captures and records the financial effects of transaction. In modern accounting information system, useful financial and non-financial can be obtained for aiding efficient decision making for both internal and external users. The authors opined that it comprises of the transaction processing system (TPS) which deals with various operations of the business with many documents and messages for users throughout the

company, the financial reporting system or the general ledger (FRS or GL) which contains features of traditional financial statement such as balance sheet, statement of cash flow, income statement, tax return and other financial report mandatory by regulations and also the management reporting system (MRS) which deals with the special-purpose financial report used by the internal management of an organization in aiding managerial decision

AIS is employed to keep track of competitive organizational environmental forces. Wise companies constantly reexamine their organizational strategies to reengineer to modern accounting system in order to adapt their business to the risk and conditions of the world market. Modern accounting system is needed by fast growing organizations to keep track with fast changes all the time, fast growing companies need sufficient source of financial and non-financial information to support daily decision making of the management (Kallunki, Laitinen & Silvola, 2011). According to Hall (2008), the major task of accounting and accounting information system is to provide adequate information for the requirement of tax administration, various managers for liquidity management towards the attainment of the overall objective of the organization. it helps managers at all levels to solve managerial problem and processes and also financial analyst for informed prediction. The information derived from AIS assist managers in four problem-solving

stages which are recognizing the problem, identifying alternatives, assessing the alternatives and taking managerial decision.

Fast growing companies and large organizations prefer independent AIS platform because of the complexity of software programming languages and their standardized information needs. According to Granlund (2011), the information needs of an organization are anchored on whether the company should develop customized system from the beginning engaging in-house systems development activities or buy from the software vendor already programmed or preprogrammed commercial systems. In choosing a commercial software, it is important to understand the business model, consult other businesses using the software and weigh the budget of the management to decide whether to customize a software from the scratch to fit in the business model.

In buying a commercial software, it is important for such commercial software to firstly be able to have basic features on inventories, invoicing, is the software easy to use or understand, what are the after sale service of the software vendor, is the software needs just once subscription or license fees, the openness of the API towards integrating to other software or business tools. This study is to determine the effect size of various literatures of scholars on accounting software or accounting information as a resolution to financial liquidation

The major problem of this study is that there are various studies on accounting

software and resolution to insolvency in other sectors and contexts but there are inconsistencies in the impact of accounting software as a resolution to insolvency in Nigeria.

2.0 Literature Review

Accounting software has never been static, the historical perspective of accounting software has been excavated by Eamonn (2012) from 1974 when accounting was performed manually on a paper-based trial balances and rapidly transformed into spreadsheets on Lotus 123 as the original double entry system during the early era of PC. During this era, Turbo Cash was launched around 1987 with an automated system for trial balance, balance sheet. It took 15 days of consolidating ledgers. It was the first software for consolidating trial balance and this software was limited with some important features like calculating tax or invoicing for organization.

Later the first era of accounting software was revolutionized from 15 day process of consolidating ledgers was reduced to minutes and seconds. Important features were included to calculate client tax and invoices and also web-based software where accounting information can be stored and integrated with other API or mobile device. This greatly had a great impact in the reporting of financial information to its various users but before this revolutionized era of accounting software, DOS based accounting systems were highly stable, but lacking in updating features Eamonn (2012).

Accounting has now become more inventive in the form of business intelligence (BI) and also clouds computing in which financial information is being stored in the cloud. In this era, accounting software has revolutionized beyond just mere accounting packages of inventory and client's invoices. Accounting software in this period according to Lea (2007) can now integrate with each other, in which other non-accounting features similar to enterprise resources planning, Customer relation management CRM and Point on sale POS are been added. This additional functionalities been added to accounting software made it more intuitive to multi users beyond just accounting users. Business intelligence has globally become a major factor in the business world, in which the smallest system need to adopt as a major feature to be included as a standard in developing an intuitive software like data mining, dashboards, monitoring business transaction and alerts to features for upselling and giving staff real ways of improving sales. According to Chapman and Kihn (2009) it captures the global wind of change with the inclusion of internet and mobile devices integrations know as cloud computing. The increasing number of mobile users have greatly influence the developing of accounting software in providing mobile resolution to financial management and insolvency.

In the sphere auditing world, cloud computing has great influence on bigger auditing firms in which a client

in Nigeria can be audited by an audit firm in the United Kingdom. Cloud computing allows audit firms to perform their audit engagements as an independent operation. It also allows audit firms to interact with the client on terms of engagement (Alzolu, 2011; Kamil, 2012). After the terms of engagement have been agreed and next the audit clerk visits the client, the audit clerk is opportuned to take with them the client's financial and tax data on a phone or tablet. This allows facilitation of closer relationship with client through interaction, which reduces agency cost.

Accounting software infiltrating business software to make it highly intuitive to multi-users has numerous advantages especially towards the resolution to financial insolvency of organizations in Nigeria in terms of controlling economic activities of the organizations. Accounting software fosters easy correction of nonconformity and Brynjothson and Hin (2003) empirically discovered that accounting software and investment in IT has a positive effect on productivity growth in the long run. Also in the empirical study of Akanbi (2017), he supported that accounting software and IT influences organizational performance positively.

Furthermore, according to Hall (2008), there are various kinds of commercial software which are turnkey, backbone and vendor supported system. Turnkey system are systems that are regarded as tested system. This is a general purpose system ready for implementation and are customized to support a specific

industry. This system allows the use of canned or off-the shelf system and are designed to have built-in software that permit the organization to use menu choices to customize input, output and processing. Examples of turnkey commercial system are Oracle, SAP, J.D Edwards and PeopleSoft. Commercial software that aid basic system structure on which the company can build the vendor design and user interface to suit the client's unique needs is called backbone system. Backbone software are regarded as a compromise between the turnkey system and the custom system which produce very satisfactory results but the disadvantage of this system is that system customization is very expensive for small enterprise. This customized system from the beginning engaging in-house systems development activities and it is very costly to build Otieno, Polo. & Oima, 2013). Vendor supported system are systems which the organization purchases rather than develop in -house to capture the business model. The difference between Turnkey and Vendor supported system is that the Turnkey system permits the organization to use menu choices to customize input, output and processing, but for Vendor supported system, the vendor does not only design the software but implements and maintains the vendor system. This system is suitable for companies with complex system requirements that do not have sufficient magnitude to explain retaining an in-house system development staff (Oladipupo, & Ajabe, 2013).

3.0 Methodology

This paper tried to investigate the effect of accounting Software on its resolution to financial insolvency in Nigeria using Meta-Analysis Version 3. The pivotal purpose of Meta-analysis is to translate diverse outcomes empirically measured into a common standardized scale that can be combined for many different statistical tests, such as means, variances and correlations. The sample size for this study is 30 scholarly literatures. Accounting information system is an accounting software which helps in the management and control of economic or financial aspects of the organization. It is incorporated into the field of Information and technology which assists in transforming raw financial data into financial information which can now be useful for various stakeholders in making qualitative decision making (Wilkson, Cerullo, Raval & Boulianne, 2000).

Scholars have argued about the impact of accounting information system in an organization. Langfield-Smith (1997) opined that proper design of accounting information system helps in the increase of organizational performance. Bowens and Abernethy, (2000) also opined that it can be used by organizations as a leverage for meeting a solid and more flexible corporate culture in any dynamic business environment. AIS is used to record and process accurately financial transactions leading to better reporting of financials to the various stakeholders. It combines the methodologies, controls and accounting

techniques and innovative technology of IT to track business transactions and provide financial information that will be used by the management for internal controls' decision making and also external reporting information through the preparation and presentation of financial statement by the management to the various stakeholders (Mahdi, 2010)..

Nicolaou (2000) emphasized on the importance of AIS on internal control system in an organization. the accounting information system aids in better internal control system,

improvement in the quality of decision making, better quality of accounting information and reporting and evaluating the performance of the organization, staff and the environment in which the business operates.. It is important to use the AIS to not just evaluate the business performance but also evaluating the performance with the various stakeholders like debtors, creditors, shareholders etc. in order to early detect financial insolvency in the organization and also the liquidity level of the business.

Benefits of Accounting Software of Accounting Information System



Source: Researchers Study (2019)

AIS has now become a tool which is incorporated to gain competitive advantage for easier and accurate tracking of financial information, processes of raw data into qualitative financial information which is now reported by the management to the various stakeholder in which the

business is affecting. According to Haigh (2011)It AIS have now a critical tool employed by the management of an organization to easier achieve organizational strategic success towards attaining organizational overall objective.

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To support this argument empirically, Chang (2001) found out that AIS specifically not only improves the performance of an organization but also support management’s chosen strategy Hunton, (2002) found out that there is a strong relationship between accounting information and business effectiveness which implies that exposure to sophisticated accounting software will foster the effectiveness level of the organization. AIS provides information in making credit and investment decisions by providing useful information concerning the effective usage of the financial resources.

In the study of Maria (2016), the author discovered that management accounting software has a significant influence on the method of direct cost distribution and the association on the way in which the valuation of product was comprehended. In the study of Martins, Carolyn and Pekka (2006) of an Empirical analysis of software productivity discovered that business type or application domain had a key impact upon productivity. In the work of Mahdi (2010), the study discovered that although accounting information system is very important to Iranian companies, there is a gap amid what AIS is and what is ought to be in Iran.

4.0 Meta-Analysis, Results and Discussion of Findings

Empirical Summary (Meta-analysis)

| Title | Author | Variable | Sample | Correlation |
|---|------------------------------|--|---------------|--------------------|
| Accounting information system for management decision | Viasta, Roska & Josenka (nd) | Size of an enterprise and the system of AIS considering the source of its purchase | 116 | 0.820 |
| Management accounting system | Maria (2016) | Relationship between the design process of indirect cost allocation method and conditioning phenomenon | 58 | 0.954 |
| The usefulness of accounting information on financial instrument to investor assessing non-financial companies. An empirical analysis on Bucharest stock exchange | Maria (2015) | Relationship between price and accounting information (financial asset) | 23 | -0.168 |
| Usefulness of accounting information system | Mahdi (2010) | Hypothesis 4: Accounting information system | 498 | 0.981 |

