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Editorial Comment

The maiden edition of the International Professional Journal (IPNJ) was published in 1999. Most articles that were published then were from Daphne Heard Research Institute of the Royal College of Nursing, London (RCN). However, this was the precise place of our contact where it was then suggested by the institute, that, they will be interested in reading nursing researches from Nigeria. With a list of Nigerians nurses in United Kingdom as well as their contacts to enable us reach them. This action refocused us in Nigeria at a time where only one university was offering post graduate programmes in nursing sciences. Conference, workshop and seminars became our main method of generating publishable articles as well as the few lecturers such as Prof Mildred John and Dr. Adiaha Effiong Effiong of department of nursing, university of Calabar, Nigeria

Over the years several of these conferences, workshops and seminars were conducted. More federal, state and private universities were established. Research in nursing was no more an optional issue. It became imperative with the Nursing and Midwifery Council of Nigeria (NMCN) and the West African College of Nursing (WACN) playing pivotal roles. Today, we have established the Nic Maurice College of Health, Management, Sciences and Technology with the Nursing Research Institute in the institution which have taken over the publication and conduct of nursing research and publications of findings from the Integrated Health Consultancy and Nursing Services (INTECHONS). The Institute have been called upon to publish another journal - JOURNAL OF ADVANCED NURSING RESEARCH (JANR) specifically for advanced nursing practitioners and researchers (M.Sc, Ph.D Thesis) that are conducted among the various institutions.

Twenty years spanning is commendable. The journey has not been without challenges. We also remember those who have been of immense contribution to this feat. They include: Nigerian Nurses Association of United States of America, Nigerian Charitable Association, United Kingdom (UK); The West African College of Nursing; The National Association of Nigerian Nurses and Midwives (NANNM) and The Nursing and Midwifery Council of Nigeria (NMCN) and other institutions.

Most of all some personalities who bestowed this assignment and guided its manifestations are commended such as Prof. Mildred John, Prof. Eunice Nnwonu, Dr. Adiaha Effiong, Prof. Idongesit Akpabio and their respective departments and institutions - departments of nursing, University of Calabar and University of Nigeria (UNN), the lecturers and the Departments of Nursing, University of Ibadan and Obafemi Awolowo University, Ile Ife as well as all the Nursing Departments and Institutions in the Federation, States and privately owned. Others include: The Nurse Scientists Union of Nigeria, and International Organization for Nursing Research and Development (IONRED).

Today, we set for ourselves another level in research conducts, findings utilization and dissemination/ publication towards a greater impact on the Scientific Arts of nursing practices. The experiences of the past years will be our motivator, God will be our inspiration, Philosophers will be our equals and the highest intelligences will deem themselves ambitious to obey our desires. We are more than confidence in the expectations of something unique to be reckoned with in another couple of years. Keep reading to be enlightened, Research

(Executive Editor)

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Any article or paper which any researcher wants published in this journal should be a thoroughly researched material ranging from contemporary nursing theoretical formalities, to new and modern methods and technologies applicable to nursing.

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Others are theoretical framework, design methodology, sample, sampling procedure, discussion of findings and recommendations.

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- ☐ *Methods design*
- ☐ *Sample*
- ☐ *Sampling procedure-their psychometric properties and procedure for used*
- ☐ *Discussion of finding and*
- ☐ *Recommendations*

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Executive Editor

PRINCIPALS' LEADERSHIP STYLES AND STAFF JOB ENGAGEMENT IN PUBLIC SECONDARY SCHOOLS IN RIVERS STATE

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Abstract

This study investigated the relationship between principals' leadership styles and staff (employee) job engagement in Public Senior Secondary Schools in Rivers State. Three (3) research questions and three (3) hypotheses were formulated to guide the study in line with the purpose of the study. The population of the study were all the 8,452 teachers from the 247 public senior secondary schools in Rivers State from which a sample size of 1,000 teachers from 33 schools were drawn through random sampling technique. The research questions were analyzed using Pearson Product Moment correlation coefficient and Z ratio statistics was used to test the hypotheses. The study used two self-designed instrument titled Principals' Leadership Questionnaire Rater (PLQR) and Staff Job Engagement Questionnaire (SJEQ) to collect data. The instruments were validated by the researcher's supervisor and two other experts in the faculty of Measurement and Evaluation, University of Port Harcourt. The reliabilities of the instruments were determined through Cronbach alpha method. The reliabilities coefficients of 0.90 and 0.87 were obtained for PLQR and SJEQ respectively. Results revealed moderate positive relationship between laissez-faire leadership styles of principals and staff job engagement, weak negative relationship between transactional leadership styles and staff job engagement and a strong positive relationship between transformational leadership styles of principals and staff job engagement. Based on this it was recommended that principals should come up with modalities of improving employee job engagement as to enhance teachers engagement, principals should adopt leadership styles that make them to be easily approachable and actively improve on communication, giving feedback on enquires and improve on job appraisal practices which should be competitive and fair. These will pave way in enhancing employee (staff) engagement, helping in achieving or realizing the organizational goals of the educational system and also affect the instructional delivery system of an educational sector.

Key Words:

Introduction

Staff (employee) engagement has emerged as a popular organizational concept in recent years. Kahn (1990) was the first to coin the term engagement as he described how people can "use varying degrees of their selves – physically, cognitively and emotionally in work role performances". Staff engagement, also called worker engagement, is a business management concept and is a relatively new concept in the educational sector. Staff engagement is a measurable degree of an employee's positive or negative emotional attachment to their job, colleagues and institution which profoundly influence their willingness to learn and perform at work. Engaged employees are those who, work with a passion and feel a profound

connection to their jobs, organizations and drive innovations which help to move the institution forward. Engagement can be seen as a heightened level of ownership where each employee wants to do whatever they can for the benefit and the success of the institution as a whole. Most organization today realized that a satisfied employee is not necessarily the best employee in terms of loyalty and productivity. It is only an engaged employee who is intellectually and emotionally bound to the organization that feels passionate about its goals and is committed towards its values, thus he goes the extra mile beyond the basic job. Staff engagement is a powerful retention strategy. An engaged staff gives his organization his hundred (100) percent.

Staff satisfaction and staff engagement are similar concepts on the surface and many people use these terms interchangeably. The importance of knowing the difference between satisfaction and engagement is critical for an organization to make strategic decisions to create a culture of engagement. Staff satisfaction covers the basic concerns and needs of employees. It is a starting point, but it usually stops short of what really matters in an organization.

Staff satisfaction or job satisfaction is quite simply, how content or satisfied employees are with their jobs, pay and work environment. For some organizations, satisfied employees are people the organization might be better off without. An employee engagement is much more than being content with pay, an engaged staff is an employee who is deeply involved and invested in their work and which the organization cannot do better without. Staff satisfaction is the foundation upon which staff engagement can grow and thrive.

Staff engagement is not the only term used to describe the positive attitudes and behavior of employees at work. Other terms commonly used are 'commitment', 'organization citizen behavior' and 'psychological contract'. The policy and practice of the implications of employee engagement are often captured in 'high involvement work practices' and 'high performance working'. Leaders in an organization must work to develop and nurture engagement, which requires a two-way relationship between employer and employee. Thus, employee engagement is a barometer that determines the association of a person with the organization. Back in 1990, Professor William Kahn held in-depth interviews with employees. He found that for an employee to feel engaged, they had to:

1. Feel that their work was meaningful and made a difference.
2. Feel valued, trusted and respected.
3. Feel secured and have self-confident.

Therefore staff engagement is generally seen as an internal state of mind; physically, mentally and emotionally that binds together the work effort, commitment and satisfaction of an employee which makes him use discretionary effort. In the context of this study, staff job engagement is defined as the emotional commitment the employees (teachers) has to the school and to the achievement of the educational goals without thinking of the fringe benefits attached to the teaching job.

Employee engagement involves emotions and feelings, which are difficult to measure objectively but instrumentally, employee engagement was measured using Schaufeli and Bakker (2008) 9-item of Utrecht Work Engagement Scale (UWES-9). This instrument measures three underlying dimensions of employee engagement; vigour, dedication, and absorption. Respondents in this study rated each item

on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The reported Cronbach's alphas range from 0.70 to 0.95 for the three dimensions across 15 studies. The sample item for vigor is, "At my work, I feel bursting with energy", for dedication is, "I am enthusiastic about my job", and for absorption is, "I feel happy when I am working intensely". Employee engagement can be detected by looking well at features such as: attendance combined with diligence, real productivity, continuous search for improvement of the work and the workplace, ardent care about the well-being of the organization at present and in the future, constructive criticism of attitudes and behaviors, readiness to participate in committees that seek optimization in the firm's performance and support of innovation and development.

Employee engagement is arguably the most critical metric for organization in the 21st century. Staff engagement is directly influenced by growth of the organization, value addition and experience of the organization. Human resource practitioners believe that the engagement challenge has a lot to do with how employee feel about the work experience and how employees are treated in the organization. Successful organizations show respect for each employee's qualities and contribution regardless of their job level.

Leadership is an important driver of engagement that goes beyond job titles. This responsibility comes through in how the leader helps his employees to do their work, conduct themselves, and how the leader, as a role model, convey messages to his followers. Armstrong (2004: 139) states that "leadership is the process of inspiring individuals to do their best to achieve the desired results. It is about getting people to move in the right direction, gaining their commitment and motivating them to achieve their goals". Leadership in the educational sector can therefore, be said to be a process in which a leader (principal) inspires his staff (teachers) to put in their best in their assigned task or duties in order to achieve the educational goals of teaching and learning whereby achieve a high academic standard in schools.

Every leader has his particular form of behavior which is known as the leadership style of that particular leader. Therefore leadership style can be said to be the way a leader uses interpersonal influences to achieve the objectives of an organization (Samson, 2009). The leadership style of a principal is important because it affects the instructional delivery system of an educational sector and it also allows the principal been the leader to interact more productively and more harmoniously with his staff to achieve personal and organizational goals. Various leadership styles are described by different authors but three types of leadership styles under consideration are:

The Transformational Leadership Style: This style of leadership was first described during the late 1970s

and some of the key characteristics of this style of leadership are the abilities of the leader to motivate and inspire followers and direct positive changes in the followers. Transformational leaders are not only committed to helping the organization achieve its goals, but also help group members fulfill their potentials. Research has revealed that this style of leadership resulted in higher performance and more improved group satisfaction than other leadership styles. Transformational leaders encourage subordinates to put in extra efforts and go extra miles in the performance of their jobs.

Transactional leadership Style: In transactional leadership style, the relationship that evolves between the leader and the followers is based on bargaining /exchange or reward systems (Bass, 1985; Bass and Avolio, 2003). The transactional leadership style views the follower relationship as a transaction. By accepting a position as a member, the individual has agreed to obey the leader. In most situations, the transactional leadership style focuses on the follower completing a required task in exchange for monetary compensation.

Laissez-faire leadership Style: This is also known as permissive, free-rein, anarchic or ultraliberal style of leadership. This is an avoidant leader, a leader who possess this leadership style may either not intervene in the work affairs of subordinates or may completely avoid responsibilities as a superior and is unlikely to put in efforts to build a relationship with them.

Studies revealed that little research has being carried out on the relationship between principals' leadership style and staff job engagement in Rivers state, this study therefore attempts to fill the research gap by examining, the relationship between the mentioned three leadership styles of Principals' and staff job engagement in Rivers State.

Statement of the Problem

The quality of an educational system depends mainly on the teachers who guide the students and carry out most of the tasks of teaching. Therefore, teachers should have high level of job engagement to the school so that schools as organizations will achieve the set educational goals and values. School leaders (principals) should always work consciously toward creating congruency between organizational and individual needs fulfillment for improved productivity in an effort to increase the level of teacher engagement. Despite efforts by the government to establish good secondary school facilities, adequate teachers' welfare, increase teachers' salaries, train teachers, provide bursaries through Ministry of Education and provide Constituency Development Funds to improve access, participation, and performance of students in both internal and external examinations, there are still reports on teachers absenteeism, teachers dissatisfaction and poor students performance in examinations particularly in external examinations. Students on their parts resort to

engaging in examination malpractices to pass examinations, these could be indicators of low levels of teachers engagement. Disengaged teachers will produce a high number of secondary school leavers who are not able to further their education given the current Joint Admissions and Matriculation Board (JAMB) entry requirements into our Nigerian universities and its competitive nature, implying a high wastage rate. This is likely to increase the level of unemployment in Rivers state due to lack of necessary and relevant education and technical skills. Unemployment is likely to lead to increased levels of crime, drug abuse and slow economic growth. Leadership style has been linked to teacher dissatisfaction and is also a predictor of employee engagement. According to the researcher, not much has been done to study teacher engagement in public senior schools in Rivers state. This study was therefore carried out to determine the relationship between principals' leadership styles and staff engagement in public senior secondary schools of Rivers State.

Purpose of the study

The general purpose of this study is to investigate the relationship between principals' leadership styles and staff job engagement in senior secondary schools in Rivers state. Specifically the study sought to:

1. determine the relationship between principals' laissez -faire leadership style and staff job engagement.
2. investigate the relationship between the principals' transactional leadership style and staff job engagement.
3. find out the relationship between the principals' transformational leadership style and staff job engagement.

Research Questions

The following research questions are to guide the study:

1. What is the relationship between laissez- faire leadership styles of principals and staff job engagement?
2. What is the relationship between transactional leadership styles of principals and staff job engagement?
3. What is the relationship between transactional leadership styles of principals and staff job engagement?

ii. Hypotheses

The following null hypotheses were stated to guide the study:

1. There is no significant relationship between laissez- faire leadership styles of principals and staff job engagement.
2. There is no significant relationship between transactional styles of principals and staff job engagement.
3. There is no significant relationship between transformational leadership styles of principals with staff job engagement.