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|--|--|--|-----|--------|
| in emerging economy Empirical evidence of Iran | | confirms with other financial and managerial system | | |
| The impact of using accounting information system on the quality of financial statement submitted to the income & sales Department in Jordan | Ahmad (2010) | The impact of using accounting information system on the quality of financial statement submitted in the income tax and sales department | 14 | 0.221 |
| Design and implementation of activity based costing system | Rong, Thomas, Wen (2009) | Productive volume | 39 | 0.076 |
| An empirical analysis of activity based costing in Chinese enterprises | Huijuan, Yangun and Wanxin (2006) | The relationship between the implementation content and the cost of the project (direct material) | 12 | 0.587 |
| An empirical analysis of firms implementation experiences with activity based costing system | Michael & Shields (1995) | Top management support | 143 | 0.61 |
| Activity based costing diffusion across organization: An exploratory empirical analysis of Finnish firms | Teemil (1999) | Existing system not visible | 34 | 0.18 |
| Barriers to adopting activity based costing system (ABC): an empirical investigation using cluster Analysis | Fawzi (2008) | Innovation and outcome | 77 | 0.80 |
| The choice of cost drivers in ABC application at a Chinese oil cementing company | Hangzbou, Fei, Dinghua and Thomas (2010) | Number, depth and distance | 40 | 0.5833 |
| Activity based | Manoj & | Return on net worth | 53 | 0.054 |

| | | | | |
|---|--|--|------|--------|
| costing management practice in India | Salhay (nd) | | | |
| An empirical study of accounting software acceptance among Bengkulu city student | Sriwidharmanely & Vina (2012) | Attitude towards using accounting software | 122 | 0.0545 |
| An empirical analysis of software productivity | Martin (2006) | Size | 700 | 0.63 |
| Utilizing a typology of management accounting change: an empirical analysis | Suzana & Falconer (2005) | Introduction of new technology | 92 | 0.019 |
| Application of accounting software: an empirical study on private universities of Bangladesh | Mohammad, Mohammad, Mohammad & Adhan (2015) | Application of accounting software | 47 | 0.80 |
| An empirical analysis of software productivity overtime | Rahul, Barbara & Martin (2004) | Effort | 102 | 0.683 |
| An empirical analysis of vendor response to software vulnerability | Ashish, Ramayya, Rahul, Yubao (nd) | Small | 1469 | 0.80 |
| Empirical analysis of software evolution profiles and outcome | Evelyn, Sandra & Chris (nd) | Package | 21 | 0.0346 |
| An empirical analysis of malicious internet banking software behavior | Andre, Vitor, Victor, Daio & Mario (2013) | Stealing patterns | 1.53 | 0.946 |
| An empirical analysis of end user participation in software development project in a developing country context | Boluwuji, Faith, Stephen, Elijah, Paula (2013) | End users IT skill level | 150 | 0.335 |
| Determinants and | Carol, Robert | Case mix | 1150 | 0.118 |

| | | | | |
|--|-----------------------------------|--|--------|--------|
| consequences of management accounting system choice: an empirical analysis | (1994) | | | |
| The declining value relevance of accounting information and non-information based trading: an empirical analysis | Alex (nd) | Non- information based trading volume | 149888 | 0.90 |
| An empirical analysis of relative predictive strength of different factor in estimating software errors | Usma, Ali (nd) | Software errors | 80 | 0.90 |
| Bayesian analysis of empirical software engineering cost model | Sunita, Barry, Bert (1999) | Analyst capability | 161 | 0.7339 |
| An empirical analysis of the institution of unit test smells and their impact on software maintenance | Gabriele, Abdallah, Rocco, Andrea | System characteristics & test smell | 18 | -0.15 |
| An empirical analysis of the effect of criticality, complexity and organizational influences on software reliability | Paul, Jon, Annc (2000) | System criticality | 20 | 0.505 |
| An empirical evaluation of accounting income number | Ray, Philip, (1987) | Net income | 100 | 0.07 |
| Accounting control system and business strategy: an empirical analysis | Robert. (1987) | Relationship between ROI and control system | 64 | 0.08 |
| Computerized accounting in Ghana. The shift | Kojo, Isaac, Evans (2018) | Manual accounting is cheaper than computerized | 43 | 0.744 |

| | | | | |
|--|--|------------|--|--|
| from books to benefits and challenges associated with the transition | | accounting | | |
|--|--|------------|--|--|

Table 1 Fisher Z and Standard Error

| Variable | Sample | Correlation | Standard error | Fisher Z |
|--|--------|-------------|----------------|----------|
| Size of an enterprise and the system of AIS considering the source of its purchase | 116 | 0.820 | 0.034 | 1.157 |
| Relationship between the design process of indirect cost allocation method and conditioning phenomenon | 58 | 0.954 | 0.135 | 1.874 |
| Relationship between price and accounting information (financial asset) | 23 | -0.168 | 0.224 | -0.170 |
| Hypothesis 4: Accounting information system confirms with other financial and managerial system | 498 | 0.981 | 0,045 | 2.323 |
| The impact of using accounting information system on the quality of financial statement submitted in the income tax and sales department | 14 | 0.221 | 0.302 | 0.225 |
| Productive volume | 39 | 0.076 | 0.167 | 0.076 |
| The relationship between the implementation content and the cost of the project (direct material) | 12 | 0.587 | 0.333 | 0.673 |
| Top management support | 143 | 0.61 | 0.085 | 0.709 |
| Existing system not visible | 34 | 0.18 | 0.180 | 0.182 |
| Innovation and outcome | 77 | 0.80 | 0.116 | 1.099 |
| Number, depth and distance | 3 | 0.5833 | 0.164 | 0.667 |
| Return on net worth | 53 | 0.054 | 0.141 | 0.054 |
| Attitude towards using | 122 | 0.0545 | 0.092 | 0.055 |

| | | | | |
|---|--------|--------|---------|--------|
| accounting software | | | | |
| Size | 700 | 0.63 | 0.038 | 0.741 |
| Introduction of new technology | 92 | 0.019 | 0.106 | 0.019 |
| Application of accounting software | 47 | 0.80 | -0.1`51 | 1.099 |
| Effort | 102 | 0.683 | 0.101 | 0.835 |
| Small | 1469 | 0.80 | 0.026 | 1.099 |
| Package | 21 | 0.0346 | 0.236 | 0.035 |
| Stealing patterns | 153 | 0.946 | 0.082 | 1.792 |
| End users IT skill level | 150 | 0.335 | 0.082 | 0.348 |
| Case mix | 1150 | 0.118 | 0.030 | 0.119 |
| Non- information based trading volume | 149888 | 0.90 | 0.003 | 1.472 |
| Software errors | 80 | 0.90 | 0.114 | 1.472 |
| Analyst capability | 161 | 0.7339 | 0.080 | 0.937 |
| System characteristics & test smell | | -0.15 | 0.258 | -0.151 |
| System criticality | 20 | 0.505 | 0.243 | 0.556 |
| Net income | 100 | 0.07 | 0.102 | 0.070 |
| Relationship between ROI and control system | 64 | 0.08 | 0.128 | 0.080 |
| Manual accounting is cheaper than computerized accounting | 43 | 0.744 | 0.158 | 0.959 |

Fisher's Z transformation is employed to find confidence intervals for both r and the dissimilarities between correlations. But it's perhaps most universally employed to test the significance of the dissimilarity between two correlation coefficient r_1 and r_2 from independent samples. If r_1 is larger than r_2 the Z-value will be positive and if r_1 is smaller than r_2 the Z-value will be not be positive.

Fisher's Z_r transformation can be defined as $ES = 0.5 \log \frac{1+ES}{1-ES}$ where r is the correlation coefficient, and Z_r ES is the corresponding individual or mean Z_r -transformed correlation. Expressed in the forms we

have used for other effect size statistics, the correlation coefficient can be presented as an effect size statistic. From a statistical perspective, effect size values based on larger samples are more precise estimates of the corresponding population value than those based on smaller samples. Once the Fisher's Z_r was calculated, the next step was to measure the actual weights based on the inverse of the standard error value of the squares to produce the inverse variance weight. For convenience in conducting some of the analyses, the researcher may use a Z_r -transformed version of this effect size statistic, then convert the results back

into regular correlation coefficients for interpretation.

Table 2 Meta- Analysis of Accounting and Resolution to Financial Insolvency

| Variable | Sample | Correlation | Lower limit | Upper limit | Z- value | P- Value |
|--|--------|-------------|-------------|-------------|----------|----------|
| Size of an enterprise and the system of AIS considering the source of its purchase | 116 | 0.820 | 0.750 | 0.872 | 12.297 | 0.000 |
| Relationship between the design process of indirect cost allocation method and conditioning phenomenon | 58 | 0.954 | 0.923 | 0.973 | 13.902 | 0.000 |
| Relationship between price and accounting information (financial asset) | 23 | -0.168 | -0.543 | 0.262 | -0.759 | 0.448 |
| Hypothesis 4: Accounting information system confirms with other financial and managerial system | 498 | 0.981 | 0.977 | 0.984 | 51.634 | 0.000 |
| The impact of using accounting information system on the quality of financial statement submitted in the income tax and sales department | 14 | 0.221 | -0.351 | 0.673 | 0.745 | 0.456 |
| Productive volume | 39 | 0.076 | -0.245 | 0.382 | 0.457 | 0.648 |
| The relationship between the implementation content and the cost of the project (direct material) | 12 | 0.587 | 0.020 | 0.868 | 2.019 | 0.043 |

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| | | | | | | |
|---|--------|--------|--------|-------|--------|-------|
| Top management support | 143 | 0.61 | 0.495 | 0.704 | 8.388 | 0.000 |
| Existing system not visible | 34 | 0.18 | -0.168 | 0.488 | 1.013 | 0.311 |
| Innovation and outcome | 77 | 0.80 | 0.702 | 0.869 | 9.451 | 0.000 |
| Number, depth and distance | 3 | 0.5833 | 0.332 | 0.757 | 4.060 | 0.000 |
| Return on net worth | 53 | 0.054 | -0.219 | 0.320 | 0.382 | 0.702 |
| Attitude towards using accounting software | 122 | 0.0545 | -0.124 | 0.230 | 0.595 | 0.552 |
| Size | 700 | 0.63 | 0.583 | 0.673 | 19.574 | 0.000 |
| Introduction of new technology | 92 | 0.019 | -0.187 | 0.223 | 0.179 | 0.858 |
| Application of accounting software | 47 | 0.80 | 0.66 | 0.884 | 7.97 | 0.000 |
| Effort | 102 | 0.683 | 0.562 | 0.775 | 8.305 | 0.000 |
| Small | 1469 | 0.80 | 0.781 | 0.818 | 42.064 | 0.000 |
| Package | 21 | 0.0346 | -0.403 | 0.459 | 0.147 | 0.883 |
| Stealing patterns | 1.53 | 0.946 | 0.926 | 0.960 | 21.951 | 0.000 |
| End users IT skill level | 150 | 0.335 | 0.185 | 0.470 | 4.225 | 0.000 |
| Case mix | 1150 | 0.118 | 0.061 | 0.175 | 4.015 | 0.000 |
| Non- information based trading volume | 149888 | 0.90 | 0.848 | 0.335 | 12.919 | 0.000 |
| Software errors | 80 | 0.90 | 0.848 | 0.935 | 12.919 | 0.000 |
| Analyst capability | 161 | 0.7339 | 0.853 | 0.798 | 11.780 | 0.000 |
| System characteristics & test smell | 18 | -0.15 | -0.576 | 0.341 | -0.585 | 0.585 |
| System criticality | 20 | 0.505 | 0.080 | 0.774 | 2.292 | 0.022 |
| Net income | 100 | 0.07 | -0.128 | 0.262 | 0.691 | 0.490 |
| Relationship between ROI and control system | 64 | 0.08 | 0.169 | 0.320 | 0.626 | 0.531 |

| | | | | | | |
|---|----|-------|-------|-------|-------|-------|
| Manual accounting is cheaper than computerized accounting | 43 | 0.744 | 0.571 | 0.854 | 6.068 | 0.000 |
| Random | | 0.600 | 0.427 | 0.731 | 5.735 | 0.000 |

The study shows a negative lower limit of the relationship between price and accounting information, accounting information system on the quality of financial statement submitted in the sales department, production volume, return on net worth, attitude towards using accounting software, introduction of new technology, packages, system characteristics, and net income. All other variables are positive. The study shows a negative Z-Value of the relationship between price and accounting information, system characteristics and test smell. All others show a positive Z- value.