Significance of the study

Relationships between leadership variables and measures of staff job engagement are examined. The study is considered a worthy area of research for the following reasons:

Having known that the quality of an educational system depends mainly on the teachers who guide and carry out most of the tasks and activities of education that take place within the schools and institutions in the educational system, findings from the study will contribute to helping the government in proffering solutions to teachers poor engagement attitude and behavior and in order give teachers maximum attention in the area of improving their working conditions so as to increase the level of teachers' job engagement.

Again, a study of the principals' leadership styles will help to provide a basis for the assessment of principals' leadership capabilities, in other words, the instrument used may serve as a useful diagnostic tool which will help the principals to know their strengths and weaknesses in terms of their managerial skills or competence in their jobs, thereby helping them to know how to manage or handle their staffs and students in any situation.

Finally, since there are little or no previous studies in Rivers state that have investigated the relationship between principals' leadership styles and staff job engagement, the students of educational management, psychology and social sciences will draw strength from this study to carry out similar research studies.

Scope of the study

The scope of this study is on the content and geographical area of the study. Within the content variable, the research specifically covers the Laissez-faire leadership style, the transactional leadership style and the transformational leadership styles. The geographical area of the study is some selected public secondary schools in Rivers State.

Limitation of the study

This study on principals' leadership styles and staff job engagement in public senior secondary schools in Rivers State was faced with the problem of finance and time in order to carry out the study in all the public secondary schools and also in private secondary schools in Rivers State. Again time in sorting and coding of data.

Definition of Terms

Principals: This is a leader and a person who is in charge of a college

Staff: This is an individual working in a given school. Staff is the same as employee.

Employee: This is one who is employed by another and paid salary for job done.

Leader: one who has followers or subordinates under him.

Leadership: This is a process whereby a leader (principal) influence and maximizes his subordinates

(employees) efforts towards the achievement of the goal of teaching and learning.

Leadership Style: This is the manner and approach used by leaders in motivating their staff. **Engagement:** This is the process whereby individuals get absorbed in their job and tend to put in their best.

Employee (staff) engagement: This is the emotional commitment the employee has to the organization and its goals.

Job: This is the role a staff or employee plays in an organization in order to be paid.

Review of Theoretical Framework

This study was based on the social exchange theory that tries to explain the social exchange relationship between leaders and their subordinates, the situational theory that explains the causes of various leadership styles and self-determination theory of employee engagement.

Social Exchange Theory (SET)

Social Exchange Theory (SET) which was initiated by Hormans in 1958 (Devan, 2006), assumes amongst others that social behavior is the result of an exchange process. The main reason of this exchange in his view is to maximize benefits and minimize costs. In accordance with this theory, people measure the potential benefits and risks of social relationships. People will tend to terminate or disregard the relationship when the risks outbalance the rewards (Cherry, 2010). Theorists have also proposed that SET is likely capable of providing insight regarding how leader's influence organizational outcomes. SET suggests that employees tend to reciprocate leaders' behavior towards them with their own matched behaviors on a pro quo (mutual reciprocity) basis as part of a social exchange relationship development process. Social exchange relationships between leaders and their subordinates develop from interactions and are motivated by the mutual benefits derived from the exchange (Hansen, 2010). It is therefore implied that to get the best from subordinates, principals being leaders should develop good social relationship with subordinates in the school environment.

Situational Theory

Situational leadership theory originates from the work of Hersey and Blanchard Fieldler, and is based on the notion that there is no best way to lead (Hersey & Blanchard, 1977). Situational theory became popular in the 1950s. According to Ajadi et al (2008), situational leadership theory proposes that leaders choose the best course of action based upon situational conditions or circumstances. In the word of Vroom (1983) and Stoner (1978) as cited by Ajadi et al (2008) the focus of the situational theory is that, the situation with which a leader finds himself will dictate his actions or behaviors. They argued that no theory could be regarded as the best; hence the situation would determine the course of action. Leadership style needs to be aligned with the situation in order for the leader to be effective (Quader 2011). As revealed by Fiedler and Chemers (1984), situations of high control

are better managed by task motivated leaders (transactional leaders), while relationship that needs motivation and low-control are managed by transformational leaders, these leaders are inclined to excel in circumstances of reasonable control. This theory implies that effective school leaders are those who can adapt their leadership style to the educational setting for which they are responsible (Hersey and Blanchard 1977). The theory is set on the premise that effective leadership is dependent on each school's unique situation, school leaders are required to choose the best course of action based upon that situation.

Furthermore, the situational leadership theory rests itself on the leadership styles of the school principals and the maturity levels of the teachers associated with the school. This theory suggest that the style of a principal in any educational setting should be dependent on a combination of factors, including the behavior and maturity levels of the teachers, the situation of the school and the school environment. It is implied that no single aspect of leadership should be associated with any particular educational setting at any one time, and that school principals need to be open-minded and adaptable for successful leadership to occur in these establishments.

There is an argument that leadership challenges of the modern world can be more effectively resolved through versatile and adaptive leadership style (Yuki & Mahsud 2010). They further argued that leadership is a process and not a set of characteristics. This therefore, suggests that there is no ideal, fixed leadership style and that affective leadership evolves over time and through circumstances (Yuki & Mahsud, 2010). Karitha Seithuraman (2014) explained that for a leader to be successful, it is imperative that his leadership style is altered to adapt to the situation at hand.

Self-determination theory of employee engagement

According to an article (downloaded from <https://peakson.com/blog/employee-wellbeing/self-determination-theory>) self-determination theory (SDT) was founded by Deci and Ryan, American Clinical psychologist and this theory has become the blueprint for understanding employee motivation. 'SDT' was initially developed back in the early 1970s; in SDT, Deci and Ryan (1985) proposed that there are three fundamental psychological needs that are critical for motivation: autonomy (a sense of control over ones' live), relatedness (connecting with others and experiencing a sense of belonging), and competence (feeling capable in our interactions with the world). They argue that our levels of motivation are shaped by the extent to which we satisfy these fundamental needs.

These scholars further proposed that motivation falls on a scale that ranges from 'extrinsic' (controlled) to 'intrinsic' (autonomous). Those who are intrinsically motivated, complete tasks out of a fundamental interest and enjoyment in the activity itself – the

pinnacle of motivation. On the other hand, extrinsic motivation refers to times when individual's behavior and motivation to perform a task originates from external influences. For example, the threat of punishment or the promise of reward. Initially it was argued that external rewards – such as bonuses and pay rises – could not possibly increase intrinsic motivation, and would in fact only lead to extrinsic forms of motivation that threaten long-term performance (Deci 1971). However, later developments based on SDT, led to the current understanding that it is the context in which feedback and rewards are given that is the key. The best forms of feedback enable us to fully understand what we have done well, or where we could make improvements – boosting all three needs: our sense of competence, relatedness and autonomy. Deci and Ryan's concept of Competence has a clear relationship to our accomplishment driver and reflects the extent to which we feel a sense of achievement on a day-to-day basis. This is influenced by the way we internalize our successes and failures. When we have the chance to challenge ourselves and receive feedback in the right manner, this increases our sense of competence and raises our accomplishment levels.

Therefore, self-determination theory consist of components of engagement theories which describes the factors that are extrinsic and intrinsic in relation to employee performance (Meyer & Negagne; 2008). The study was based on self-determination theory because it considers both external and internal factors of employee engagement. Consequently, it would indeed provide a conclusive view of the impact of supervisor's behaviour towards employee perceptions. This theory states that there are extrinsic motivational factors which are predominant in a work context, and can reflect a desire to gain rewards or avoid punishment (Meyer & Negagne, 2008).

Conceptual Review

Concept of leadership styles:

Many scholars, including Babalola (2016), Osabiya and Ikenga (2015), and Adeyemi (2010) agreed that leadership entails the capacity of the leader to influence the activities of others to achieve the corporate goal of the organization. In leadership, the leader applies several leadership styles to achieve the set goal. To Akinwumiju and Olaniyan (1996), leadership style is seen as a process through which the leader influences others in the process of attaining the group goal. As a process, it requires that the leader has a laid down procedure and specific direction to follow in his/her leadership activities. According to Okumbe (1998) leadership style "is a particular behavior applied by a leader to motivate subordinates to achieve the objectives of the organization". To this scholar, leadership is not only an act of influencing others to carry out the organizational goal, but it includes the specific activity such as the "motivation" of others to ensure that they carry out the organizational goal to the

desire of the leader. This provides the leader with the opportunity of controlling the followers in the organization.

Concept of job engagement

According to Darryl & Thomas (article downloaded from Wiley online library) job engagement is defined as a person's enthusiasm and involvement in his or her job. People who are highly engaged in their jobs identify personally with the job and are motivated by the work itself. They tend to work harder and more productively than others and are more likely to produce the results their customers and organizations want. People who are engaged in their jobs are those who are enthusiastic and they tend to do better in their day-day work. Engaged employees report that they make good use of their skills and abilities in their jobs, their work is challenging and stimulating and their work provides them with a sense of personal accomplishment.

An employee can be satisfied with a job without being engaged in the job. Employee engagement is much more than being content with pay. The difference between an engaged and unengaged employee is a willingness to exert discretionary effort. Discretionary effort is the difference between meeting the minimum requirements of one's job and exceeding expectations in order to further the organization's mission. Building a satisfied workforce is relatively straightforward: offer employees competitive salaries and benefit packages. Encouraging engagement is a bit more complicated. Within any organization employees differ greatly in terms of their engagement levels at work and the amount of intensity and attention that they put forth in their jobs. As a construct, employee engagement is a relatively new concept that has come into play over the past two decades (Rafferty, Mabey, West & Robinson, 2005). It is a vast construct with no single, universally-agreed upon definition. Staff (employee) engagement has emerged as a popular organizational concept in recent years. Kahn (1990) was the first to coin the term engagement as he described how people can 'use varying degrees of their selves-physically, cognitively and emotionally in work role performances'.

Leadership styles and job engagement

To Chandan (1987), leadership style entails the ingredient of personality embedded in a leader that causes subordinates to follow the leader. It is the leadership style that attracts the followers to the leader. Mohammed et al ;(Yusuf, Sanni, Ifeyinwa, Bature, and Kazeen (2014) agreed with the above views on leadership style and added that leadership style is the pattern of behaviors engaged by a leader when dealing with the employees. Such behavior makes the staff to respond willingly or otherwise to the directive of the leader, and determines the type of leader in question.

The principal's leadership style in a secondary school determines the level of success or failure achieved in

the school management. This is because the level of staff response to the Principal directives also determines the capacity to achieve the schools' educational goals. This makes it imperative therefore, that there should be need for every educational organization to start examining the leadership styles exhibited by their leaders (principals) in order to achieve effective learning environments. This is because the role played by these empowered leaders will determine the student's learning and future outcomes, teachers' performance and most importantly, teachers' job engagement.

Leadership styles are considered to affect employees in a significant way. It can translate into the achievement of the organizations values, mission, vision and achievement of organizational outcomes (Nwibere 2013). The degree of control achieved by a leader depends on the relationship between the leader and his followers, the way the task is structured, and the power vested in the position the leader occupies (Quader, 2011). Therefore, Leadership style describes the relationship which exists between the leader and the followers usually in decision making and flow of information leading to effective and efficient workforce.

Over time, researchers have proposed many different styles of leadership, according to an article (downloaded from <https://blog.hubspot.com/marketing/leadership-styles>) there are seven (7) types of Leadership Styles and these includes: autocratic leadership Style, bureaucratic leadership Style, democratic leadership styles, strategic Leadership styles, transactional leadership styles, laissez-faire leadership style and transformational leadership. This study will be based on the transactional, laissez-faire and the transformational leadership styles of principals. The relationship between these leadership styles of principals and job engagement of staff in selected secondary schools in Rivers State will be investigated/studied and is the main objective of this study.

Leaders impact organizational effectiveness through their followers. Leadership can have a great impact on engaging employees within the organization. However, Laissez-faire leadership style is associated with dissatisfaction, unproductiveness and ineffectiveness (Deluga, 1992) followed by transactional leadership, which limits the leader to using reward based behaviors in order to achieve higher performance from employees, which only have short-term effects. Transformational leadership emerges as a style that fosters the development of employee engagement. As Kaiser, Hogan, and Craig (2008) suggest, transformational leadership changes the way followers see themselves-from isolated individuals to members of a larger group. When followers see themselves as members of a larger group, they tend to work towards the achievement of the group values and goals, and this enhances their motivation and they work hard to contribute their part to the group.

Transformational leaders provide an inspiring vision of goals that can help overcome self-interest and narrow factionalism in organizations. They summon new and broader energies among followers. Bakker and Schaufeli (2008) found that employees who have positive interactions with their managers have increased levels of engagement. Additionally, Walumbwa, Orwa, Wang, and Lawler (2005) found that using a transformational leadership style leads to increased organizational commitment and job satisfaction, and again, Cartwright and Holmes (2006) found that leaders who focus on relationship building and trust, develop increase engagement levels. Transformational leaders are not viewed as a power figure but as mutual support for a common purpose, the collective good of an organization. From this perspective, transformational leaders have the capacity to directly impact the engagement levels of their employees (Nohria, Groysberg, & Lee, 2008) and are able to meet the human and work needs of their employees, a dividend of a very unique and empowering style.

The figure 2.1 below illustrates the leaders' impact on job engagement based on the literature review. It is the researcher's hope that this study will prove otherwise or support these views.

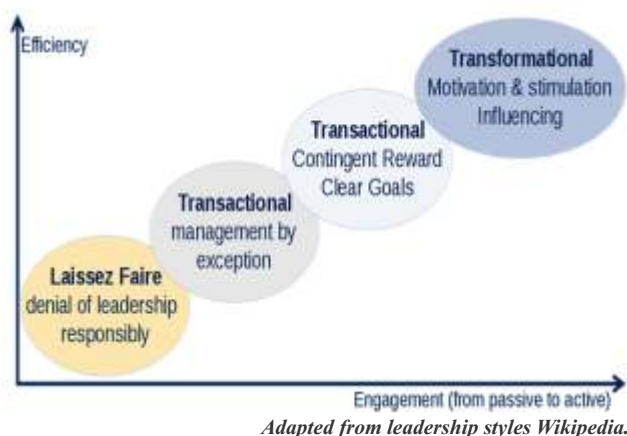


Figure 2.1: leaders impact on job engagement

Laissez-faire leadership styles and job engagement

The word laissez faire is derived from two French words and it stands for "leave alone". Or more accurately "leave to be" (<https://www.merriam-webster.com/dictionary/laissez-faire>). Laissez-faire also means indifference or non-interference, especially in the affairs of others. (Collins English Dictionary Laissez-Faire). This style of leadership allows complete freedom to the group and individuals in the organization to do their wishes. It is characterized by indecision and indifference about the leader's responsibilities. In laissez-faire leadership style, all the rights and power to make decisions is fully given to the worker. Laissez-faire leaders abdicate responsibilities and avoid making decisions, they give subordinates complete freedom to do their work and set their own deadlines. (Chaudhry & Javed, 2012). Employees under a laissez-faire leader are dissatisfied, unproductiveness and ineffective (Deluga, 1992). It can therefore be concluded that laissez-fair leaders

are not sufficiently motivated or adequately skilled to perform supervisory duties. Lastly, in laissez-faire leadership style a leader only gets involved when there is a problem (Northouse, 2004). This is supported by Neograss (2014) when he stated that leaders using a laissez-faire style usually adopt monitoring methods and wait until there are serious issues that come to light before they become involved. Teams under laissez faire leaders struggle with lack of direction and enthusiasm (Awan & Mahmood, 2010). Laissez-faire leaders are inactive, and are profoundly disengaged in work progression; leadership duties such as determining a clear vision and mission, which are not discharged at all. (Zineidin & Hyttew, 2012). Achieving organizational goals in this type of leadership is often difficult as it is devoid of rules and regulations (Ajadi et al 2008). Often this style of leadership is most effective when individual employees are very experienced and skilled. This type of leadership, however, could also occur when managers do not apply sufficient control. The major functions of this leadership style include trusting members to make appropriate decisions and hiring trained employees. Leaders feel confident that the members of their group possess the skills, knowledge, and follow through to complete a project without being micromanaged.

Leadership styles and job engagement

The Transactional leadership style was identified by Burns in 1978. According to Burns, the relationship that exists between most leaders and followers is transactional as the leader approaches the follower with the notion of exchanging one thing for another. According to Armstrong (2005), transactional leaders are more into the exchange of resources like money or jobs to ensure that employees do what they are required to do. Nwokocha and Iheriohanma (2015) defines transactional leadership as an exchange process that ensures that a follower is in compliance with the leader's request but is very unlikely to produce commitment and zeal to the task objectives. Transactional leadership starts with the idea that employees agree to obey their leader totally when they accept a job. The leader has a right to "punish" employees if their work does not meet the pre-determined standard. Transactional leaders use conventional reward and punishment to gain compliance from their followers (Burns, 1978). A transactional leadership style is considered as a replacement of the autocratic leadership because both of leadership styles generate levels of predictability and order (Aarons, 2006).

The relationship between the leader and the follower is purely based on bargaining and it does not go beyond this. This style of leadership urges the leader to tell the followers what to do in order to achieve a desired reward for their efforts. Burns (1980) believed that transactional leadership is based on bureaucratic leadership authority. Transactional leaders' focus on work standards, assignments and task orientated goals. In addition, he believed that transactional leaders tend to focus on task completion and employee compliance. These

leaders tend to be action oriented and results focused. Team members can do little to improve their job or achieve job engagement under transactional leadership.

These transaction falls under the labels constructive and corrective transactions (Bass & Avolio, 1991). constructive transactions are known as contingent reward and corrective transactions are known as management-by-exception. Contingent reward is constructive form of transactional leadership where a leader clarifies expectations and offers recognition when goals are achieved (Bass & Avolio, 2004). These leaders focus on reward and in some cases punishment. In the work of Bass (1985), Bass and Avolio (2004), these rewards are classified as contingent positive reinforcement or contingent penalization/negative reinforcement. Contingent positive reinforcement could be as simple as a leader's praise. Praise could be given when individuals complete a task-on-time, ahead of time, or when working at a good pace towards completion. Contingent negative reinforcement could involve meting out punishments to those who are underperforming, such as suspensions when goals or tasks take longer than expected. Bass (1985) states that 'contingent punishments are handed down on a management-by-exception basis, in which the exception is "something that is going wrong"

Eventually, it was discovered that within this style of leadership are two forms of management-by-exception. These two forms of management-by-exception are known as active and passive forms. Management-by-exception (active) is a style of leadership by which principals primarily only intervene when something goes wrong. Active management-by-exception constitutes leadership whereby principals continually examine teachers' performance and make modifications and provide corrections throughout the process. These leaders expect subordinates to obey and they specify standards for compliance. These principals also make clear what constitutes ineffective performance and quite often they will implement punishment for any form of insubordination or non-compliance with standards. This form of transaction is considered corrective, as more often than not, these principals take corrective action for any mistakes or errors as quickly as it may occur (Bass & Avolio; 2004)

Management-by-exception (passive) on the other hand constitutes a style of leadership whereby the school principal waits for things to go wrong before attempting to fix the problem (Bass 2008). These principals are motivated to take action only when problems become chronic. They usually fail to intervene until issues become serious (Bass & Avolio, 2004). This extreme form of transactional leadership is similar to laissez faire leadership style in which principals display avoidant behaviors. They avoid making decisions, avoid specifying agreements, avoid clarifying expectations and avoid issuing goals and standards of performance to individuals. This style of leadership has a negative effect on all those

involved, and in the outcomes of set goals-not intended by the leader. It can therefore be stated that in transactional leadership style the job engagement of followers or subordinates are limited by the leader's use of reward based behaviors in order to achieve higher performance from employees, which only have short-term effects.

Transformational leadership style and job engagement

James Macgregor Burns was the first person who put forward the concept of transformational leadership. Burns (1978) stated that "transformational leadership is a process where leaders and followers raise one another to a higher level of morality and motivation." Bass (1996) further added that transformational leadership exist when a leader encourages his followers to share a vision, allowing them to achieve the vision and providing the opportunity to develop their individual potentials. Transformational leaders have the ability to work with the vision of their employees, encouraging them, and raising their moral (Neider and Schriesheim, 2002). Transformational leaders encourage followers to both develop and perform beyond standard and expectations. They achieve this by showing followers the sacrifice they are willing to make and followers are subsequently encouraged to follow suite (Bruce & Avolio, 1985).

Transformational leaders inspire trust in those they are leading, encouraging them to think critically and seek new ways to approach their jobs. Transformational leaders motivate their followers by making followers more aware of the importance of task outcomes (Akpa, 2011). As a result, there is an increase in their levels of performance and commitment to the goals of their organization in a positive way (Hiller, 2009). However, Fenn and Mixon (2011) confirmed that the transformational leaders raise the efficiency and productivity of an organization because of its flexibility and how it gives the followers the chance to be creative.

Transformational leaders are often visible and known for their passion and energy in all aspects of their work. They spend most of their time communicating with others and looking for initiatives that will add value to their teams' future and they motivate and empower their followers. Transformational leaders urge followers to go beyond their self-interests and be concerned about their organization. They help followers to realize and develop their potential. These leaders identify the needs of their followers and then consider those needs to enhance development (Meyer & Allen, 1997)..

A transformational leader has integrity, sets clear goals, clearly communicates vision, sets good examples, expects the best from employees, encourages, inspires, supports, help subordinates see beyond their self-interests and focus more on team interests and needs. Furthermore, transformational leaders act as role models for their followers and

encourage their followers to regard challenges as opportunities (Bass & Avolio, 1997). They further explained that transformational leaders are deeply respected, have referent power, set high standards and challenging goals and have individualized consideration for their followers. The leader delegates assignments to followers to provide learning opportunities and coach them if they need it.

Furthermore, Covey (1992:287) confirmed that, the goal of transformational leadership is to transform people and organizations, in a literal sense, to change them in mind and heart; enlarge their vision, provide insight and understanding; clarify purposes; make behavior congruent with beliefs, principles or values; and bring about changes that are permanent. Kelly, 2003) also stated that transformational leaders serve as role models and also motivate their followers by following Maslow's hierarchy of needs, which involves raising followers from low levels of need (physiological) to the highest level of need (self-actualization).

The first factor of transformational leadership is idealized influence. Idealized influence is a style of leadership that influences subordinates to view their leaders in an idealized way (Bass & Avolio, 2004). These leaders behave admirably, which usually causes followers to idealize and identify with them. In the case of a school setting, these leaders take stands with their teaching colleagues and appeal to them on an emotional level. The relationship is built on genuine trust and there is a solid moral and ethical foundation between the two parties (Covey 2007). Principals, who are idealized leaders, envisage a desirable future, articulate how it can be reached, provide examples to be followed, show determination and confidence, and set high standards of performance (Bass 1999). Gerhardt (2004) believes that these leaders use outstanding influence in order to move and motivate others to accomplish tasks beyond personal and organizational norms. Gerhardt (2004), Konzes and Posneer (1987) pointed out that leaders create a sense of covenant when they help others to grow and develop. When a leader is viewed as helpful and appears to be making decisions in the best interest of each member of staff, then subordinates are more likely to be committed to the leader and they will help to work towards the achievement of the organizational goals.

The second factor of transformational leadership is known as inspirational motivation. Inspirational motivation is the ability to inspire and motivate followers. It denotes a leader as a figure, who inspires and articulates a vision that is appealing. Inspirational leaders share goals and mutual understanding of what is right and important, they inspire and motivate (Bass & Avolio, 2004). In an educational setting in which transformational change is being conducted, principals have the task of stimulating others to adopt new ideas. Principals displaying inspirational and motivational behaviors challenge their teaching

subordinates positively, communicate a sense of optimism towards future goals and provide meaning for the task at hand (Bass 1999). Importantly, teachers also require a strong sense of purpose if they are to be motivated to act, and school principals need to acquire communication skills that allow their vision to be activated in a persuasive way (Bass 1999).

Thirdly, a transformational leader is known for displaying intellectual stimulation. Intellectual stimulation is modeled when leaders pay attention to the developmental needs of followers, support and coach their development to become more innovative and creative (Bass, 1999). Bass and Avoio (2004) believe that principals who promote intellectual stimulation encourage teachers to question assumptions, their own beliefs and values and when appropriate, those of the principals which may be out of date or inappropriate for solving current problems. A principal who promotes intellectual stimulation willingly allows for a shift in power or distribution of leadership authority. Such leaders encourage their subordinates to take on greater responsibilities in the workplace as well as engage with key stakeholders to impact educational practice with a higher purpose and meaning (Bhindi & Duiguan, 1997).

Lastly individualized consideration is a transformational leadership characteristic whereby leaders recognize and attempt to satisfy their associates' current needs and aspirations. Paying attention to others is one of the most important aspects of transformational leadership (Podsakoff, Mackenzie, Moorman et al; 1990). Principals who display characters of this leadership style try to understand and share in others concerns and developmental needs, and treat each individual uniquely (Bass 1999). They expand, elevate and empower those needs in an attempt to maximize and develop their followers' full potentials (Bass & Avolio, 2004). This was supported by Kelly (2003), when he stated that the components of transformational leadership are as follows:

1. Idealized influence: transformational leaders behave in ways that result in their being role models to their followers. The leaders are admired, respected and trusted.
2. Inspirational motivation: transformational leaders act in ways that inspire and encourage those around them by providing sensible challenges to their followers, team spirit is aroused. The leader creates clearly communicated expectations and demonstrates commitment to goals and the shared vision that followers want to meet up with.
3. Intellectual stimulation: transformational leaders encourage their followers to be hard working, inventive, reframe from troubles, approach situations in a mature manner and in diverse ways. Creativity is encouraged and followers are encouraged to try new approaches to problem

solving and these are not criticized because they differ from leader's idea.

4. Individualized consideration: transformational leaders pay special attention to individual's needs and help achieve their highest level needs. This is done by tracing individual's talents, coaching and mentoring of these individuals and developing consecutively to higher levels of potential.

Bakker and Schaufeli (2008) found that employees who have positive interactions with their managers have increased levels of engagement. Additionally, Walumbwa, Orwa, Wang, and Lawler (2005) found that using a transformational leadership style leads to increased organizational commitment and job satisfaction, and again, Cartwright and Holmes (2006) found that leaders who focus on relationship building and trust development increase engagement levels.

Transformational leaders are not viewed as power figures but as mutual support for a common purpose for the collective good of an organization. From this perspective, transformational leaders have the capacity to directly impact the engagement levels of their employees (Nohria, Groysberg, & Lee, 2008) and are able to meet the human and work needs of their employees, a dividend of a very unique and empowering style.