The P-Value of the study shows the overall significant level. The variable of the size of an enterprise and the system of accounting information system considering the services of its purchase P-value is 0.000 which is not greater than 0.05. The P-Value of the variable showing the relationship between the design process of indirect cost allocation method and conditioning phenomenon is 0.000 which is not greater than 0.05, the P-value of the variable of accounting information system confirm with other financial and management system is 0.000 which is not greater than point 0.05.

P-Value of variance top management support of 0.000 which is not greater

than point 0.05, P-Value of the variable of innovation and outcome is 0.000, P-Value of the variable size is 0.000, P-Value of the variable of application of accounting software is 0.000, P-Value of the variable of effort of 0.000. P-Value of the variable of smell is 0.000. P-Value of the variable of stealing patterns is 0.000. P-Value of the variable of end users IT skill level is 0.000. P-Value of the variable of non-information based trading volume is 0.000. P-Value of the variable of software errors is 0.000. P-Value of the variable of manual accounting is cheaper than computerized accounting is 0.000. The overall combine effect (Random) of correlation of 0.600 of a P-value of .0000 which have an overall significant level.

5.0 Conclusion and Recommendations.

The SEC (Securities Exchange Commission) plays a key role in the Nigerian corporate sphere. Consequently, it has vast experience that it can contribute to solving financial insolvency in Nigeria. It is recommended that the SEC is better placed to oversee matters relating to solving financial insolvency than the CAC (Corporate Affairs Commission) which is mainly responsible for administrative matters like the registration of companies, filing of

documents, inter alia. SEC should liaise with, and coordinate the activities of the courts, the Bureau of Public Enterprises (BPE), Chambers of Commerce, the CAC, and BRIPAN (Business Recovery and Insolvency Practitioners' Association of Nigeria). It should create rules that coincide with other key rules regulating companies that it has or design to mitigate inconsistencies. The debt recovery professionals must, at least, be trained to accomplish their tasks. Administrators and banks prefer to have as little oversight as possible from the courts. It is difficult, given their, reported, proclivity for fraud, to envisage a system in Nigeria that would permit the practitioners to take

most decisions without oversight. In any case, the Nigerian courts are still ill-equipped to play even a diminished role, as administration requires. The feedback received from these officers would help to reform and facilitate the distressed resolution system. The Investment and Securities Act was fundamental to the reform of the banking sector; unlike the insolvency system. It should be noted however, that the banking sector was reformed to facilitate access to credit. The government and its central bank officials are bound to recognize, perhaps sooner than later, with sustained efforts from BRIPAN that the economy will benefit from reforms to the insolvency system.

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Service Recovery Tactics and Brand Trust Among Service-Based Small & Medium scale Enterprises (SMEs) in Nigeria: A Review

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Abstract: Service based SMEs in Nigeria are individuals and groups that are solely engaged in rendering services to customers. Studies have shown that SMEs contributed greatly to the development of nations including the developed and developing nations. Among the problems that lead to the failure of SMEs is how competent they are skilled in handling challenges as business evolves. Findings show that among the problems facing SMEs is the lack of market research, low or defective customer service and lack of trained staff which constitute a major aspect of problems faced. The service-based SMEs usually have needs to closely meet their customers as a result of the inseparability nature of services with tendencies of having service failures which could arise from power failure, defective product, incompetent employee, etc. The purpose of this study is to theoretically explore the service recovery tactics for building brands among SMEs in Port Harcourt. The study concludes based on reviews that service recovery tactics are veritable tools in restoring and building trust among service based SMEs in Port Harcourt.

Keywords: Service Recovery Tactics, Refunds, Apology, Compensation, Replace, Brand Trust, Preference, Advocacy

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Introduction

In several nations including Nigeria, small and medium scale enterprises (SMEs) that well-managed make up the most contributory sources of employment opportunities and creation of wealth. Members of the society gain from it as an employment source and income while government institutions also gain from SMEs by taxations which affect social stability. (Etuk, Etuk, & Michael, 2014). Notably, there are lots of the business activities of SMEs that are not inclusive in the formal national account; they constitute an estimated labor market of over 4-6% in developed countries to over 50% in developing nations (Etuk et al. 2014). The service-based SMEs are businesses that are more involved in rendering services which are more intangible in nature such as mini hotels, seminars, hair styling, hair cut/barbing saloon, home classes and schools, car wash, Cyber café etc. Aremu and Adeyemi (2011) argued that the performance and growth of small and medium enterprises (SMEs) is a trigger and key measure of a country's industrial level, modernization, urbanization, employment ratio, income per capital, equitable wealth distribution, welfare and living standard. Further, the International Finance Corporation (IFC, 2006) found a positive relationship between the overall income level of a country and the number of SMEs per 1,000 individual. These imply that SMEs growth and positive performance may have connection with countries' growth and development. Etuk, Etuk, and Michael (2014) noted that small and medium enterprises (SMEs) are defined based on specific criteria such as turnover, total number of employees, amount of profit, amount of capital employed, finance availability, market share, and

firms' size in comparison to the industry members. Additionally, the National Council of Industry (2003) categorized SMEs into four major classes such as micro with 1-10 employees and less than 1 million capital, small which consist of 11-35 employees and capital of 1million less than 40 million, medium which consist of 36-100 employees and 40 million less than 200 million as capital, and fourthly large with over 101 employees and capital of 200 million and above.

Despite the important roles played by SMEs in a Nigeria, there seems to be a constant record of low performance in terms of meeting with the global standards as results of different factors that have been given little or no attention. For example Alli and Jimoh (2013) noted that records from financial experts show that over 80% of SMEs in Nigeria fail within the first 5 years due to lack of experience, wrong business approaches and practices. Similarly, a study conducted by Ihua (2009) on "SMEs Key Failure-Factors: A Comparison between the United Kingdom and Nigeria with an interview of both Nigerians and UK. Findings showed that poor management was the most critical factor for failure in UK whereas poor economic conditions and infrastructure found to be the remote cause of SMEs failure in Nigeria.

Similarly, the growth and development of small and medium scale enterprises (SMEs) in Nigeria over the years is faced with factors such as harsh economic conditions. The challenges are not far from finance, skills and managerial acumen, inadequate infrastructure, weak electrical powers, bad roads, low institution supports, constant political conflicts, ethnocentric fights, multiple taxations, unstable foreign exchange and high

inflation rates (Etuk, Etuk, & Michael, 2014). In addition, Ahmad and Seet (2009) opined that among the problems that lead to the failure of SMEs is how competent they are skilled in handling challenges as business evolves. Temtime and Pansiri (2004) found that among the problems facing SMEs is the lack of market research, low or defective customer service and lack of trained staff which constitute a major aspect of problems faced. No doubt, these could be the reason most SMEs lack the tactics to delivery service effectively to meet and exceed customer satisfaction in order to build trust.

Obviously, studies on the issues that bother on SMEs have attracted lots of researchers but very few have deemed it necessary to pay more attention to how service failure can be recovered to gain brand trust. Meanwhile, effective service delivery posits to be a sine qua non as most of the SMEs businesses require contact and interaction with customers regardless of whether the business is focused on tangible goods or intangible goods. Customers will always feel bad when they encounter an experience that is negative to their expectation and these could require the business concerned to recover this experience by making the customers happy again. SMEs in Nigeria need more understanding of what brand trust means and how it could be enhanced using service recovery tactics as trust seems to be key in business. The dearth in literature linking SMEs services recovery tactics and brand trust in Nigeria stands as a literature

gap which the current study seeks to bridge. Similarly, Bell and Zemke (1987) opined that a service failure happens when customers' expectations are not reached. Reichheld and Sasser (1990) maintained that businesses usually lose 15 to 20% of their annual customer base as a result of factors like: better offers from competitors, uncontrollable factors, and low service recovery tactics. Michel, Bowen, and Johnston (2009) opined that services often fails as a result of unsettled tensions between customer, process, and employee recovery. The customer recovery aspect seeks to bring customers back to their satisfied state, process recovery is geared towards understanding the causes of the failure and reduce its chances of occurrences while employee recovery entails settling employees' complains to ensure stable work flow. The service-based SMEs usually have needs to closely meet their customers as a result of the inseparability nature of services with tendencies of having service failures which could arise from power failure, defective product, incompetent employee etc. How would a business bring back lost confidence or trust as a result customers' bad service experience? Hence, this study seeks to theoretical explore service recovery tactics for brand trust among service-Based SMEs in Nigeria.

Theoretical Foundations

Expectation-Confirmation Theory

The expectation confirmation theory (ECT) is a cognitive theory that explains consumers after purchase behavior based on the functions of

expectation, perceived performance and belief. The theory was developed by works of Richard L. Oliver in the year 1977 (Oliver, 1997). The expectation-confirmation theory states that satisfaction of individual customers depends on the interplay of prior expectations and perception of delivery. The theory opines that before any event, one already has an expectation and if that expectation is met in a positive manner, then one is satisfied but a situation where the expectation is met in a negative manner then one is dissatisfied (James & Gary, 2009). Oliver (1980) opined that the expectation confirmation theory explains and suggests that customers buy goods/services based on their expectations for a good performance. The theory relates to the Gaps Model which is based how consumers evaluate quality and takes into consideration the factors that contribute to determine the quality such as quality expected by the customers, quality offered by firms, and quality perceived by users after the service consumption (Oliver, 1980). Further, Oliver (1977) noted that the ECT holds four major construct which are expectations, perceived performance, disconfirmation belief, and satisfaction. According, the expectation entails features that an individual anticipates, perceived performance is an individuals' personal judgment about the functionality of a product. Also, disconfirmation belief is the comparison between what an individual expects and what is actually received which could either be positive or negative disconfirmation while

satisfaction indicates the degree of individuals delight about what is was expected and what was given.

Furthermore, the theory faces some limitation despite its relevance to management and marketing decision making. Hill (1985) opined that the theory lacks validation of its applicability in experiential services that poses difficulty in measurement than tangible goods which may be easily measure. Further, the theory asserted that when a consumer does not meet or meet his/her expectation, the customer gets satisfied/dissatisfied which usually not in all purchase situations. Also, Churchill and Surprenant (1982) argued that the ECT suffers limitation in its inability to incorporate and specify other consumer buying decision standards like ideas, desires, and tolerable level which are core part of the decision variable.

Nevertheless, Chiu, Hsu, Sun, Lin, and Sun (2005) opined that expectation confirmation or disconfirmation theory is widely appreciated as a model of the consumer behavior which is used in explaining and predicting consumer's satisfaction and repeat purchase behavior. Further, the theory can be used to explain how consumers react to service failure and service recoveries as well. It enables owners of small and medium enterprises (SMES) in Nigeria to understand that when a consumer is faced with a failed service, the consumer feels dissatisfied as a result of the fact that it does not meet the expectation. This creates a gap between the consumer and the business organization. It becomes the role of

SME manager or service provider to bridge this gap via service recovery tactics.