Conceptual framework

Staff engagement involves emotions and feelings, which are difficult to measure objectively. However, according to Schaufeli and Bakker (2003), Staff (employee) engagement can be measured using 9 item of Utrecht work engagement scale (UWES-9) which is characterized by vigor, dedication, and absorption. The different components of each of the leadership styles as reviewed conceptually, are represented in the framework below

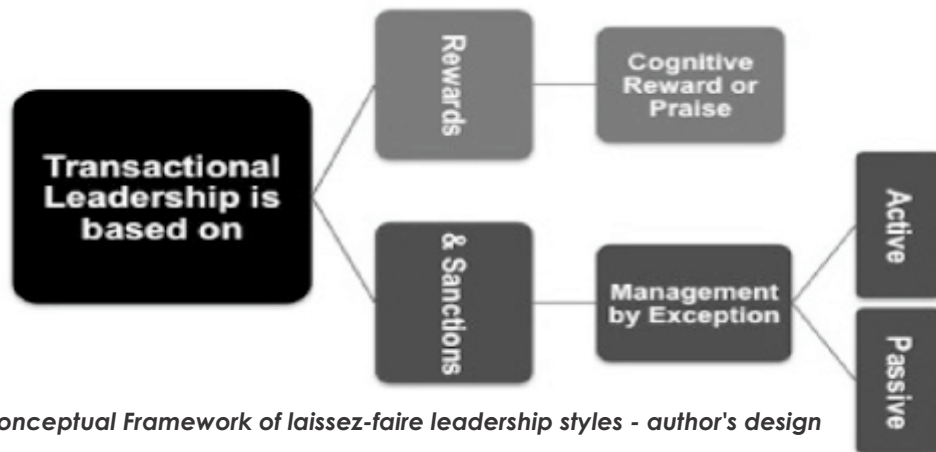
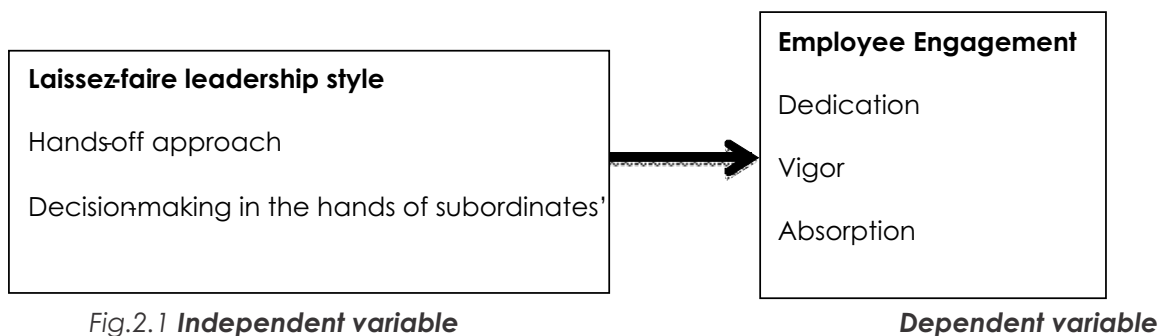


Figure 2.2: Conceptual Framework of laissez-faire leadership styles - author's design

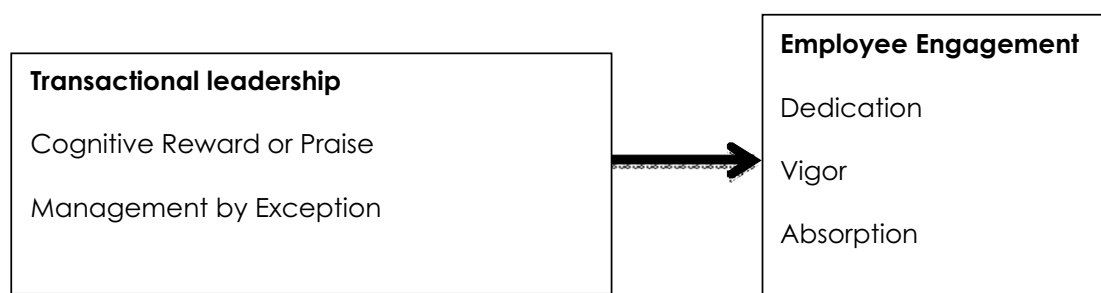


Figure 3a: Conceptual framework of transactional leadership styles-adapted from leadership Wikipedia



Figure 3b. Conceptual framework of transactional leadership styles- designed by the researcher

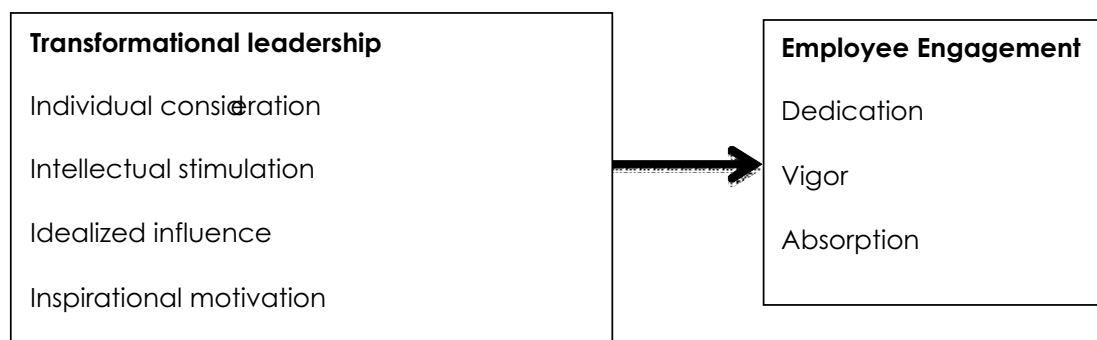


Figure 4a. Conceptual framework of transformational leadership styles- designed by the researcher.

Review of Related Empirical studies

Heba, Alfahad, Salem, Alhajri and Abdulmuhsen Alqahtani research on the relationship between principal's leadership styles and teachers' achievement motivation in Malaysia in 2018. A total of 320 heads of instructional departments were randomly selected from randomly selected schools. The results revealed that a transformational leadership style was prevalent among principals and teachers' achievement motivation was positive. There was a positive correlation between the principals' transformational leadership style and the teachers' achievement motivation. The study established that 18.7% of teacher engagement was explained by transformational leadership. It is therefore recommended that there is need for the Teachers Service Commission to plan and strategize at the National and County levels on how to train school principals on transformational leadership skills including other teachers that aspire to take leadership positions. To ensure continued practice of the transformational leadership in schools, it is necessary that the Teachers Service Commission through the Ministry of Education puts in place organized evaluation strategies that give school principals the opportunity to assess their performance on a regular basis. The '360 degree' feedback system if applied will give the principals a complete knowledge of their skills and strengths as viewed by

themselves and others, and thus provide them with an opportunity to become more aware of themselves and keep them on track in practice in appropriate leadership behaviors.

Maundu et al (2018) in their study the effect of transformational leadership style on employee engagement in public secondary schools of Murang'a County in Kenya. A Survey research design was employed. The target population was 3,860 teachers. Systematic random samplings followed by use of random numbers were applied to 368 samples, 368 respondents in 306 Public Secondary Schools. Data analysis was carried out using descriptive statistical methods that provide measures of central tendency like the mean, standard deviation and percentages to describe the characteristics of the variables of interest in the study. The inferential statistical tools applied in this research were correlation analysis and linear regression. Statistical Package for the Social Sciences software (SPSS) version 23 was used to assist in data analysis. The result showed that transformational leadership had a positive significant effect on employee engagement and its dimensions. Based on the findings of this study, it was established that using transformational leadership style could enhance employee engagement.

An attempt to study different styles of leaders' behavior on the group, a research was conducted at the University of Iowa by a group of scientists. This study was known as the Iowa studies. The researchers came up with three leadership styles to determine their effects on the attitudes and productivity of the subordinates. Authoritarian leaders were very directive and did not allow any participation in the decision-making process. They assume full authority and responsibility from initiation to task completion. Democratic leaders promoted group discussion and decision-making. They encouraged subordinates to express their ideas and make suggestions. Laissez-faire leaders let the group decide on their own and gave them complete freedom. In other words, they do not provide any leadership at all. Some of the implications of the research were that of the three styles of leadership, subordinates preferred democratic style the best. They also preferred laissez-faire leadership style over the authoritarian one. Authoritarian leaders receive aggressive or apathetic behavior from their subordinates. Productivity was slightly higher under the authoritarian leader than under the democratic one. However, it turned out to be the lowest under the laissez-faire leader's supervision (Lunenburg & Ornstein, 1996).

Akinola (2013) sampled 770 teachers and 154 principals in a study on principals' leadership skills and school effectiveness. The case of South Western Nigeria, the researcher used questionnaire to obtain data that were relevant to meeting the demands of 4 research questions of the study. The descriptive survey research was employed for the study. Simple percentage was used to analyze the data. Findings revealed that secondary school principals in South Western Nigeria possessed technical, interpersonal, conceptual and administrative skills. A significant relationship was found between principal's leadership skills and school effectiveness. The level of adequacy of possession of leadership skills for school effectiveness was not examined. The result suggests training for possession and exercise of principal's leadership skills at sufficient levels to influence school effectiveness. The researcher recommended removal of school barriers which will influence principals' leadership skills and school effectiveness.

Javad and Davood (2012) sampled 280 Iranian employees in a study of organizational commitment and job satisfaction among employees in Iran. The study employed a questionnaire survey approach to collect data for testing the hypotheses. Relevant statistical analytical techniques including regression analysis were used. The results indicated that all three factors of job satisfaction (promotion, personal relationships and favorable conditions of work) have positive and significant effects on organizational commitments. The findings highlighted the critical roles of components of job satisfaction in organizational commitment. The study suggested that appropriate investments in job satisfaction can enhance organizational commitment. This related to Becker "side bet" theory (continuance commitment).

Nguni, Slegers and Denessen (2006) studied the relationship between the transformational leadership style of the school principal and the teacher job satisfaction. The study was conducted in public primary schools in Tanzania and included 700 primary school teachers selected from 70 schools located in five districts in the Eastern education Zone of Tanzania. A total of 545 teachers appropriately responded with a return rate of 78%. The sampled teacher population consisted of 83% female and 17% male. The instrument used was questionnaire, multiple regression analyses were performed to assess the effect of transformational and transactional leadership factors on the job satisfaction, organizational commitment, and organizational citizenship behavior. Results indicated that both transformational and transactional leadership factors influence the outcome variables of organizational commitment, organizational citizenship behavior and teachers job satisfaction; however varying degrees of influence were evident on the outcome variable. The findings also confirmed that transformational leadership behavior had strong to moderate effects on value commitment, organizational citizenship behavior, and had only a positive effect on commitment (continuance commitment). The result demonstrated that individual leadership factors with regard to transformational and transactional leadership has varying degrees of influence on outcome variables.

The transformational leadership dimension of charismatic leadership particularly had the greatest influence and accounted for a large proportion of variation in value commitment, organizational citizenship behavior, and teacher's satisfaction, with regard to the component had a positive influence on job commitment. The two leadership dimensions of passive management-by-exception and laissez-faire leadership exhibited strong negative effects on individual dimensions of transformational and transactional leadership which include have varying degrees of influence on teachers' work attitudes and behavior including organizational commitment, organizational citizenship behavior, and job satisfaction. These results suggest that effective school leaders should use a combination of transformational and transactional leadership styles or behavior.

In another study by Ling and Ibrahim (2013), on "Transformational leadership and teacher commitment in secondary schools of Sarawak", 1014 trained teachers were sampled, survey method was applied and two broad hypotheses were tested. The results indicated a moderate level of teacher commitment and a low level of transformational leadership qualities among the respondents. The results from multiple regression analysis provided little to moderate support for the analysis. They order insights on how leadership practices affect teacher's commitment. It also necessitates leadership development of school principals to acquire

transformational leadership qualities that are crucial in changing teacher's attitudes and improving their commitment level. The suggestion of this study seems to agree with Katz (1955) when he said that leaders will be focused on 'what they do' and not 'who they are', which implies that a leader or those occupying managerial positions should develop certain skills to influence their subordinates' attitude and for the effectiveness of the organization. This is also applicable to the principals since they are the most powerful and influential individuals in the colleges, their critical role in ensuring commitment of their teachers, the effectiveness of the schools and the efficiency in running the school (Ahmad, 2004).

From the above, it can be seen that there has not been any research done on the researcher's topic and in the geographical location of study, this explains the gap in knowledge. And although there has not been an exact study on the researcher's topic but to an extent the researchers above have emphasized that management style or leadership style of a principal has a great influence on teacher's commitment and attainment of organizational goals. A competent principal should make do with his skills to influence his teachers to be more committed and more engaged in their jobs. When the teachers are highly engaged, teachers will be dedicated to teaching students, which will in turn lead to students achieving positive results in their academics hence the quality of education will be improved.

Leadership has been a complex phenomenon about which many theories have been developed. The theoretical framework for this study was based on leadership theories of social exchange theory that tries to explain the social exchange relationship between leaders and their subordinates, the situational theory that explains the causes of various leadership styles and self-determination theory of employee engagement.

Conceptually, the principal is seen to be the leader of the secondary school in which he is administering. The principal being the leader has his subordinates or followers which are the academic and non-academic staff, these groups of persons help him to take care of the students as to achieve the organizational goals and the aims and objectives of education. The principal may exhibit certain characters as regards; his means of communication, relationship with staff, etc. depending on the style chosen by the principal. These styles exhibited by the principals are known as the principal's leadership styles. Principals may exhibit certain leadership styles as a result of the situation principals find themselves as seen in situational theory. And regarding the leadership styles of principals; three were discussed in this study namely: transactional, transformational and the laissez faire leadership styles.

In transactional leadership style the relationship between managers and employees are based on bargaining, contingent reward and contingent negative reinforcement, whereas transformational

leadership styles supposes that the relationship between the manager and the employee are of mutual trust and characterized by four factors: Idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation. The laissez-faire leadership style has to do with the leaders 'hands off' approach to work leaving the decisions of policies to be decided by the followers. Whatever, form of leadership style a principal decides to adopt may have negative or positive influence on his/her staff leading to either a low level of job engagement or high level of job engagement.

Related empirical studies were also reviewed, which are mostly studies that were carried out in other countries as seen above. It therefore, implies that there has not been any research done on the researcher's topic and in the geographical location of study, this explains the gap in knowledge. This study was therefore carried out to bridge the gap in knowledge by determining the relationship between principals' leadership styles and staff (employee) engagement in public senior secondary schools in Rivers State. It was hoped that a relationship can be discovered.

Research Methodology

This chapter presents the research method that was used in this study; it discussed the research design, population of the study, sample and sampling techniques, instrumentation, validity and reliability of the instruments, procedure for data collection, procedure for administration of instrument and method of data analysis.

Research Design

The research design used for this study is the correlational design. The correlational survey design seeks to establish the relationship that exists between two or more variables. Therefore, the correlational design was used to investigate and establish whether a relationship exists between principals' leadership styles and staff job engagement.