Review of Related Literature

Concept of Service Recovery Tactics

The concept service recovery is defined as the actions undertaken by a business that renders services in response to a service failure (Gronross, 1988). Sparks' (2001) classification of service failures differentiates between acts of omission and acts of commission. Acts of omission are committed if the service offering is not provided, for example, a flight is cancelled or a reserved seat on an aircraft is not available due to overbooking. Conversely, acts of commission refer to situations where the service is delivered but not to acceptable standards. Service recovery is defined as attempt made by organization to compensate for the negative effects of a breakdown in order to alter customers' dissatisfaction to satisfaction and ultimately to retain those customers (Zemke & Bell, 1990). Michel (2001) opined that service recovery seeks to settle short comings at the environment where the service is being rendered before customers complain or get dissatisfied. Bitner, Booms, and Tetreault (1990) opined that service recoveries ranges from doing what it takes to restore faults in the service delivery. The study identified several dimensions service recoveries such as apology, assistance, follow-ups, acknowledgement, compensation etc which depends on the kind of situations including the type of service involved.

For instance, in Nigerian business could callback a customer who bought an item that is defective to ensure the item is in a good condition. Further, saying "*we are sorry for the inconveniences*" to customer who did not get the exact service paid for implies adoption of apology in service recovery. Service recovery tactics constitutes all efforts taken to make the customer smile when an error of failure occurs in the service centre.

Further, Johnson and Michel (2008) identified seven important activities involved in customer recovery to acknowledgement, empathy, apologizing, owning the problem, fixing the problem, providing assurance and providing compensation. Gordon and Terrence (1991) maintained that effectiveness of service recoveries depends on the level of responsiveness, empathy, and better understanding of the problem at hand. The concept of service recovery can be divided into technical and functional dimensions. The technical dimension entails what customers actually obtain from a service provider which are part of the tactics used to recover failed service, while the functional dimension consists of how the tactics process is executed (Lewis & Spyropoulos, 2001). Service recovery tactics is the measures tacking by a business organization in order to bring a customer back from sad mood or moment of regret to a happy mood. Lewis and McCann (2004) identified different tactics undertaking in response to service failures to include apology, corrective actions, empathy, compensation,

confirmation, explanations, exceptional treatments, management intervention. The authors opined that each tactics can be either used independently or as a combine mechanism to recovery service failure.

Refunds

Refunds are policies taking by businesses to allow customer who bought faulty goods or undervalued service to receive their payments or charges back. Refunds entails a business practice that enables a customer to be paid back his or her money if the service received is not equivalent with what is paid for in order to make the customer feel satisfied.

Apology

Apology is the act of saying sorry to customers when they receive a service or a product that does not meet their expectations. Apology is expression of respect and value to the individual customer's value and showing of remorse when the businesses delivery does not match what.

Compensation

Compensation is the act of paying an individual an amount that is equivalent or near equivalent to his or her lost. Compensation may not necessary be an amount of money but could be in services or goods given to an individual customer to serve as a make-up for a loss.

Replace

Replace is a business activity that involves replenishing a defective product with a better or another alternative. Replacement occurs where

customers' goods or services are exchanged for another similar or different one as result of default or unpleasant experience.

Concept of Brand Trust

Brand trust is the customer's belief that a business is worthy and faithful in terms of keeping to their promises and rendering of services devoid of deceits. Chaudhuri and Holbrook (2001) defined brand trust as the willingness of an individual customer to depend on the ability of the brand to perform the function is has said to perform. Brand trust is an element of loyalty and support which is derived from positive customer experience over a period of time. Supportively, Pina e Cunha, Rego and Kamoche (2009) opined that trust is logically connected to loyalty. In other words, those who do not trust a business organization will likely not be loyal as well. Also, Rod and Ashill (2010) opined that trust is an important element in explaining loyalty divided trust in credibility and benevolence. Brand trust is a vital element in achieving successful marketing practices (Garbarino & Johnson, 1999). Ganiyu, Uche and Elizabeth (2012) agreed that customer satisfaction can lead to trust and a repurchase behavior. Trust is when a customer highly believes in the performance of a particular product or organization.

Preference

Preference is choosing or liking something instead of another. It is a part of consumers' behavior which could occur as a result of personal or general reasons such as price, belief, taste, age, location, relationship,

gender, income etc. Trust could also be a reason for preference as studies like Pina e Cunha, Rego and Kamoche (2009); Ganiyu, Uche and Elizabeth (2012) have shown that trust is directly related to loyalty and positive attitude towards a product or organization.

Advocacy

Advocacy is the intentional or willful act of an individual in supporting a view or an idea. Consumers' advocacy is the consumer's willingness to tell good stories about a specific product or organization to others as result of trust and loyalty. Lowenstein (2011) opined that customers are brand advocates when they are loyal for a very long period of time. Advocacy of consumers does not come in at immediate effect, rather it comes via long period of skeptics, trial, experience that conforms to their expectations.

Empirical Review

In the case of service failures, service recovery is the key method of retaining customers and reduces the cost involved in customer defection and negative referral behaviors (Kristie, Seawright, Presto, Charlotte, & Hoopes, 2008). Lewis and McCann (2004) found that lots of studies have revealed that satisfaction and service recovery directly influences a customer's intention to repurchase and to refer the service provider to others. Cranage (2004) holds that the bonds and loyalty that comes as an outcome of service recovery are part of the critical reasons service providers pay extremely attention to service recovery because. The author added that gaining customers that are loyal can increase

profits including and customers' advocacies. A study conducted by Abou and Abou (2013) on "The Influence of Perceived Service Failure Recovery Strategies on Customer Satisfaction and loyalty in Hotels." Using critical incident technique, 172 samples collected from both foreign and non foreign guest of hotels in Egypt found that service failure has the ability to influence satisfaction and intentions of customers negatively. The result also shows that service recovery is a veritable tool to enhance loyalty of customers. Nwokorie (2016) conducted a study on Service recovery strategies and customer loyalty in selected hotels in Lagos State, Nigeria." Using inferential statistics and z-test statistical technique, findings show that there is a significant relationship between service recovery strategies, satisfactory, and loyalty level of customers. The study suggested that training of employees on better communication procure and development of complaint platforms, are key headways in achieving business success. Komunda and Osarenkhoe (2012) study of the "Remedy or cure for service failure?: Effects of service recovery on customer satisfaction and loyalty." With a sample of 120 staff and business school students at Makerere, Kampala, Uganda; data was analyzed using regression analytic tool. Findings show that communication had a momentous relationship with service recovery and that when issues are highly redressed; it increases the positive responses of customers towards the business. Additionally, finding shows that the employees'

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interactions and responsiveness asserts a positive relationship with satisfactory level of customers.

Furthermore, these imply that SMEs whose employees have good interactive skills can capture the customers trust by making them feel satisfied when service failure occurs. The studies of Nwokorie (2016) reveal that employees contributes immensely to the recovery level of service failure since they are mostly the frontiers of the business organization. Confidence can be build by telling a customer “*sorry for the incontinences, it will be fixed shortly*” and customers could decide to remain loyal to business that employ effective service recovery tactics. Evidently, Lewis and McCann (2004) found that satisfied customers via service recovery could decide to prefer a businesses’ product to another. These also imply that refunding a customer certain amount for a defective product, replacing malfunction items with the better items and acknowledging the businesses’ error or mistake aid in enhancing level of trust. Notably, Pina e Cunha, Rego, and Kamoche (2009); and Ganiyu, Uche and Elizabeth (2012) that customers that trust a business could be more loyal, committed, willing to repeat purchase and even spread positive word of mouth. Based on these reviews, the study proposed the following hypotheses as thus:

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Dissecting Behaviour Associated

H₁: Refunds positively influence brand trust of small and medium scale enterprises in Nigeria.

H₂: Apology positively influence brand trust of small and medium scale enterprises in Nigeria.

H₃: Compensation positively influence brand trust of small and medium scale enterprises in Nigeria.

Summary and Conclusion

The study began with an introduction which provided the background to the study and established the fact that service recovery has been a matter of discuss but most scholars have not deemed it necessary to link service recovery tactics and brand trust of SMEs in Nigeria. The theoretically examined the relationship between service recovery tactics and brand trust; and explored different tactics that could be employed by SMEs in handling service failure situations. Findings from related studies hold that service recovery is an element that enhances satisfaction and trust of businesses. Studies also revealed that employees are direct contributors of effective service recoveries hence; they should be well-equipped and trained to meet customers’ expectations. Based on findings from the review, the study concludes that service recovery tactics are veritable tools for restoring and building trust among service-based SMEs in Port Harcourt.

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Terrorism, Sexuality and Sexual Violence in North-Eastern Nigeria: A Psychosexual Analysis

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Abstract: The emergence of Boko Haram terrorist organization and its activities has precipitated galaxies of security challenges for the Nigerian state. Thousands of Nigerians have been killed, properties worth millions have been destroyed, increase in Internally Displaced Persons and IDPs camps and other forms of humanitarian crisis and post-conflict reconstruction challenges. Boko Haram has employed Sexual Violence such as rape, sexual slavery, forced prostitution, forced pregnancy, forced abortion, enforced sterilization, forced marriage, and other form of sexual violence of comparable gravity perpetrated against women and girls directly or indirectly as part of its strategy towards achieving its goals and objectives. There is a causal relationship between the sexuality of terrorist and sexual violence. Sexual violence by Boko Haram is an integral part of its strategy and weapon of terror as women's bodies are used by them as battlegrounds, serving the dual purpose of spoils of war and a means of terrorizing the populace. It is based on the foregoing that this paper attempts to investigate the nexus between sexuality and sexual violence by Boko Haram terrorist group with a view to appreciate the role of psychology in the study of terrorism. It is the position of this paper that the sexual behaviour of Boko Haram is a product of their psychological, phenotypic, physiognomic and ideological makeup. Methodologically, this paper relied on secondary sources, Abraham Maslow's hierarchy of needs and Sigmund Freud psychoanalytic

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theory as tool for data collection and analysis. Finally, it recommends among others the need for the study of terrorist psychology.

Key words: terrorism, sexuality, sex, sexual-violence, psychology and ideology

Background

Contemporary international system is faced with several threats and challenges. Notable of these challenges is the increasing rate of terrorist activities and the corresponding impact and effects of terrorist on human societies. Africa and Nigeria in particular is not also left out in this. The Jama'atu Ahlis Sunna Lidda' awati Wal-Jihad which in English means "People Committed to the Propagation of the Prophet's Teachings and Jihad" which is popularly known by its Hausa name 'Boko Haram' was a local radical terrorist organization. Since 2009 this group has been a major threat to Nigeria's sovereignty and national security. It is pertinent to note that the activities of Boko Haram in terms of scope and geo-politics has gone beyond the sphere of Nigeria into several countries in Sub-Saharan Africa.