Population

Population of this study comprised all the 8,452 teachers in the 247 public senior secondary schools in Rivers state. Of these numbers, 4,413 teachers are male while 4,039 teachers are female respectively. Thus, the total population of teachers in Rivers State Public Senior Secondary schools stood at 8,452 (**Rivers State Secondary Schools Board-March, 2019**). These schools are spread around the three senatorial districts in Rivers state.

Sample size and Sampling Techniques

The sample of the study comprised 1,100 teachers out of the 8,452 teachers in Rivers State public secondary schools. This sample size constituted approximately 13% of the total population of teachers, which was above the minimum sample size of 845. This is to enable sufficient statistical power. The 13% of the total population constitute of 33 schools drawn from the

different local government areas that make up the three senatorial districts of Rivers state. Teachers were considered to be members of the sample because they were expected to rate their principals based on the demonstration of their principals' leadership styles and also rate how their principals' leadership styles have affected their job engagement. The sampling technique used for this study is random sampling technique. To select the actual members of the sample, names of the schools from the different senatorial districts were written on small pieces of papers and rolled into paper balls. The paper balls were put in a basket and shuffled until 33 schools were selected which brought the total sample to 1,100 teachers in 33 schools that make up the different senatorial districts.

Research Instruments

Two self-designed instruments were used for data collection. The first is titled Principals' Leadership Questionnaire Rater (PLQR) containing 26 items that provided information on the different leadership styles of principals. The second instrument is titled Staff Job Engagement Questionnaire (SJEQ). The SJEQ contains 15 items that provided information on the engagement level of staff to their teaching jobs. Each of the instruments had four point likert type scale of Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2 and Strongly Disagree (SD) = 1. The two sets of questionnaire were given to the teachers to rate their principals and themselves. Section A of the questionnaire elicited information on the teachers' demographic data and location of school.

Validation of the instrument

Validity refers to the extent to which an instrument measures what it is designed to measure. In other words, validity is concerned with the extent or degree to which an instrument measures up to its purpose (Nworgu, 2006). The instruments was presented to the researcher's supervisor in the faculty of Education, University of Port Harcourt and two other lecturers in the faculty of Measurement and Evaluation for critical appraisal of the content, corrections and suggestions, in this regard; the corrections was incorporated into the final draft, ensuring, face and content validities.

Research Question One

What is the relationship between laissez-faire leadership styles of principals and staff job engagement?

Table 4.1: Relationship between laissez-faire leadership styles of principals and staff job engagement.

Variables	N	$\sum x^2$	$\sum y^2$	$\sum xy$	r-value	Remark
laissez-faire leadership styles (X)	1000	317946	2044924	791428	0.452	Moderate positive relationship
Staff job engagement (Y)						

Source : Author's Field Survey (2019)

Table 4.1 above reveals that correlation coefficient between laissez-faire leadership styles of principals and staff job engagement as expressed by the respondents gave a Moderate positive relationship of 0.452. By implication, there is a moderate positive relationship between laissez-faire leadership styles of principals and staff job engagement in Public Senior Secondary Schools in Rivers State.

Reliability: The reliability of an instrument refers to the degree of consistency with which the instrument measures whatever it measures. It deals with the truthfulness of the instrument whether the instrument tells different things on different occasions. Therefore, to ascertain the consistency of the instrument, the researcher used Cronbach Alpha Statistics to obtain the reliability of 0.90 for the Principals' Leadership Questionnaire and 0.87 for Staff Job Engagement Questionnaire after carrying out a pre-test on 20 teachers who do not form part of the sample size.

Administration of instrument

A letter of introduction was given to the principals of the different selected public secondary schools in Rivers States so as to allow the researcher administer the questionnaire to the respondents. The instrument was administered by the researcher with the help of three assistants who were involved in order to facilitate the administration and retrieval of the instrument. The PLQR and SJEQ were administered to 1,100 teachers out of which 1,000 were successfully completed and returned, representing 90% return, 60 not returned and 40 not properly filled.

Methods of Data Analysis

Data from the completed questionnaire was coded to correspond to the weight assigned for each item. The collated data was used for analysis using the Pearson product-moment correlation coefficient (r) to answer the research questions and Z ratio to test the hypotheses. The Pearson's correlation coefficient is used to measure the strength of the association between the two variables (the different principals' leadership styles and staff job engagement) in the research questions while the Z ratio is used to test the hypotheses in order to determine whether to reject or accept the null hypothesis by comparing the z value to the critical value.

Results and Discussion

This chapter dealt with data presentation, analysis and interpretation. The Pearson Product Moment Correlation Coefficient statistic was used to answer the research questions while the Z-ratio statistic was used to test the various hypotheses posed.

Research Question Two

What is the relationship between transactional leadership styles of principals and staff job engagement?

Table 4.2: Relationship between transactional leadership styles of principals and staff job engagement.

Variables	N	$\sum x^2$	$\sum y^2$	$\sum xy$	r-value	Remark
Transactional leadership styles (X)	1000	576788	2044924	1067336	-0.138	weak negative relationship
Staff job engagement (Y)						

Source: Author's Field Survey (2019)

Table 4.2 above reveals that correlation coefficient between transactional leadership styles of principals and staff job engagement as expressed by the respondents gave a weak negative relationship of -0.138. By implication, there is a low negative relationship between transactional leadership styles of principals and staff job engagement as expressed by the respondents in the Public Senior Secondary Schools in Rivers.

Research Question Three

What is the relationship between transformational leadership styles of principals and staff job engagement?

Table 4.3: Relationship between transformational leadership styles of principals and staff job engagement.

Variables	N	$\sum x^2$	$\sum y^2$	$\sum xy$	r-value	Remark
Transformational leadership styles (X)	1000	566075	2044924	1059289	0.884	Strong Positive relationship
Staff job engagement (Y)						

Source: Author's Field Survey (2019)

Table 4.3 above reveals that correlation coefficient between transformational leadership styles of principals and staff job engagement gave a strong positive relationship of 0.884. By implication, there is a strong positive relationship between transformational leadership styles of principals and staff job engagement as expressed by the respondents in public Senior Secondary Schools in Rivers State.

Hypothesis one

There is no significant relationship between laissez-faire leadership styles of principals and staff job engagement.

Table 4.4: z-calculated ratio between the relationship of laissez-faire leadership styles of principals and staff job engagement.

Variables	N	$\sum x^2$	$\sum y^2$	$\sum xy$	r-value	Zr-cal.	Z-crit.	Remark
laissez-faire leadership styles (X)	1000	317946	2044924	791428	0.452	15.06	±1.96	Significant
Staff job engagement (Y)								

The table 4.4 above reveals that there is a statistically significant relationship between Laissez-Faire leadership style of principals and Staff job engagement. At an Alpha level of significance of 0.05, the z score of (15.06) is greater than Z-critical(±1.96) for a two tailed test. Hence the null hypothesis which states that there is no significant relationship between laissez-faire leadership styles of principals and staff job engagement is rejected and the alternate hypothesis which states that there is a significant relationship between laissez-faire leadership styles of principals and staff job engagement is adopted. By implication, there is a significant relationship between laissez-faire leadership styles of principals and staff job engagement as expressed by the respondents in some of the public Senior Secondary Schools in Rivers State.

Hypothesis Two

There is no significant relationship between transactional styles of principals and staff job engagement.

Table 4.5: z-calculated ratio between the relationship of transactional leadership styles of principals and staff job engagement.

Variables	N	$\sum x^2$	$\sum y^2$	$\sum xy$	r-value	Zr-cal.	Z-crit.	Remark
Transactional leadership styles (X)	1000	576788	2044924	1067336	0.138	4.60	± 1.96	Significant
Staff job engagement (Y)								

Source: Author's field Survey.

The table 4.5 above reveals that there is a statistically significant relationship between transactional leadership style of principals and Staff job engagement. At an Alpha level of significance of 0.05, the calculated z score ratio of 4.60 is greater than Z-critical value of ± 1.96 for a two tailed test. Therefore, the null hypothesis which states that there is no significant relationship between transactional styles of principals and staff job engagement is rejected and the alternate hypothesis which states that there is a significant relationship between transactional leadership styles of principals and staff job engagement is adopted. Therefore, there is a significant relationship between transactional leadership styles of principals and staff job engagement as expressed by the respondents in the public senior secondary schools of Rivers State .

Hypothesis 3

There is no significant relationship between transformational leadership styles or principals with staff job engagement.

Table 4.6: z-calculated ratio between the relationship of transformational leadership styles of principals and staff job engagement.

Variables	N	$\sum x^2$	$\sum y^2$	$\sum xy$	r-value	Zr-cal.	Z-crit.	Remark
Transformational leadership styles (X)	1000	566075	2044924	1059289	0.884	29.46	± 1.96	Significant
Staff job engagement (Y)								

Source: Author's Field Survey

The table 4.6 above revealed that there is statistically significant relationship between transformational leadership styles of principals and staff job engagement. At an Alpha level of significance of 0.05, the calculated z score ratio of 29.46 is greater than Z-critical value of ± 1.96 for a two tailed test. Therefore, the null hypothesis which states that there is no significant relationship between transformational leadership styles of principals and staff job engagement is rejected and the alternate hypothesis which states that there is a significant relationship between transactional leadership styles of principals and staff job engagement is adopted. Therefore, there is a significant relationship between transactional leadership styles of principals and staff job engagement as expressed by the respondents in some of the public senior secondary schools of Rivers State .

Summary of Findings

The findings of this study are summarized as shown below:

1. There is a moderate positive relationship between laissez-faire leadership styles of principals and staff job engagement in public Senior Secondary Schools in Rivers state .
2. There is a weak negative relationship between transactional leadership styles of principals and staff job engagement in Public Senior Secondary Schools in Rivers.
3. There is a strong positive relationship between transformational leadership styles of principals and staff job engagement in public Senior Secondary Schools in Rivers.
4. There is a significant relationship between laissez-faire leadership styles of principals and staff job

engagement in public Senior Secondary Schools in Rivers State

5. There is a significant relationship between transactional leadership styles of principals and staff job engagement in public senior secondary schools in Rivers State.
6. There is a significant relationship between transformational leadership styles of principals and staff job engagement in public senior secondary schools in Rivers State.

Discussion of Findings

Relationship between laissez-faire leadership styles of principals and staff job engagement.

This study revealed that there is a moderate positive relationship between laissez-faire leadership styles of principals and staff job engagement in Public Senior

Secondary Schools in Rivers state. This observation is in consonance with the findings of Ajadi, T, Adediji, S. Adeyemi K. (2008). These scholars claim that the Principals applying this type of leadership styles assume that their staff are fully engaged, dedicated, absorbed and with high vigor to do their best in their jobs. Often this style of leadership is most effective when individual employees are very experienced and skilled and the major functions of this leadership style include trusting members to make appropriate decisions and hiring trained employees. Leaders feel confident that the members of their group possess the skills, knowledge and follow through to complete a project without being micromanaged.

However Deluga, (1992) had different opinion that employees under a laissez-faire leader are dissatisfied, unproductive and ineffective. In agreement with this view, teams under laissez-faire leaders struggle with lack of direction and enthusiasm (Awan & Mahmood, 2010). This was further affirmed by Ajadi et al (2008) achieving organizational goals in a laissez-faire leadership is often difficult as it is devoid of rules and regulations.

Relationship between transactional leadership style of principals and staff job engagement.

The study revealed that there is a weak negative relationship between transactional leadership styles of principals and staff engagement in public secondary schools of Rivers state. This result implies that although there is a statistically significant relationship between transactional leadership style of principals and staff job engagement, it is rather on a negative connotation. This finding is in line with Leithwood (2006) who reported that not only overwork has reduced teachers' organizational commitment but also teacher's poor relationship with their principal. Blasé and Blasé (2006) also supported this finding by providing evidence on existing cases of principal's mistreatment to teachers which include denying leave, restricting them to express views and opinions, swearing, screaming, finger pointing, favoritism, unfair job appraisal, unreasonable monitoring, threatening transfer or termination of their services, public criticism and humiliations, and unfair assignment. The phenomenon is rarely reported, thus causing them to continuously occur and decrease teachers' commitment to the school.

Burns (1990) confirmed that under transactional leadership styles, team members can do little to improve their job or achieve job engagement.. Bass & Avolio, (2004), further affirmed that this style of leadership has a negative effect on all those involved, and in the outcomes of set goals. It can therefore be stated that in transactional leadership style the job engagement (dedication, vigor and absorption) of teachers (followers or subordinates) are limited by the leader's use of reward based behavior in order to achieve higher performance from employees, which only have a short-term effects. This may indicate that this method of leadership style of principals is not really effective and needs an improvement in the schools

sampled in this research. The staff may resent this style of leadership by principals but only tolerate it since the principal is an authority. Principals may need to minimize giving query, be less forceful, less faultfinding and approachable. Principals may also need to care about their staff welfare and form cordial relationships with

Relationship between transformational leadership styles of principals and staff job engagement.

There is a strong positive relationship between transformational leadership styles of principals and staff job engagement in selected public Senior Secondary Schools in Rivers. This style of leadership by principals is the most effective style of leadership as reported by the results from this research. It yielded the highest positive result in the Pearson's correlation coefficient. It implies that staff appreciates and value the way principals treat them under this style of leadership and thus they are more engaged in their jobs. This is in consonance with Akpa (2011) that transformational leaders motivate their followers by making followers more aware of the importance of task outcomes; as a result, there is an increase in their levels of performance and commitment to the goals of their organizations in a positive way.

Fenn and Mixon (2011) confirmed that the transformational leadership style raises the efficiency and productivity of an organization because of its flexibility and how it gives the followers the chance to be creative. Kelly (2003) also stated that the transformational leader serve as role models and also motivate their followers by following Maslow's hierarchy of needs, which involves raising followers from low levels of need (physiological) to the highest level of need (self-actualization).Gerhardt (2004) believes that transformational leaders use outstanding influence in order to move and motivate others to accomplish tasks beyond personal and organizational norms. Gerhardt (2004), Konzes and Posneer (1987) pointed out that leaders create a sense of covenant when they help others to grow and develop. When a leader is viewed as helpful and appears to be making decisions in the best interest of each member of staff, then subordinates are more likely to be committed to the leader and they will help to work towards the achievement of the organizational goals. Therefore, transformational leadership styles of principals' have a strong relationship with the staff job engagement (vigor, dedication and absorption). The implication is that, both the principal and teachers under this leadership style work together towards the achievement of the organisational (school) goal.