Over time, countries in sub-Saharan Africa have been faced with myriads of security challenges, ranging from militancy, ethno-religious crisis, political conflict, human and drug trafficking, to trans-border crimes. In recent times however, terrorism and insurgency have become a major security threat to the sovereignty of these countries, particularly the threat of Boko Haram in the Northeast of Nigeria and countries of the Lake Chad region; hence the formation of the Multi-National Joint Task Force as a military alliance to combat terrorism (Tar and Adejoh, 2017). This has stimulated

attempts by scholars in several fields and most especially in social science to x-ray and interrogate the phenomenon of Boko Haram terrorism in Nigeria in relations to its impact on national and international security; its impact on trans-national trade and its impact on economic and educational development in Nigeria.

A very important aspect of terrorism is sexuality and rate at which they perpetuate sexual violence. The history of acts of sexual violence against women committed during wars and conflicts is as old as the history of war. As in the case of rape generally, this form of sexual violence is subsumed in a conspiratorial culture of silence: The victims do not want to talk about it, while society pretends that it does not exist. The result of this conspiracy of silence is manifested in the low record of prosecution and conviction of men who sexually assault women in conflict situations. The global upsurge in terrorism has led to increasing reports of acts of sexual violence committed against women by members of various terrorist organizations (United Nations, 2016).

Sexuality is the most secret and intimate feature of human life. People guard their sexual secrets so closely that they, or their partner, may never share all their sex related experiences, desires and dreams together, even in long-term relationships. Sometimes people hesitate to admit even to themselves that they long for a

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particular kind of arousal or pleasure, because it feels somehow, strangely, inappropriate. Just a few short decades ago, most women had a hard time acknowledging to themselves that sex was in general something they wanted. We have come much further along now, thanks to more open public discourse and improved information on the subject of sexuality.

The rate of at which women are raped, forced into marriage and sexuality exploited by Boko Haram is the major factor that precipitated this paper. This group has embarked on the deliberate use of sexual violence against women as one of its tactics in the terror campaign against the Nigerian state. The sexual violence which humiliates the Nigerian state and its people and also destroys the social fabric of society, where a high premium is placed on the chastity of its women, has had a devastating impact on the victims – physically as well as psychologically. While some of the women rescued from the camps of Boko Haram militants have tested positive for HIV, majority of the rescued women were found to be pregnant (Nossiter, 2015:6).

It is based on the foregoing that this paper attempts to answer the following questions:

- i. What is the nexus between terrorism and sexuality?
- ii. If terrorists are monsters, how come they are sexuality active?
- iii. What is the relationship between terrorism and sexual violence?
- iv. What are the implications of Boko Haram's sexuality on human rights?

Theoretical and Conceptual Perspectives

The human system is made up of several component parts that are interdependent and complimentary and the survival of the system is dependent on the functionality of each of these parts. Man is both a biological and social being hence the manifestation of biological and social characteristics of man. Sex and Sexuality is one inherent component of man as a biological being and it is reflected in man's social interactions. This intercourse between the biological and social traits of man has precipitated several works by scholar each pontificating from different theoretical lens.

According to Freud, sex is the most important life instinct in an individual. According to him sex instinct is centered around a number of bodily needs that give rise to erotic wishes. Each of these wishes has its source in a different bodily region referred to as erogenous zones. An erogenous zone is a part of the skin or mucous membrane that is extremely sensitive to irritation and which when manipulated in a certain way removes the irritation and produces pleasurable feelings and experiences (Freud, 1940).

The lips and mouth, anal region, and the sex organs are examples of erogenous zones. Thus, sucking produces oral pleasure, elimination anal pleasure, and rubbing genital pleasure. In brief, Freud regarded the sexual instinct as a psychophysiological process, which has both mental and physical manifestations (Phillip, 2011).

Human sexuality refers to people's sexual interest in and attraction to others, as well as their capacity to have erotic experiences and responses. People's sexual orientation is their emotional and sexual attraction to particular sexes or genders, which often shapes their sexuality. Sexuality may be experienced and expressed in a variety of ways, including thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles, and relationships. These may manifest themselves in biological, physical, emotional, social, or spiritual aspects. The biological and physical aspects of sexuality largely concern the human reproductive functions, including the human sexual-response cycle and the basic biological drive that exists in all species

([https://courses.lumenlearning.com/boundless-
psychology/chapter/introduction-to-gender-and-sexuality/](https://courses.lumenlearning.com/boundless-psychology/chapter/introduction-to-gender-and-sexuality/)).

In a similar light, the Resource Center for Adolescent Pregnancy Prevention (ReCAPP) and ETR Associates (2011) conceptualised Sexuality as the total expression of who you are as a human being, your femaleness or your maleness. Our sexuality begins at birth and ends at death. Everyone is a sexual being. Your sexuality is interplay between body image, gender identity, gender role, sexual orientation, eroticism, genitals, intimacy, relationships, and love and affection. A person's sexuality includes his or her attitudes, values, knowledge and behaviors. How people express their sexuality is influenced by their

families, culture, society, faith and beliefs (ReCAPP and ETR Associates (2011)).

Sexuality is a central aspect of being human throughout life and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviors, practices, roles and relationships. While sexuality can include all of these dimensions, not all of them are always experienced or expressed. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, ethical, legal, historical, religious and spiritual factors (World Health Organization, 2006).

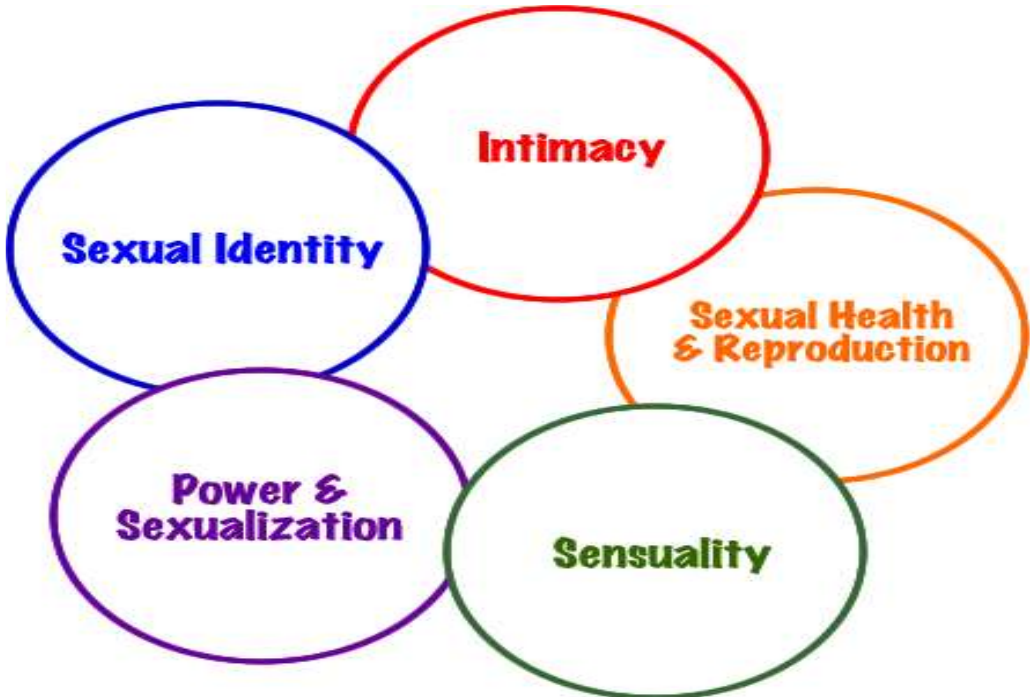
The above definition by World Health Organization (2004) can be summarized into four different levels:

1. Sexuality is a central aspect of being human throughout life and encompasses sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction.
2. Sexuality is experienced and expressed in thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles and relationships.
3. Sexuality is influenced by the interaction of biological, psychological, social, economic, political, cultural, ethical, legal, historical and religious and spiritual factors.
4. Sexuality includes the basic need for human affection, touch and

intimacy, as consciously and unconsciously expressed through one's feelings, thoughts and behaviour.

Concept of sexuality encompasses the following aspects: a. Individual capacity and desire, b. Sexual functions, c. Social organisation of sexual relationships, d. Associations

between sexual behaviour and individual identity, sexual appetites, style and group identity, based on the expression of sexuality and/or sexual preferences. Dailey,D.(1981) has attempted a categorization of sexuality into five as exemplified in the diagram below.



Source: Dailey,D.(1981)

These terms “sexual exploitation” and “sexual abuse” are used to distinguish those who are physically forced to have sex and those who are coerced into it owing to a lack of alternative survival tactics or through ignorance of their rights. “sexual exploitation” is defined as “any actual or attempted abuse of a position of vulnerability, differential

power, or trust for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another” and “sexual abuse” as “the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions” (United Nations, 2005).

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Theoretical framework

Theories are germane and central to understanding socio-political and economic issues. Human behaviours are multifaceted and multidimensional. The interplay of several variables such as culture, traditions, believe systems, religion, background, environments etc constitute major indices that shape human personality. Theories are lens and sign post. As lens, theories give clearer understanding to issues associated with human societies and as a sign post, theories gives directions, focus and predictability. For the purpose of this study, the Sigmund Freud theory of psychoanalysis will be employed to illuminate our understanding of terrorism, sexuality and sexual violence in Nigeria with a view to examining the biological and social characteristics of terrorist.

The theory of psychosexual development, also known as theory of libidinal development, is one of the earliest theories explaining how personality develops in human beings. This theory owes its credence to the findings of Sigmund Freud's clinical research with emotionally disturbed people. The theory of psychosexual development, however, is an integral part of the psychodynamic personality theory proposed by Freud .In essence Freud used the term sexuality to refer to the erotic life of the individual. According to him, sexuality is not a matter for adults alone but also infantile. It is all-pervasive and covers all those activities and sensations that are pleasurable and afford sensual gratification. Freud noted that infants

were capable of erotic activity from birth onward (Freud, 1920).

Personality development takes place through constant activation of the life instinct. Sex being the most important life instinct in an individual, engagement in different erotic activities is a must to activate the life instinct. Sex is a biological instinct, which needs to be gratified. When present it creates tension and when met with, it leads to satisfaction.

In his analysis of human personality particularly on sexuality, Sigmund Freud maintained that the human system is divided into three interrelated parts. This component parts according to him performs specific roles as far as sexuality is concerned. They are the Id, Ego and Superego.

Id is governed by the *pleasure principle*, with an overriding goal maximising pleasure and eliminating tensions and conflicts associated with achieving pleasure. The characterising way of processing information or thinking by id is referred to by Freud as *primary process*. The primary process is primarily emotional, irrational, illogical "and filled with fantasies and preoccupations of sex, aggression, selfishness and envy (Barlow and Durand 25).

a. ID

- the reservoir of psychic energy
- pleasure principle
- unconscious
- biological part of personality

b. EGO

- psychological part of personality

- reality principle
- mostly conscious

c. SUPEREGO

- social part of personality
- idealism principle (conscience)
- partially conscious

Boko Haram: Why Sex and Sexual Violence?

Since 2009 Nigeria and in particular the North-Eastern part of Nigeria has been seriously ravaged by Boko Haram thereby posing galaxies of security challenges to the inhabitants of this geo-political area. The social, economic and political architecture of these people has been restructured by the activities of Boko Haram. Apart from the killings, destruction of properties and kidnapping, Boko Haram has given room to different forms of human rights violations.

There have been series of human rights violations by Boko Haram manifested in the forms of destructions of lives and properties, kidnappings, detentions, force marriages etc. in addition to these is the issue of sexual violence/exploitations that has characterized the activities of this terrorist group. In his examination of terrorism, sexuality and sexual violence Storr (2016), was of the opinion that sexual violence is both a tactic of war and a tactic of terrorism and this tactic have been manifested and are associated with most terrorist organizations. Sexual violence has variously been described as ‘one of the most horrific weapons of war, an instrument of terror used against women. conflict-related sexual violence”, as used in the 2017 Annual

Report of the Secretary-General on Conflict-related Sexual Violence, it refers to rape, sexual slavery, forced prostitution, forced pregnancy, forced abortion, enforced sterilization, forced marriage, and any other form of sexual violence of comparable gravity perpetrated against women, men, girls or boys that is directly or indirectly linked to a conflict. There is no evidence to prove that men or boys have been sexually violated by Boko Haram however a lot of evidence and instance have proven beyond reasonable doubt the sexual violation of women and girls. It is also pertinent to note that sexual violations and exploitation is note peculiar to Boko Haram alone. It is manifested in the activities of most terrorist organizations in different parts of the global system.

Attah (2016:385) corroborated the above discus from both the angle of generalization and particularization when he says:

Over the centuries rape has been used effectively by terrorist groups as a weapon of terror. In this context, women’s bodies are used by terrorists as battlegrounds, serving the dual purpose of spoils of war and a means of terrorising the populace. The Nigerian fundamentalist group, Boko Haram, has employed sexual terrorism in its campaign of terror against the Nigerian state and its people. Boko Haram has since 2013 embraced this tactic, which has led to the abduction of hundreds of women and girls, the most outrageous being the

abduction of 276 ‘Chibok girls’ that has attracted global concern. The 2017 eighth Annual Report of the Secretary-General on Conflict-related Sexual Violence, states that:

Despite military gains made against Boko Haram, women and girls remain exposed to the risk of sexual violence and other crimes, including being used as suicide bombers. Efforts led by the Government to secure the release of the girls abducted from Chibok and others held in captivity continued in 2016. Hundreds managed to escape or were rescued, with many returning pregnant or with babies, some having contracted HIV. Their accounts corroborate information received about forced marriage, forced pregnancy and sexual slavery by Boko Haram. Those living in Boko Haram-controlled areas that were compelled to marry insurgents face acute stigma and discrimination... (United Nations, 2017:12).

Expressing her frustration on the activities of Boko Haram, Zainab Bangura, Special Representative of the Secretary-General of the United Nations on Sexual Violence in Conflict had this to say:

I am appalled by reports that hundreds of the recently released female captives were repeatedly raped by Boko Haram militias and compelled to ‘marry’ their captors. In order to give rise to a new generation raised in their own image, they (Boko Haram militants) are waging war on

women’s physical, sexual and reproductive autonomy and rights (Zainab Bangura in Lord-Mallam and Adejoh, 2018:84).

Understanding the rate of sexual exploitations and sexual violence by Boko Haram can be situated within the context of sex and sexuality which reflects the humanity and biology of the human system. It is very easy for people to assume that terrorists should have nothing to do with sex since they are monsters and are interested in destroying lives and properties, creating fear, tension and chaos. Regardless of the nonconformist and rebellious nature of Boko Haram, the humanity in them will also manifest hence their involvement in sex and sexual violence.

It is based on this that Maslow classified sex as a basic need of man regardless of whether the man is a terrorist, prophet or a clergy. Sex is a biological response to innate human nature. What this portends is that Boko Haram’s sexuality is only a confirmation that terrorist are both biological and social beings with needs that need to be expressed and gratified. It is in line with this that Hawkes and Scott (2005:7) argued that:

Human sexuality is distinct from non-human sexuality in that it is neither immutable nor static but is highly responsive to social forces. Human sexuality is imbued with symbolic meaning and social significance...given that humans are social beings, human sexuality is inevitably influenced by a person’s social location...forms of social

stratification, relating to class, status, gender, ethnicity, age and so on, will influence modes of individual self-expression.

Every human being undergoes psychosexual development or libidinal development as it's also called. The genetic, physiological and phenotypic components of man have made sex and sexuality an integral aspect of man. Sexual drives, feelings, desire, urges, response and stimulants are also felt by Boko Haram since this terrorist are not less humans. This view was corroborated by Freud when he claimed that:

The sex drive in the organism is based on a special form of energy called *libido*. This has its seat in that part of personality called *id*, which is essentially unconscious. The libido or sex energy is best released through amorous activities. However, "society can see no more menace to its culture than would arise from the liberation of sexual impulses and a return to their original goal (Freud, 1920:180)

The sexuality and sexualisation of Boko Haram if situated within the Freudian psycho-sexual analysis will illuminate ones understanding better. Human behaviour is a reflection personality traits and development and the interplay between these traits is manifested in man's behaviour. The id, ego and superego are the three components parts of man and they regulate and determine human thoughts, stimulus, behaviour and response.

Freud encapsulated this position when he says: Id is the prime-mover; it is the

source of all psychic energy. The psychic energy or drive within it called the *libido*, if left totally unchecked will lead to amorous activities and if fully checked will lead to damming up of libido. Both are dangerous, to the society and to the individual respectively. Id is governed by the *pleasure principle*, with an overriding goal maximising pleasure and eliminating tensions and conflicts associated with achieving pleasure.

Sexual rights offer the potential for an approach that goes beyond identity politics. With identity politics, rights are associated with particular categories of people, such as 'women's rights' or 'gay rights'. Sexual rights can instead be taken to mean that everyone should have the right to personal fulfilment, and to freedom from coercion, discrimination and violence around sexuality, whatever their sexual orientation or gender identity

World Health Organization (WHO) Working Definition of Sexual Rights is that Sexual rights embrace human rights that are already recognized in national laws, international human rights documents and other consensus statements. They include the right of all persons, free of coercion, discrimination and violence, to:

- i. the highest attainable standard of sexual health, including access to sexual and reproductive health care services;
- ii. Seek, receive and impart information related to sexuality;
- iii. Sexuality education;
- iv. Respect for bodily integrity;
- v. choose their partner;

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- vi. Decide to be sexually active or not;
- vii. Consensual sexual relations;
- viii. Consensual marriage;
- ix. Decide whether or not, and when, to have children; and
- x. pursue a satisfying, safe and pleasurable sexual life.

The responsible exercise of human rights requires that all persons respect the rights of others.

(WHO 2004)

WASH (2013) identifies eleven sexual human rights, which include the right to sexual freedom, sexual autonomy in individual decision-making, and to be free from sexual violence, as well as the right to sexual privacy. It also includes the right to be free from sexual discrimination, the right to experience sexual pleasure and sexual expression. It asserts that individuals have the right to choose with whom they associate sexually and to make their own reproductive choices.

The Fourth World Conference on Women, Beijing 1995 maintained that the human rights of women include their right to have control over and decide freely and responsibly on matters related to their sexuality, including sexual and reproductive health, free of coercion, discrimination and violence. Equal relationships between women and men in matters of sexual relations and reproduction, including full respect for the integrity of the person, require mutual respect, consent and shared responsibility for sexual behaviour and its consequences.

Conclusion and Recommendations

Contemplating the relationships between terrorism, sex and sexuality may look strange to a lot of people and the reason is not farfetched. Off course, some will feel that terrorist have no business with and time for sex since their concern is more on how to create fear, tension and destructions. This paper has attempted to discuss a number of issues on terrorism, sexuality and sexual violence with a view to stimulate further research in the psychology of terrorism. The rate of sexual violations by Boko Haram is not unconnected to their sexuality and personality development. Sex is a major need for humans and attempt is usually made to achieve this need which itself is a manifestation of the psychological, biological and genetic makeup of man. Hence the sexuality of Boko Haram is not the issue, the issue is the way and manner such sexual drives and apatite is achieved with human rights considerations and consent. The paper therefore recommends that:

- i. Government should ensure the protection of her citizens from being kidnapped or taken hostage so as to avoid and prevent women and girls from been sexuality abused by the terrorist;
- ii. There is need to increase research in this area so as to further illuminate people on the psychology of terrorism;
- iii. There is the need to criminalize and punish sexual exploitation by terrorist in Nigeria;

iv. An effective, efficient and practicable counter-terrorism strategy be put in place to ensure total eradication of terrorism in

Nigeria as this will serve as a lasting solution to sexual violation by the terrorist

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Influence of Risk Perception on Marketing of Chemicals in Nigeria

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Abstract: Risk perception refers to the way risk is regarded, understood and interpreted while risk is the probability of incurrance of hazards in certain activities. This study investigates the influence of channel members' risk perception of chemical exposures on marketing of chemicals in Nigeria. The study is a survey design and adopts stratified and simple random sampling techniques. One hypothesis and a research question guided the study. The target population is 876 involving 47 producers, 18 importers, 103 wholesalers, 230 retailers and 478 industrial consumers in Aba and Onitsha. The sample size is 275. The sample size for each category of the respondents is determined. Primary and secondary sources of data are accessed. In-depth interviews are held. The structuring of the questionnaire is based on the five-point Likert scale format. Opinions of marketing experts are used in the questionnaire validation. The scores derived from the pilot study are processed using Cronbach Alpha technique. A reliability coefficient of the research instrument, 0.952 is estimated. Using one way ANOVA technique and Minitab software package, the hypothesis is tested at 0.05 level of significance and 19 degrees of freedom. The study reveals non-significant influence of risk perception of chemical exposures on marketing of chemicals. It is recommended that enlightenment campaigns should be mounted by the Chemical Society of Nigeria and Media Organizations to raise risk perception of chemical exposures as to suppress risk tolerance and high-risk behaviors of channel members, among others

Keywords: Chemical exposures, Channel members, Health disorder, Risk perception, Risk tolerance.

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1.0 Background of the Study

It is a common observation that people wittingly indulge in variety of activities that cause harm to human health and the environment on regular basis. A situation where risk taking is a matter of choice as in the marketing of chemicals provides opportunity to analyze behavior of the marketing intermediaries on the basis of their willingness to avoid perceived risk or accept risk tradeoff for financial gains. The perception of risks associated with a vocation may resonate within the hybrid of absolute truth based on facts and virtual truth shaped by popular opinion or media coverage. According to National Safety Council (2003), risk can be measured in terms of its probability of occurrence and severity of the adverse effects. In the context of this study, risk perception reflects the ability of a channel member, (i.e., chemical manufacturer, wholesaler, retailer or customer/end-users) to recognize, interpret and create meaningful picture of risks associated with chemical exposures (Kotler & Keller, 2009). It comprises of personal interpretation of information about risks arising from the marketing of chemicals in a way that fits the channel members' preconceptions, beliefs and expectations in tandem with actual behavior (Chisnall, 1975).