Summary

This chapter discussed the summary of the study, conclusions, recommendations and suggestions for further study. The purpose of this study was to investigate the principals' leadership styles and staff job engagement in public senior Secondary schools in Rivers State.

Summary of the study

The study was aimed at determining the relationship between principals' laissez-faire leadership style and staff job engagement, investigating the relationship between the principals' transactional leadership style and staff job engagement and staff job engagement and finding out the relationship between the principals' transformational leadership style and staff job engagement in public senior secondary schools in Rivers State. The study was guided by three (3) research questions and three (3) hypotheses.

The study adopted the correlational survey design to determine the relationship between principals' leadership styles and staff (employees) job engagement in the Public Senior Secondary Schools that were covered. The population of the study comprised all the 8,452 teachers in the 247 public senior secondary schools in Rivers state. Of these numbers, 4,413 teachers are male while 4,039 teachers are female respectively, thus, bringing the total population of teachers to 8,452.

The sample of the study comprised 1,000 teachers out of the 8,452 teachers in Rivers State public senior secondary schools. This sample size constituted approximately 13% of the total population of teachers. This is made of 33 schools drawn from 247 schools in the different local government areas that make up the three senatorial districts of Rivers state. Teachers were considered to be members of the sample because they rated their principals based on the demonstration of their principals' leadership styles and also rated how their principals' leadership styles have affected their job engagement.

The instruments used were Principals' Leadership questionnaire Rater (PLQR) and Staff Job Engagement Questionnaire (SJEQ) to gather data from the respondents. The instruments were validated by the researcher's supervisors and two experts in the faculty of Measurement and Evaluation, University of Port Harcourt. The reliability of the study was determined through Cronbach Alpha statistics to obtain the reliability coefficients of 0.90 for the Principals' Leadership Questionnaire and 0.87 for Staff Job Engagement Questionnaire.

Pearson Product Moment correlation coefficient was employed to analyze the data and answer the research questions and Z ratio statistics was used to test the hypotheses at 0.05 alpha level of significance. Having analyzed the data and tested the hypotheses formulated, the following findings were made:

1. There is a moderate positive relationship between laissez-faire leadership styles of principals and staff job engagement in Public Senior Secondary Schools in Rivers State.
2. There is a weak negative relationship between transactional leadership styles of principals and staff job engagement in Public Senior Secondary Schools in Rivers state.
3. There is a strong positive relationship between transformational leadership styles of principals and staff job engagement in Public Senior Secondary Schools in Rivers State.

4. There is a significant relationship between laissez-faire leadership styles of principals and staff job engagement in public Senior Secondary Schools in Rivers State
5. There is a significant relationship between transactional leadership styles of principals and staff job engagement in public senior secondary schools in Rivers State.
6. There is a significant relationship between transformational leadership styles of principals and staff job engagement in public senior secondary schools in Rivers State.

Conclusion

Based on the findings of the study it is reasonable to conclude that principals' leadership styles in term of their managerial skills and how they relation with staff (employee) can result to staff job engagement.

Recommendations

From the findings of this study, the following recommendations were made:

1. The researcher recommends that there is need for school administrators (principals) to come up with modalities of improving employee job engagement so that teachers engagement can be enhanced. Principals should also enhance their supervisory support to enhance employee job engagement.
2. The study also recommends that some aspects of reward system such as fringe benefits, recognition by school administration, rewards for job well done should be enhanced in the school.
3. The principals' should actively improve on communication, giving feedback on enquires on timely bases and improve on job appraisal practices which should be competitive and fair.
4. Principals should apply their experiences as school administrators to help teachers and other staff in the school in their areas of difficulties in the schools through mentoring and advice. And they should be approachable; these will make employees to be more committed to their job.

Suggestions for further studies

This study was only focused on some selected public senior secondary schools in Rivers state. It is suggested that similar study should be carried out in Public junior secondary schools, Universal Basic Education (UBE) and private secondary schools in the Rivers State for comparative purpose. In the present study the three independent variables of principals' leadership styles and job engagement variables were used, subsequently, it is advisable that researchers should use more variables or different variables to carry out research on similar topic. A study should be carried out on how teachers' demographic variables influences teachers' job engagement.

Contributions to knowledge

1. The findings of this research work have provided evidence on the level of relationship between principals' leadership styles and employee

(teachers') job engagement in Public Senior Secondary Schools of Rivers State. The findings have revealed that a principal though qualified may not be competent in the performance of his/her job if he/she does not demonstrate or exhibit certain leadership styles.

2. The studies have portrayed the poor relationship of principals with transactional leadership studies in the area of not only overwork on the part of the staff but the reduced teachers' organizational commitment and also the poor relationship. There is rather a strong positive relationship between transformational leadership styles of principals and staff job engagement. This style of leadership by principals is the most effective style of leadership as expressed from the respondents of this research.
3. Leadership is seen to be a critical factor which can lead to employee engagement and it affects the instructional delivery system of an educational sector and it also allows the principal been the leader to interact more productively and more harmoniously with his staff to achieve personal and organization goals. This shows that the job of a principal is beyond the paper (certificate).
4. This again is applicable to teachers because they need to be physically, cognitively and emotionally engaged in their work role performances" in order to guide the students and carry out most of the tasks of teaching so that schools as organizations will achieve the set educational goals and values.

References

- Aarons G.A. (2006) *Transformational and Transactional leadership*. Woodbridge.
- Adeyemi T.O (2010) *Principals leadership styles and teachers job performance in senior secondary schools*. Retrieved from www. Academicjournal. Org.
- Ahmad R.A (2004) *Malaysian school Principalship: Predicament of leader and management; Principals' institute*, University of Malaysia
- Ajadi, T. Adediji, S. Adeyemi K. (2008). *Principles of institutional administration*. National Open University of Nigeria.
- Akpa V. (2011): *Effects of leadership style on organizational performance*. Australian Journal of Business management Research, Vol. 1 No7 (100-111)
- Allen ,O.B. (2013) *principles leadership skills and school effectiveness: The case of South Western Nigeria* World journal of education 3(5). Retrieved on the 3/3/2019.
- Armstrong.M. (2004) *Handbook of management and leadership 4th –Ebook* . Retrieved on the 6/3/19.
- Armstrong, M. (2004) *How to Be an Even Better Manager A complete A-Z of Proven Techniques & Essential Skills*, sixth Edition, Hogan
- Babalola, S.S.(2016). *The effect of leadership style, job satisfaction and employee-supervisor relationship on job performance and organizational commitment*. A journal on Applied Business Research. 32 (3)
- Bakker, A. B., & Schaufeli, W. B. (2008). *Positive organizational behavior: Engaged employees in flourishing organizations*. Journal of Organizational Behavior, 29, 147-154.
- Blasé, J. and Blasé J (2006): *The mistreated teacher*, Journal of Education Administration, 46 (3), 263-307.
- Bass B.M. & Avolio, B.J *Multifactor Leadership style-manual and sampler set*. Palo Alto, C.A. Mind Garden. Inc.
- Bass B.M. (1985) *Leadership and performance beyond exceptions*. New York: Free Press.
- Bass, B.M. (1999). 'Two decades of Research and Development in Transformational leadership. "European Journal of work and organizational psychology 8(1):9-32.
- Bhindi N. & Duignan (1997) "leadership for a New century" Educational management and Administration 25 (2):117-132.
- Bruce J. Avolio, B. M. (1985). *Multifactor leadership style*. University of Nebraska and SUNY Binghamton, 1-122.
- Buckingham M. & Coffman, C (1999). *First, break all the rules: what the world's greatest managers do differently*. New York, NY: Simon & Shuster.
- Burns James Macgregor (1978). *Transformational leadership* Wikipedia. Retrieved on the 3/3/2019.
- Burns James Macgregor (1980) *Transactional leadership* Wikipedia. Retrieved on the 3/3/2019.
- Burns, J. M. (1978) *Leadership*, New York: Harper & Row.
- Burns, James Macgregor (1978), *theory of transformational leadership*. Retrieved on the 6/3/2019.
- Cartwright S. and Holmes, N.C. (2006). *The meaning of work, the challenge of regaining Employee Engagement*. Retrieved on the 3/3/2019.
- Chadam. J. S Google Books on *Management theory and practice*. Retrieved on 13/1/2019.
- Chandan. J.S. (1987). *Management theory and practice*. New York: Akas publishing House.
- Chaudhry, A.Q., & Javid ,H. (2012). *Impact of transformational and Laissez-faire leadership on Motivation*. International journal of Business and social science 397(2)64.
- Chemers M.M.(1984) Research work. University of California, Santa.
- Cherry K. (2010) *what is social exchange theory?* Psychology in action. 20-24. S. (2007).
- Deci. E.L. *Effects of externally mediated rewards on intrinsic motivation*. Retrieved on the 3 / 3 / 2 0 1 9 . From <https://psy.net.apa.org/record/>.
- Deluga R. J (1992). *The relationship of leader-member exchanges with laissez-faire, transactional and transformational leadership in naval environment*. Retrieved on the 13/3/2019.
- Fenn and Mixon (2011); *The relationship between*

- transformational leadership styles of principals and Staff motivation*. Retrieved on the 3/3/2019.
- Gerhardt, P. (2004), *Transformational and leadership in Retail: Customer service training and Evaluation*, Retrieved on the 3/1/2019.
- Hansen s. (1999) *Social exchange theory, Exchange Resources* Retrieved from <http://www.researchgate.net>.
- Heba A, Salem A and Abulmuhsen. (2018). *A Published research on the relationship between principals' Styles and teachers' achievement motivation in Malaysia*.
- Hersey, P. & Blanchard, K.H. (1977) *Management of organsitional behavior*. 3rd Edition- utilizing human Resources. New Jersey, prentice Hall.
- Hiller (2009), *Outcomes of leadership*. Retrieved on the 3/3/2019.
- Houzes, J.E. & Posner, B.Z (1987) *the Leadership challenge: San Fracncico* Jossey- Bass Publishers.
- JavadEslami and DavoodGharakhani (2012). *Organizational commitment and job satisfaction*. Retrieved on the 3/3/2019.
- Kaiser, R., Hogan R. & Craig. S. (2008). *Leadership and fate of organizations*. Retrieved on the 2/3/2019.
- Katz, D., & Kahn R.L (1978). *social psychology of organizations*. The New York Wiley.
- Katz, R.K. (1955), *skills of an effective administrator*, Harvard Business Review, 52, 90-120.
- KavithaSethuraman, J.S. (2004) *Effective Leadership styles*. International Business Research, 7 (9) 165-172.
- Kelly (2003); *journal on Transformational leadership*. Retrieved on 3/3/2019.
- Khan, W.A. 1990, *Psychological conditions of personal engagement and disengagement at work* Academy of Management, Journal, 33 (4), 682-724).
- Leadership styles Wikipedia. Retrieved on 3/1/2019.
- Ling and Ibrahim (2013); *Transformational leadership and teacher commitment in secondary schools of Sarawak* . Retrieved on the 3/3/2019.
- Lunenborg F.C. and Omstein A.C (1996). *Educational Administration, concepts and Practice* (2nd edition) Wadsworth Publishing, Belmont CA; 1996.
- Macey and Schenelder(2008), *Model of engagement summary*. Retrieved on the 14/3/19.
- Macey W.H and Schneider B, (2008). *The meaning of employee engagement industrial and Organizational psychology* 1,3-30. Retrieved on the 15/3/2019.
- Meyer J.P & Allen N.J. (1997). *Commitment in the work Place: theory, Research and Applications*. Thousand, Oaks, C.A: Sage.
- Meyer J.P. & Negagne M. (2008); *Employee Engagement from a self-determination theory perspective*, University of Western Onario.
- Mohammed. Y., Sanng, Ifeyinwa, N., Usman. B; Ndube T. I and Kazeem (2014). *The relationship between leadership styles and employees performance*. European journals of Business and management. Retrieved on the 3/1/2019.
- MonahMaundu, Georgory S. Nannusonye&Simiyu, (2018), *effect of transformational leadership style On employee engagement in Public secondary schools of Murang's Country in Kenya*.
- Neider, L. Schriesheim. C. *leadership*. Greenwich, conn. Information age. Retrieved on the 3/3/19.
- Nguni, S. Slegers, P; &Denessen E. (2006) *transformational and transactional leadership effects on Teachers job satisfaction; organizational commitment and organizational citizenship behavior in primary schools*. The Tanzanian case, school Effectiveness and school improvement, 17 (20), 145-177.
- Noegrass D. (2014). *What leadership behaviors Do CPA's prefer from Managers'. The preferred Behaviors most related to quality of relativeness*. International Journal of Business and Public Administration, 11 (2), 121-134.
- Nohria N. Boris G. Lee.L.E. (2008) *Employee Motivation: A Powerful Model*. Retrieved on the 3/3/2019.
- Northouse, P.G.(2004) *leadership theory and practice* (3rd edition) Thousand Oaks, C.A: Sage.
- Nwibere B.M. (2013). *The influence of corporate culture on management leadership style, the Nigerian Experience*. International Journal of Business and Public Administration, 10 (2), 166-186.
- Nworgu B.G. (2006) *educational Research: Basic issues and methodology*. Ibadan: Wisdom Publisher Ltd.
- Okumbe J. A. (1998). *Educational Management Theory and Practice*, Nairobi: Nairobi University Press.
- Online Cambridge dictionary Engilish. Retrieved on the 3/1/2019.
- OsaibiyaBabatunde, Ikenga, Emem (2015) Vol.5 (1). *The impact of leadership style on employee's Performance*. Journal on international knowledge sharing platform. Retrieved on the 1/3/19.
- Oxford (2012) oxford Dictionaries online, Oxford University press.
- Peretonmode V.F. (2013) *educational administration applied concepts and theoretical perspectives* Lagos. Joja educational Research publishers limited.
- Podsakoff, P.M., Mackenzie, S.B, Moorman, R.H. et al, (1990). *"Transformational leader's behaviors and their effects on their followers and organizational citizenship behavior 'leadership quarterly*. 1:107-142. Retrieved on the 2/3/2019.
- Quader, M.S (2011) *leadership style and emotional intelligence: A Gender comparism*; Annamlai International journal of Business