Chemicals are substances that result from reactions involving atomic or molecular changes or natural phenomenon. It is important to note that the marketing of chemicals is an integral part of industrial marketing reserved for goods and services destined for use in producing other goods (Achison, 2000). It is a specialized function of management that directs the flow of chemicals from the producers or importers to the

distributors or end-users as to effectively match supply and demand to accomplish the organization's objectives. The chemicals are utilized directly as either raw materials with little or no alterations or manufactured goods in the production of other goods. They play significant roles in human development and affect every sphere of modern life. Chemicals serve as inputs to agricultural, manufacturing, mining, construction and service sectors of the economy. They are not usually supplied directly to consumers except in the form of products that are encountered in everyday lives such as degreaser, paints, printing inks, adhesives and sealants, among others. Chemicals may be categorized into a few sub-groups for commercial purposes, such as basic, specialty and life science chemicals. Examples of basic chemicals include polymers, petrochemicals, industrial/inorganic chemicals and fertilizers. Inorganic chemicals are salt, chlorine, caustic soda, soda ash, titanium dioxide, acids and others. Fertilizers include phosphates, ammonia and potash chemicals. The life science chemicals are pharmaceuticals, diagnostics, animal health products, vitamins, and pesticides. Chemicals are used to produce variety of consumer products found in homes and offices such as waxes/ polishes, blind, air refresher and plastic dustpan. Personal care products such as soaps, detergents, hair shampoos/conditioners, toothpastes, cosmetics and deodorants are made from chemicals. These consumer products are formulated from basic and specialty chemicals. The demand for chemicals is derived from the ultimate demand of customers for both the industrial and consumer products. The chemicals are usually stocked in the warehouses and sold through network

of intermediaries to the end users. People are continuously exposed to chemicals as a result of the exchange transactions. But chemical exposures arising from marketing of chemicals have been linked to varieties of health disorders. The perceived knowledge of the risks associated with chemical exposures may possibly affect the production or importation, distribution and sales of chemicals since human health is involved. The influence of risk perception of chemical exposures by chemical manufacturers, wholesalers, retailers and customers/end-users on marketing of chemicals constitutes the core of investigation of this study.

1.1 Statement of the problem

Human contacts with chemicals directly or through substances containing chemicals lead to exposures. Chemical exposures may not always be harmful but in certain cases they can cause health disorders. Responses to chemical exposures differ with individuals. Some people tend to be less sensitive to chemicals while others may experience severe reactions. Studies have shown that certain variables which influence an individual's susceptibility to chemical exposures include age, gender, genetics and pregnancy (Greitens, 2016). The potential risks associated with chemicals depend on the types of chemical, dosage, duration, frequency and routes of exposure (ATSDR, n.d.). Children, pregnant women and old people appear to be more vulnerable. Long term exposure of people to chemicals has been associated with health disorders such as organ damage,

weakening of the immune system, reproductive problems/ birth defects, effects on the mental cognitive or physical development of children, cancer, among others (Pressinger, Tampa & Sinclair, 2015). The health effects depend on the toxicity of chemicals that enter the body through breathing, eye contact or skin and ingestion. They move into the bloodstream and circulate to internal organs to infect the respiratory, renal, cardiovascular, nervous and hepatic systems including the skin. Several illnesses ranging from lung cancer, chronic bronchitis, kidney tissue damage, heart failure, to inability of the blood to supply oxygen to the body have been linked to chemical exposures (ATSDR, n.d.). The effects of chemicals on reproductive and nervous systems include infertility, baby deaths and decreased speech, sight/memory, respectively (ATSDR, n.d.). The chemicals affect the immune system by causing autoimmunity which makes the body to attack itself (Pressinger, et al., 2015). The hepatic system is impaired, which may result in liver damage, tumors, accumulation of fat (steatosis) and death of liver cells due to chemical exposures. The possible effects of chemicals on the skin include irritation, rash, redness or discoloration and dermatitis (ATSDR, n.d.). About 47,000 persons, mostly children and adolescents die every year as a result of chemical poisoning (WHO, 2017). The perceived knowledge of the risks involved in marketing of chemicals through exposures ought to affect the participation of channel members in the

occupation and reduce volume of transactions. In spite of the chemical exposures and dire health consequences inherent in the marketing of chemicals, the trade continues unabated. Many people are deeply involved in the vocation on daily basis, with influx of new entrants (apprentices). Does it mean that these people are unaware of the health hazards or dangers of chemical exposures? Can financial considerations outweigh the health implications of chemicals marketing? To what extent has risk perception of chemical exposures influenced the marketing of chemicals in Nigeria? This study is aimed at addressing the aforementioned queries, among others.

1.2 Objectives of the study

The broad objective of the study is to assess the influence of risk perception of chemical exposures on marketing of chemicals in Nigeria. The specific objective is to determine the extent to which risk perception of chemical exposures has influenced the marketing of chemicals in Aba and Onitsha.

1.3 Research question

To what extent has risk perception of chemical exposures influenced the marketing of chemicals?

1.4 Delimitations of the study

The study is limited to the States of Abia and Anambra in the South East Zone of Nigeria. The commercial nerve centers of Aba and Onitsha are selected for the research because of increasing business activities and high concentration of chemical manufacturers/ importers, wholesalers,

retailers, customers/end users in the areas.

1.5 Hypothesis formulation

At 95% confidence level, the hypothesis, stated in null and alternate forms, is formulated for testing as shown below:

Ho. Risk perception of chemical exposures has no significant influence on marketing of chemicals.

H₁. Risk perception of chemical exposures has significant influence on marketing of chemicals.

2.0 Review of related literature.

The study literature is reviewed from the perspectives of the conceptual and theoretical frameworks.

Conceptual framework.

An understanding of the concept of risk perception and risk tolerance is capable of increasing safety awareness in the environment. The ability of an individual to pre-empt the occurrence of hazards refers to risk perception. Risk tolerance is a person's capacity to accept risk to a certain limit. Risk perception and risk tolerance are mutually related. Studies have shown that the inability of an individual to perceive risk with accuracy can arouse higher risk tolerance, leading to high-risk behavior. Conversely, habitual involvement of individuals in high-risk activities may lead to higher risk tolerance and lower risk perception (Dow Chemical, 2010). Situations may arise where higher risk tolerance levels are not linked to lower risk perception ability. A person may possess the ability to assess risk with its potential consequences accurately and still show

willingness to tolerate higher risks. The marketing of chemicals is potentially hazardous, yet many people are unperturbed undertaking the business venture. An individual's depth of knowledge about an activity can affect his or her risk tolerance level. Venero and Montanari (2007) noted the unwillingness of workers in a chemical plant to wear personal protective equipment because of their perceived knowledge of the attendant risks. Weyman and Kelly (1999) explain that the ability of a worker to exercise personal control over a situation can lessen anxiety and propel him toward engaging in unsafe behaviors. Channel members who believe they are well informed about the risks of exposures arising from various activities of chemical production/importation, distribution and usage are more likely to take risks because of the perceived knowledge and possession of higher levels of risk tolerance. The channel members who are less informed of the risky nature of chemical exposures are less likely to take risks and have lower levels of risk tolerance or may even exhibit high risk behavior and tolerance level, depending on the individual's own perception of knowledge. The motivation for the high risk behaviors of the channel members may stem from the profitability of chemicals marketing coupled with the indispensability of chemicals in national development. The study therefore focuses on the extent to which the motivation of channel members in embarking on chemicals marketing has been affected by their

perceived knowledge of the inherent risks of chemical exposures.

Theoretical framework.

The study is anchored on Situated Rationality Theory. The theory postulates that to presume safe behaviors are inherently rational and high-risk behaviors are inherently irrational is erroneous. The implication is that some people wittingly take risks based on rational justifications and not that they are crazy. According to Slappendal, et al. (1993), in occupational safety, workers may not adhere to safe work procedures in order to complete work more efficiently. Finucane, et al. (2000) opine that the greater the perceived benefit of an activity, the lower the perceived risk. Many channel members may have justifiable reasons for engaging in the business of chemicals marketing, health implications notwithstanding. Invariably, if the financial gain associated with the marketing of chemicals is huge, channel members may consider it rational to take the risks of chemical exposures. The study also focused on the Habituated Action Theory which states that engaging in high-risk behavior severally without the occurrence of dire consequences often decreases the perceived risk associated with this behavior. As Kasperson, et al. (1988), and Weyman and Kelly (1999) noted, people who repeatedly perform high-risk tasks without adverse consequences eventually become desensitized to the risks. Because some health disorders/hazards associated with chemical exposures may take a long

time to manifest, channel members ideally become less sensitive to the inherent risks of chemicals marketing. Rhodes (1997) remarks that “behaviors which are habitual do not demand risk assessment or calculation for their doing; they are simply done”. The relatively large numbers of people in Aba and Onitsha who are engaged in the marketing of chemicals, in spite of the danger of chemical exposures, tend to corroborate this assertion.

3.0 Methodology

The study adopts a survey method. The target population is 876 comprising of importers (18), manufacturers (47), wholesalers (103), retailers (230) and end users (478) of chemicals. The sample size of 275 is determined using Yamane (1967) formula (Eboh, 2009). Applying Bowley’s proportional allocation statistical technique, the sample size for each category of respondents is estimated, viz: importers

(6), manufacturers (15), wholesalers (32), retailers (72) and end users (150). Primary and secondary sources are accessed for data collection. The structuring of the questionnaire is based on a five-point Likert Scale format to obtain enhanced responses of channel members’ risk perception of chemical exposures on the marketing of chemicals. Marketing experts validated the questionnaire. The data from the pilot study are applied in determining the reliability coefficient, 0.952 of the research instrument using Cronbach’s Alpha technique. The hypothesis of the study is formulated and tested at 0.05 level of significance and 19 degrees of freedom. Using one-way ANOVA technique and Minitab Statistical software package, the extent of influence of channel members’ risk perception of chemical exposures on marketing of chemicals is determined.

4.0 Data Presentation and Analysis

Table 4. 1: Profile of Respondents.

| Parameters | Total | Percentage (%) |
|-----------------|-------|----------------|
| <u>Category</u> | | |
| Importers | 6 | 2.2 |
| Manufacturers | 15 | 5.5 |
| Wholesalers | 32 | 11.6 |
| Retailers | 72 | 26.2 |
| End-users | 150 | 54.5 |
| <u>Age</u> | | |
| 20-30 | 29 | 10.4 |
| 31-40 | 70 | 25.6 |
| 41-50 | 84 | 30.7 |
| Above 50 | 92 | 33.3 |

| | | |
|-----------------------|-----|------|
| <u>Gender</u> | | |
| Male | 242 | 88.0 |
| Female | 33 | 12.0 |
| <u>Marital status</u> | | |
| Married | 215 | 78.0 |
| Single | 60 | 22.0 |
| <u>Qualification</u> | | |
| Ph.D. | 3 | 1.1 |
| MSc/MBA | 14 | 4.9 |
| BSc/HND | 18 | 6.7 |
| ND/NCE | 31 | 11.3 |
| WASC/GCE | 116 | 42.2 |
| FSLC | 93 | 33.8 |

Source: Field data, 2018

Table 4.1 shows that negligible percentages of the respondents are chemical importers (2.2) and manufacturers (5.5). Retailers (26.2%) outnumber the wholesalers (11.6%) while the percentage of the end users involved in the study is 54.5. The age brackets of the respondents show that 64 percent are above 40 while the rest

(26%) are within 20 and 40 years old. About 88% of the respondents are males and female 12%. The married respondents are 78% and singles 22%. The literacy levels of the respondents indicate that 76% possess FSLC/WASC/GCE, 11.3% OND/NCE while a few of them (12.7%) has higher qualifications.