- studies and Research; 3 (1), 01-23.
- Rafferty Mabenwest and Robinson (2005). Impact of employee performance. Melcrum Publishing.
- Rayan R.M., Deci E.L. *Self Determination theory*. Retrieved from [www.https://org./SDT](https://org./SDT)
- Samson R. (2009). *Leadership and Management in Nursing practice and Education*. New Delhi. Nagpur, St. Louis USA.
- Schaufeli W. B, Bakker, A.B. & Van Rhenen, W. (2008). *How changes in job demands and resources Predict burnout, work engagement, and sickness absenteeism*. Journal of organizational behavior, 30, 893-917.
- Secondary school Wikipedia. Retrieved on the 3/1/19.
- Stogdill R.M. (1974) *Handbook of leadership. A survey of theory and research*. New York: free press.
- Transformational and transactional leadership*. Journal of Applied Psychology, 88, 207-218.
- Vroom V.H. (1973) *A new look of managerial Decision-Making organizational dynamic* Vol. 1. Retrieved on the 3/1/2019.
- Walumbwa, F.O., Orwa, B., Wang, P., & Lawler, J.J. (2005). *Transformational leadership organizational Commitment and job satisfaction: a comparative study of Kenyan and U.S. Financial firms*. Human Resource Development quarterly, Retrieved on the 3/1/2019.
- Welbourne R.J. (2013). *Employee Engagement and Commitment*: SHRM Foundation.
- Yuki, G., & Mahsud, R (2010). *Why flexible and adaptive leadership is essential*, consulting psychology Journal: Practice and Research, 81-93.
- Zineidein & Hytter, A (2002), *leaders' negative emotions and leadership styles influencing subordinates' Wellbeing*. The international journal of human Resource management 23 (4) 748-758

IMPACT OF PARENTAL ATTACHMENT AND ACADEMIC PERFORMANCE IN BIOLOGY ON SSS STUDENTS OF CALABAR EDUCATIONAL ZONE, CROSS RIVER STATE—NIGERIA

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Abstract

This study was conducted to examine the impact of parental attachment on the academic performance of Senior Secondary School 3 (SSS-3) students in Calabar Educational Zone in Biology. Four (5) research questions were raised and four (5) hypotheses formulated to guide the study. The design adopted for the study was a cross-sectional survey design. A total of 71 government secondary schools and 410 SS3 students were selected from the Area using multistage sampling technique. Data was collected using a well structured, validated and reliable questionnaire. Data collected were analyzed using descriptive statistics of frequency, simple percentages, mean and standard deviation; while the hypotheses were tested using a multiple logistic regression at 95% confidence interval. Findings revealed that there is a statistically significant relationship between secure, avoidant, ambivalent, and disorganized parental attachment styles, and the students' academic performance in Biology ($p < 0.05$). Whereas the effect of secure parenting was positive, avoidant, ambivalent and disorganised attachment posed negative effect on the students' performance in biology. Based on this findings, the researcher recommended that parents should form a better habit that encourage cordial interpersonal relationship between them and the child, whereby they can discuss issues together, and as a matter of priority, check their children's class activity at least twice in a week to discuss on them.

Key Words: Parental Attachment, Impacts, Academic Performance & Biology

Introduction

Parental attachment is one specific and circumscribed aspect of relationship between a child and the society. It is known to be responsible for every positive interpersonal relationship and goal attainment in life endeavor. Waters & Cummings, (2000) said it is a sure base for children to explore their environment, acquire safety and secure comfort for his/her future. Due to hard times and struggle for family sustenance most parents are detached from children to attend work schedule, business, market or hustling, leaving children with unconcerned and biased guards and caregivers. Works of Omolewa (2002) affirmed that academic performance of a child could be traced to the kind of parents and the kind of friends he keeps. Thus it is believed that when parents monitor the child's home work, encourages their children participation in extra-curricular activities; play active role in Parent Teacher Associations and help children develop plans for their future, those children are more likely to respond and do well in school.

Sincere (2012) described attachment styles as: secure, ambivalence, avoidance and disorganized. Secure is when a child is safely attached to their caregivers (parents), they feel happy whenever their caregivers are around, but are upset when they get

separated from them. While the child is in distress when his parent is away, still, he feels secured with the feeling that his caregiver will return sometime soon. Ambivalent attachment is a relation of hate and love going on with an opposing coexistence between the child and parent. The child does not feel that he can rely on his caregiver whenever he is in need of something. In avoidance attachment, a child is fearful of the caregiver and dissociates from them. Studies revealed that this may be a cause from parents who are fond of neglecting or abusing their children. Finally, disorganized attachment is when there is no clear (or mixed) attachment between the child and his caregiver. The parent acts as an apprehensive caregiver who reassures at different times, getting child confused of what kind of attachment this might cause him.

Research has shown that responsive and engaged parenting is associated with children's cognitive development (Kerns, 2008). Specifically, secure attachment was related to better attention and participation, less insecurity about the self, and a higher grade point average (Jacobsen & Hofmann, 2007). In preschool, Sroufe (2003) found that attachment had an effect on cognitive and socio-emotional development. A similar report indicates that mothers' sensitivity predicts reading and math

achievement in third grade for both boys and girls (NICHD, 2008).

In a study conducted by Cortesi (2014) to determine the relationship between adolescent attachment style and academic performance in the United States of America. The study was a cross sectional, relational study performed using 244 male and female high school adolescents who were randomly selected to participate in the study. A behavioral system questionnaire (BSQ) was used as instrument for data collection, while the relationship between variables of interest was achieved using Pearson Product Moment Correlation analysis. The outcome of this study revealed that there was a significant positive correlation between the Secure Item Mean and Grades in School ($r = 0.170$, $p < 0.05$). This indicates that students with higher secure attachment styles tend to have greater academic success. Also, there were significant negative correlations between the Dismissing and Preoccupied scores and Grades in School ($r = -0.142$, $p < 0.05$ and $r = -0.152$, $p < 0.05$, respectively). These correlations indicate that students with higher Dismissing and Preoccupied attachment styles tend to have less academic success.

Statement of the problem

Poor academic performance is always reported about biology by SS students of Calabar educational zones. And this is the major reason why a lot of students flock to offer arts instead of meeting science with all its expectations in biology. According to WAEC/SSCE (2014) report, analysis of Biology students' performance in the senior secondary school certificate examination from 2002-2014 is persistently under-average, and they had never recorded an average performance of 50 percent pass in public examinations within Calabar educational zone. This frustrates both the students and their teachers causing students to boycott their proposed career. Government and school heads are unable to provide adequate solution to students' poor academic performance, and parents have been partly blamed for failing to lay the right foundation in their children, through informal education. However, there is a dearth in literature that could showcase the effect of parental attachment styles on academic performance of students in the Zone. Hence, this study is poised to investigate the impact of parental attachment on the academic performance of SS3 students in Calabar Educational Zone specifically in Biology.

Purpose of the study

The main purpose of this study is to ascertain the impact of parental attachment on academic performance of Senior Secondary Students of Calabar educational zone in biology. The specific purposes are:

1. To determine the impact of parental attachment on academic performance of SS3 students in Biology
2. To ascertain the effect of secure parenting on academic performance of SS3 students in Biology

3. To determine the relationship between avoidance parenting and academic performance of SS3 students in Biology
4. To ascertain the influence of ambivalence/resistant parenting on the academic performance of SS3 students in Biology
5. To determine the relationship between disorganized parenting and academic performance in biology on senior secondary school students

Research questions

Three research questions were posed to address the problem of this study:

1. What is the impact of parental attachment on academic performance of SS3 students in biology?
2. What is the effect of secure parenting on academic performance of SS3 students in biology?
3. What is the relationship between avoidance parenting and academic performance of students in biology?
4. What is the influence of ambivalence parenting on the academic performance of SS3 students in biology?
5. What is the relationship between disorganized parenting and academic performance of students in biology?

Hypothetical statements

To make decisions on the answers to the research questions, four null hypotheses were formulated and tested at 0.05 level of significance:

1. There is no significant relationship between parental attachment and academic performance of SS3 students in biology
2. There is no significant relationship between secure parenting and academic performance of SS3 students in biology
3. There is no significant relationship between avoidance parenting and academic performance of SS3 students in biology
4. There is no significant relationship between ambivalence/resistant parenting and academic performance of SS3 students in biology
5. There is no significant relationship between disorganized parenting and academic performance of SS3 students in biology

Literature review

The literature of the study is discussed under the four types of parenting which involves secure, avoidance, ambivalence/resistant and disorganized parental care.

Secure Parental Attachments

Children with secure parenting are surer of the parents, themselves and their environments. They generally get upset when their parents are away and are happy when they return. When frightened, these children will seek comfort from the parent or caregiver. Hazan & Shaver (1987) explained that contact initiated by secure parenting is readily accepted by children and they greet their return with

positive behavior. These parents are said to play more role in children upbringing, reacts fast to their kids' needs and shows more empathy to their concern. Bowlby (2015) reports that a securely attached child possess high self esteem, enjoys intimate relationships, explores and utilizes available social support, and wish to share their feelings with other people. In another study by Leblance, Degeilh, Daneault, Beauchamp & Bernier, (2017), it revealed that female children secure attached parents has more positive feelings in romantic relationship during adolescence and adult life, than women from insecure parenthood.

Ambivalent Parental Attachment

This is a rare parental style occurring in 7-15% infants at United States (Cassidy & Berlin, 1994). These children appear to be suspicious of strangers, distressed when separated from parents and are never comforted even when they return. The researchers described them of possessing tendency of rejecting parents when they offer help, and might publicly display aggression towards parents. In their observational survey, this type of parenting is found among mothers with low maternal availability. And even when children grows to school age, they are clingy and over-dependent in class seeking teacher's attention.

Avoidant Parental Attachment

This is a serious attachment style with dangerous outcome. Children form avoidant parental attachments are at the verge of avoiding their parents and caregivers. These attitudes get pronounced after a period of absence. These children might accept attention from parents, but have no need of seeking for their comfort or contact. They show no preference between their parents and a visiting stranger. At adulthood, those with avoidant attachment have difficulty with intimacy and close relationships. They pay no concern to emotional relationship and experience little distress when a cordial relationship ends. They up out of intimacy with flimsy excuses like long working hours and may fantasize about other people during sex. Works of Simpson & Rohles (2017) disclosed that adults with avoidant attachment style are more consenting and likely to indulge in casual sex. Other common characteristics are failure to support partners during stressful times and inability to share feelings, thoughts and emotions of partners.

Disorganized Parental Attachment

In disorganized/insecure parental attachments, there is lack of clear attachment behavior. Their actions and responses to parents are mixture of behaviors, including avoidance or resistance. The children are described of displaying dazed behavior, most times seeming either confused or apprehensive before their parents. Studies of Reisz, Duschinsky & Siegel (2018) revealed that parents' inconsistent behavior might be a contributory factor in this style of attachment. Hence the child is at one end comforted and the other end frightened of parents. In the general setting, students' learning habit does not really mean a consequence of early parental attachments but a relative factor in most academic output. Hence,

there is no question that our earliest relationships with parents/caregivers play a role in development.

Theoretical framework

Social learning theory of Bandura and Walters (1977) is applicable to this study as it holds to the fact that behaviors are acquired through observation and imitation of others. In this context, the child observes and imitates the behaviors of immediate parents which are enhanced at the age of 4-9 years. According to Mazur (1986), imitation and learning is possible if the model was rewarded, the model is rewarding to the observer and there is no implicative consequence to the observer. Hence, a child gets attached to the rewarding parent with corresponding reinforcement in their cordiality. In that case the parents provides what the child wants, have time to his/her complaints and works toward the child expectation. Conversely, this implies that the child bound to detach or withdraw from those parents whose behaviors are irritable and fretful.

Methodology

Research design

The design adopted for this study is a cross-sectional survey design. Kellinger and Lee (2000) describe the survey design as a research design which is directed towards determining the nature of a situation that exists at the time of investigation; and aim to ascertain the relationship between variables in a study while eliciting information on specific fact about entire population of a study. Also, Ndiyo (2010) posits that this method allows data to be generated from a representative sample through the use of a questionnaire (Ndiyo, 2010). Hence, this design is considered appropriate for this study.

Area of study

The area covered by this study is Calabar educational zone, Cross River State - Nigeria. This comprise of Akamkpa, Abi, Biase, Odukpani, Calabar Municipality, Calabar South, Akpabuyo and Bakasi Local Government Areas.

Study population

The population of the study consists of all SS3 students in the 71 government secondary schools in Calabar Educational Zone. According to students' population records obtained from the Cross River State Ministry of Education, SS3 students the population of SS3 students in the Zone is 5,581 (WAEC Registration, 2019).

Sample and sampling technique

The sample size for this study consisted of 410 SS3 students who were selected from 71 government secondary schools in the Zone. These sample sizes (for schools and students) were obtained using Taro Yemen's formula for sample size determination (see appendix). To select these students from schools in the Area, a multi-stage sampling procedure was adopted. First, the schools were clustered in LGAs. The sample size for schools and students in each of the LGAs were derived using proportionate sampling method. Below is a Table showing the sampling distribution for the study.