Table 4.2. Influence of risk perception on marketing of chemicals

| Questions | No of Respondents Agree. A | Scores of Respondents. Agree.(A-Scores) | No. of Respondents Disagree. D | Scores of Respondents. Disagree.(D-Scores) | Total No. of RespondentsA+ D |
|-----------|----------------------------|---|--------------------------------|--|------------------------------|
| 1 | 220 | 741 | 55 | 94 | 275 |
| 2 | 77 | 189 | 198 | 529 | 275 |
| 3 | 177 | 590 | 98 | 166 | 275 |
| 4 | 137 | 234 | 138 | 449 | 275 |
| 5 | 198 | 628 | 77 | 125 | 275 |
| 6 | 100 | 188 | 175 | 581 | 275 |
| 7 | 102 | 312 | 173 | 320 | 275 |
| 8 | 127 | 289 | 148 | 375 | 275 |
| 9 | 120 | 264 | 155 | 331 | 275 |

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|-------|-------|-------|-------|-------|------|
| 10 | 158 | 292 | 117 | 513 | 275 |
| Total | 1416 | 3727 | 1334 | 3483 | 2750 |
| Mean | 141.6 | 372.7 | 133.4 | 348.3 | 275 |

Source: Field Survey, 2018.

Table 4.2 shows that 52 percent (1416) of the respondents affirm that risk perception of chemical exposures has not significantly influenced the marketing of chemicals while the rest 48 percent (1334) differ in opinion.

4.1 Test of hypothesis.

One-way ANOVA: A-Scores, D-Scores

Analysis of Variance

| Source | DF | Adj SS | Adj MS | F-Value | P-Value |
|--------|----|--------|--------|---------|---------|
| Factor | 1 | 2977 | 2977 | 0.08 | 0.775 |
| Error | 18 | 637804 | 35434 | | |
| Total | 19 | 640781 | | | |

Model Summary

| S | R-sq | R-sq(adj) | R-sq(pred) |
|---------|-------|-----------|------------|
| 188.238 | 0.46% | 0.00% | 0.00% |

Means

| Factor | N | Mean | St Dev | 95% CI |
|----------|----|-------|--------|----------------|
| A-Scores | 10 | 372.7 | 201.2 | (247.6, 497.8) |
| D-Scores | 10 | 348.3 | 174.4 | (223.2, 473.4) |

Pooled St Dev = 188.238

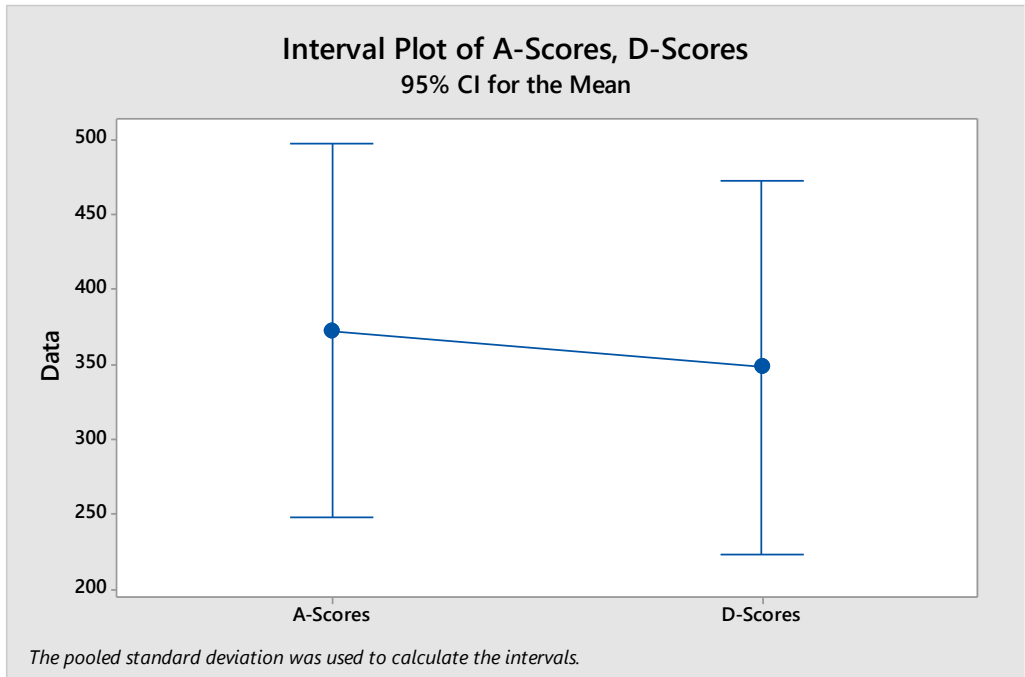


Figure 1. Interval Plot of A-Scores, D-Scores

In Figure 1, the plots reflect the intervals between the enhanced opinions of channel members' risk perception of chemical exposures on marketing of chemicals.

Section 4.1 shows that F-critical (4.38) is greater than F-computed (0.08) at 0.05 level of significance and 19 degrees of freedom. The null hypothesis, H_0 is not rejected. The p-value provides a confirmation of the decision. The p-value, 0.775 is greater than the significance level of 0.05 (i.e, $p > 0.05$). The co-efficient of determination, R^2 (adj) is zero percent. The null hypothesis is therefore upheld. In conclusion, channel members' risks perception of chemical exposures has no significant influence on marketing of chemicals.

5.0 Discussion of Results

The findings of the study reveal non-significant influence of channel members' risk perception of chemical exposures on marketing of chemicals in Nigeria. The result of the study implies that the health disorders/hazards associated with frequent contacts of channel members with chemicals have not affected the volume of exchange transactions. Perhaps, it may be that the channel members are not fully aware of the health implications of chemical exposures or financial considerations have shrouded their sense of personal safety and instinct of self-preservation. The Habituated Action Theory corroborates the revelations of this study. The theory states that engaging in high-risk behavior severally without

the occurrence of dire consequences often decreases the perceived risk associated with this behavior. In line with the opinions expressed by Kasperson, et al. (1988) and Weyman, et al. (1999), people who repeatedly perform high-risk tasks without an adverse consequence eventually become desensitized to the risks. Because the health disorders arising from chemical exposures, often manifest much later and not in the immediate for people to feel the pain, decrease in risk perception and high risk tolerance of channel members occur. The low literacy level of the greater number of channel members could be contributory to the low risk perception of the longer-term health effects of chemical exposures. The report of Finucane, et al. (2000) which states that the greater the perceived benefit of an activity, the lower the perceived risk further confirms the result of the study. The financial benefits associated with marketing of chemicals may have subdued the risk perception of channel members. For instance, at Ajasa market in Onitsha, observations have shown that some channel members share store spaces with chemicals and rarely use personal protective equipment such as coveralls, hand gloves, nose masks and eye goggles when re-packaging chemicals for wholesaling or retailing. Chemicals such as calcium hypochlorite, calcium carbide and formaldehyde with pungent smell are freely measured on weighing balances with no safety measures in place. Unmindful of the dangers of chemical contacts including the fumes

being inhaled daily, some channel members still place food stuff alongside the chemical substances in their offices /mini-warehouses which may lead to chemical poisoning. The huge financial gains associated with the trade seem to receive greater consideration than the health implications. The unsafe use of pesticides and disposal of their containers at refuse dumps in Aba metropolis also contribute to the frequency of human contacts with chemical contaminants. Furthermore, the theory of Situated Rationality buttresses the report of this study. The theory postulates that it is erroneous to presume safe behaviors are inherently rational and high-risk behaviors are inherently irrational. The high risk behaviors of the channel members engaged in marketing of chemicals even in the face of hazards of chemical exposures could not be judged irrational. The members wittingly take risks based on rational justification for financial gains and not that they are ignorant. As the channel members 'risk perception exerts insignificant influence on marketing of chemicals, emergence of safety culture can create more risk awareness and less risk tolerance in the psyche of members to minimize the attendant health disorders.

5.1 Implications of the study.

The study has several implications. It exposit the need for promotion of chemical safety in the environment and protection of public health. It signals the imperative of synergy between the regulatory authorities and chemical

channel members in the coordination of policies and activities for sound management of chemicals in Nigeria. The study reveals knowledge gap for possible research into risks characterization and assessment to identify chemical exposure limits that either present non-significant health threats or serious health disorders, as to provide framework for making risk management decisions. In addition, the study posits a paradigm shift in social behavior from risk tolerance and high risk dispositions of channel members to heightened risk perception of chemical exposures through an enthronement of safety culture in the distribution net work.

5.2 Conclusion.

The report of the study shows that the way risk relating to human contacts with chemicals is regarded, understood and interpreted by channel members has no significant influence on the business of chemicals marketing in Nigeria. When a channel member makes personal decision to engage in marketing of chemicals, in consideration of justifiable reasons and in spite of the inherent risks, situated rationality theory is in operation. The channel members would likely make poor judgment about risks if they have performed their tasks repeatedly without incurring health disorders. The longer-term health effects from chemicals due to delayed manifestation of ailments tend to convince channel members of the safety of their modes of operation. They become desensitized about the risks of chemical exposures, leading to lower risk perception and

high risk behavior. When huge financial gains are envisaged in chemicals marketing, risk tolerance and risk taking behaviors of the channel members would likely increase irrespective of enhanced risk perception. That channel members' considerations of financial benefits seem to outweigh the risks of chemical exposures ought to be worrisome. Any attempt to increase risk perception and suppress risk-taking behavior and risk tolerance levels of channel members engaged in the marketing of chemicals would safeguard the lives of citizens of this country and sustain the environmental health and safety.

5.3 Recommendations.

The following recommendations are articulated to create safety culture, increase risk perception, suppress risk tolerance and high-risk behaviors of members of the chemical distribution channels.

- i) All chemical channel members should be registered by the professional body of Chemists, i.e., Chemical Society of Nigeria.
- ii) Wearing of personal safety protective equipment should be mandatory to channel members and enforced by Chemical Society of Nigeria.
- iii) Regular workshops, conferences and training programs should be organized by the professional body to educate channel members on dire consequences of chemical exposures.
- iv) Every stage of chemical production/importation, wholesaling, retailing and

- usage/disposal should be analyzed and properly scrutinized to reduce frequency of human contacts with chemicals.
- v) Enlightenment campaigns should be mounted by Chemical Society of Nigeria/Media to increase awareness and raise public risk perception of chemical exposures and lower risk tolerance.
 - vi) Governments to create policies geared toward discouraging the public from engaging in marketing of chemicals without appropriate training, equipping and certification.
 - vii) The Federal and State Environmental Protection Agencies should strengthen cooperation of the intermediary organizations and increase coordination in the field of chemical safety.
 - viii) Legislative mandates on risks characterization and assessment to determine limits of chemical exposures and attendant health threats should be established and compliance to safety measures enforced.

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