Table 1: Sampling distribution of the respondents

S/No.	LGAs	Population of Schools	Schools sample size	Students population	Students sample size
1.	Abi	11	9	868	64
2.	Akamkpa	10	8	533	39
3.	Akpabuyo	7	6	573	42
4.	Bakassi	2	2	145	11
5.	Biase	9	8	534	39
6.	Calabar Municipality	16	13	1,502	110
7.	Calabar South	7	6	1,011	74
8.	Odukpani	9	8	415	31
	Total	71	60	5,581	410

Source: State Ministry of Education (2019)

To select the schools from their respective cluster, a simple random sampling of balloting method was used. In each of the selected schools, systematic random sampling was applied to select the classes. Hence, the researcher after numbering all the SS3 classes in a school selected all even numbered classes for the study. In each of the selected classes the number of students selected, were proportionately allocated based on the sample size for the school. This sample was selected from the students' population in the class using systematic random sampling through a sampling interval derived by dividing the class population by the sample size for that class.

Instrument for data collection

The instrument for data collection was a structured questionnaire. The questionnaire consists of five (5) sections (A-E). Section A was structured to obtain the students' demographic information and the respective examination grade they obtained in biology during their Mock Examination. Items in section B-E were structured using five (5) points Likert scale: strongly agree [SA], agree [A], undecided [U], disagree [D], strongly disagree [SD]) and elicited information on types of parental attachment, that is, secure, avoidance, ambivalence, and disorganized attachment styles. The instrument was validated using face validity. It was presented to the researcher's supervisor and other experts to ascertain the relevance of the items. After scrutiny, the supervisor certified that the instrument could adequately measure the variables under study.

Also, a pre-test was conducted to determine the reliability of the instrument through test-retest procedure. Twenty (20) copies of the instrument were administered to 20 SS3 students in a government secondary school Ijiman, Yakurr LGA. After a period of two (2) weeks, same students filled the questionnaire for the second time. These questionnaires were coded and scored. Thereafter, the students' scores in the first test were correlated with their scores in the second test using Pearson product moment correlation coefficient. The reliability coefficients obtained for the variables ranged from 0.71 to 0.86 indicating that the instrument is reliable and could be used for data collection.

Procedure for data analysis

With the aid of the statistical package for social sciences (SPSS version 20), data obtained for the study were analyzed using descriptive statistics of frequency, percentage, mean and standard deviation. The hypotheses were tested using **binary logistic regressions** at 95% confidence interval.

Results

A total of 410 questionnaires were distributed to students in schools selected for the study. These questionnaires were adequately filled and returned to the researcher and his assistants at the spot giving a 100% response rate. The retrieved questionnaires were sorted, coded and entered into SPSS version 20 for analysis. Results of the study are presented and analyzed as below:

Table 2: Distribution of respondents by sex (n=410)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	218	53.2	53.2	53.2
	Female	192	46.8	46.8	100.0
	Total	410	100.0	100.0	

Source: Fieldwork, 2019

The above table shows that male represents 53.2% of the total sample size for the study, while the remaining 46.8% were female.

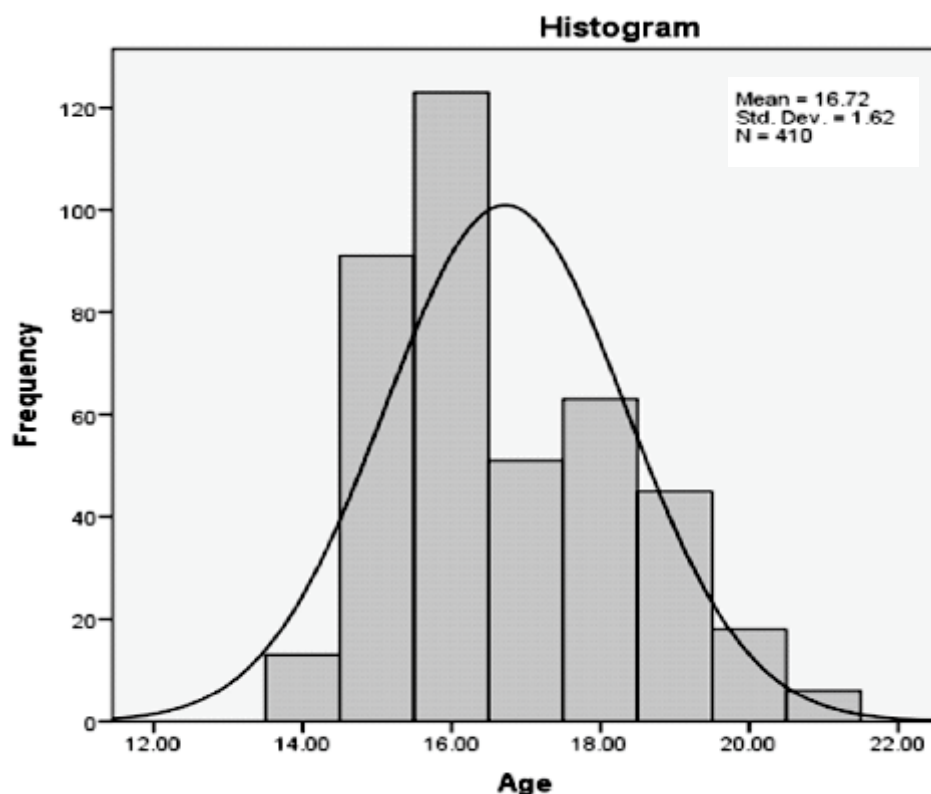


Figure 1 is a histogram showing the age distribution of the students. According to the figure, the age range of the students lies between 14-21 years with a mean age of 16.72 (1.62) years.

Fig. 1 showing the distribution of the students by age

Table 3: Distribution of the students by ethnicity (n=410)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Efik	47	11.5	11.5	11.5
	Ibibio	118	28.8	28.8	40.3
	Ejagham	43	10.5	10.5	50.8
	Igbo	49	12.0	12.0	62.8
	Hausa	7	1.7	1.7	64.8
	Yoruba	41	10.0	10.0	74.5
	Others	105	25.6	25.6	100.0
	Total	410	100.0	100.0	

Source: Fieldwork, 2019

Table 3 shows that students of Ibibio ethnic background constitute the highest proportion of the study sample with 28.8%, while the remaining percentages were shared by students of other ethnic groups such as the Efiks (11.5%), Ejagham (10.5%), Igbo (12.0%), Hausa (1.7%), Yoruba (10.0%), and others ethnic groups (25.6%).

Table 4: Distribution of students by religion

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Christianity	392	95.6	95.6	95.6
	Islam	18	4.4	4.4	100.0
	Total	410	100.0	100.0	

Source: Fieldwork, 2019.

Table shows that among the 410 students used for the study, 95.6% were Christian, while the rest 4.4% were Islam.

Table 5: Distribution of students by parents' highest academic level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No formal education	40	9.8	9.8	9.8
	Primary	101	24.6	24.6	34.4
	Secondary	207	50.5	50.5	84.9
	Tertiary	62	15.1	15.1	100.0
	Total	410	100.0	100.0	

Source: Fieldwork, 2019.

Table 5 shows that approximately half of the students used for the study had parents who had secondary level of education as their highest academic qualification, while the remaining had parents who had: no formal education (9.8%), primary level of education (24.6%), and tertiary level of education (15.1%).

Table 6: Distribution of students based on their academic performance in Biology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	270	65.9	65.9	65.9
	Good	140	34.1	34.1	100.0
	Total	410	100.0	100.0	

Source: Fieldwork, 2019.

The students' academic performance was categorized into good (for grades ranging from A₁ to C₂) or poor (grades ranging from D₇ to F₉) performance depending on the students' reported grade in the 2018 Mock Examination in Biology. Table 6 shows that out of the 410 students used for the study, 270 (65.9%) had poor performance while 140 (34.1%) had good performance in Biology.

Test of hypotheses

Research hypothesis 1

Table 7: Summary of binary logistic regression analysis showing the relationship between parental attachment and academic performance of SS3 students in biology

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	Pa	4.832	.598	65.311	1	.000	125.495	38.874	405.129
	Constant	-14.723	1.802	66.752	1	.000	.000		

a. Variable(s) entered on step 1: Pa1.

Research hypothesis one was tested using the binary logistic regression model where parental attachment (Pa) was the predictor (explanatory) variable while academic performance of SS3 students in biology was the outcome (dependent) variable. The introduction of the explanatory variable into the model leads to a significant improvement of the baseline model as shown by the Omnibus test of model coefficient ($p < 0.001$). The pseudo R-squared values indicate that 64.7% to 89.5% of the variance in the students' academic performance is accounted for by the degree of their attachment to their parents respectively.

According to Table 7 a unit increase in the students' attachment score will increase the odd of having good performance in biology by 125 (95% CI: 38.87 – 405.13) times. Additionally, the Hosmer and Lameshow goodness of fit test shows that the data generated from this study have a good fit into the regression model ($\chi^2 = 1.740$, $p > 0.05$). In conclusion the Table shows that there is a significant positive relationship between parental attachment and academic performance of SS3 students in biology (Wald = 65.311, $p < 0.05$).

This result could be presented mathematically as shown below:

$$Y = -14.723 + 4.832Pa$$

Where Y = Academic performance of SS3 students in biology

Pa = Students' Parental attachment score

Hypotheses 2–5

The research hypotheses were tested using a multiple

logistic regression model. The predictors (explanatory variables) in the model were the four categories of parental attachment. These include: secure attachment, avoidant attachment, ambivalent attachment, and disorganized attachment. The dependent (outcome) variable is the students' academic performance in biology which was categorized into good and poor performance, and represented by the **dummy variable 1** (for good performance) and **0** (for poor performance).

The introduction of the explanatory variables into the model leads to a significant improvement of the baseline model. This is shown by the Omnibus Tests of Model Coefficients with a χ^2 -value of 497.074 ($p < 0.001$) indicating a significant difference in the -2 log likelihood prior to introduction of the explanatory variables and after the introduction of these variables.

Additionally, an overall success rate of the model in predicting the effect of the explanatory variables on the outcome variable is 98.8% with a sensitivity of 98.6% and specificity of 98.9% (see appendix). While there was no meaningful multicollinearity between the predictor variables indicated by the r-values (range: -0.582 to 0.696) in the correlation matrix, the Hosmer and Lameshow Test of the goodness of fit suggests that the model is a good fit to the data generated for this study ($\chi^2 = 0.349$, $p > 0.05$). A summary of the logistic regression analysis is presented in Table 8.

Table 8: Summary of multiple logistic regression showing the influence of parental attachment on academic performance of SS3 students in Biology

Step		-2 Log likelihood			Cox & Snell R Square			Nagelkerke R Square	
1		29.367 ^a			.703			.972	
		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	Secure	4.873	1.626	8.986	1	.003	130.709	5.402	3162.393
	Avoidant	-4.463	1.187	14.131	1	.000	.012	.001	.118
	Ambivalent	-1.821	.704	6.695	1	.010	.162	.041	.643
	Disorganised	-3.160	.722	19.157	1	.000	.042	.010	.175
	Constant	14.688	4.792	9.396	1	.002	2392736.938		

a. Variable(s) entered on step 1: Secure, Avoidant, Ambivalent, Disorganised

In the logistic regression summary Table, the Cox & Snell R-square and Nagelkerke R-square indicates that 70.3% to 97.2% of variance in students' academic performance in Biology is explained by parental attachment. The p-values associated with the computed values of the Wald statistics show that the four explanatory variables (secure, avoidant, ambivalent and disorganised attachment) have statistically significant effect on the outcome variable (academic performance in biology) ($p < 0.05$). Whereas the effect of secure parenting is positive, avoidant, ambivalent and disorganised attachment pose negative effect on the students' performance in biology. According to the table, the odd ratios [Exp (B)] reveal that a unit increase in secure attachment scores of the students increases the odds of having good performance in biology by 131 (95% CI: 5.402 – 3162.393) times. Similarly, a unit increase in avoidant, ambivalent and disorganised attachment scores will lead to an increase in the odds of having good performance in biology by 0.012 (95% CI: 0.001 – 0.118), 0.162 (95% CI: 0.041 – 0.643), and 0.042 (95% CI: 0.010 – 0.175) respectively. In conclusion therefore, the null hypotheses 1, 2, 3 and 4 are rejected. Hence, a statistically significant relationship exists between secure, avoidant, ambivalent, disorganized attachments and academic performance of SS3 students in biology.

The mathematical representation of this logistic regression model is given below:

$$Y = 14.688 + 4.873Sa - 4.463Aa - 1.821Ama - 3.160Da$$

Where Y = Academic performance of SS3 students in biology

Sa = Secure attachment

Aa = Avoidant attachment

Ama = Ambivalent attachment

Da = Disorganised attachment

Discussion of findings

This study determined the impact of parental attachment on the academic performance of SS3 students of Calabar Educational Zone in Biology. The study hypotheses were stated in the null form and sought to establish the relationship between secure, avoidant, ambivalent and disorganised attachments, and academic performance of SS3 students in biology.

Findings of the study revealed a statistically significant positive relationship between secure attachment and academic performance of SS3 students in biology (Wald = 8.986, $p < 0.05$). Accordingly, the odds of having good performance in biology among the students increase by 131 times for every unit increase in the secure attachment score of the students. Hence, students who are securely attached to their parents have very high likelihood of performing better in biology. This finding agrees with that of Majimbo (2017) who found a significant positive but weak correlation between academic performances of adolescents in High Cost Secondary Schools in Nairobi and secure attachment style. Similarly, Cortesi (2014) reported that students with higher secure attachment styles tend to have greater academic success.

Though statistically significant (Wald = 14.131, $p < 0.05$), results of the study showed that the effect of avoidant attachment on the performance of the students in biology was negative. This indicates that the students tend to show poor performance in biology, as they experience avoidant relationship with their parents. Accordingly, a unit increase in the avoidant attachment scores of the students results in a 0.012 odds of having good performance in biology. This finding is in line with that of Cortesi (2014) who reported that a significant but negative relationship between dismissing scores and grades among high school students in Nairobi.

Similarly, the study revealed a statistically significant but negative relationship between ambivalent attachment and academic performance of the students in biology (Wald = 6.695, $p < 0.05$). According to the result, a 0.162 odds of having good performance in biology is associated with a unit increase in the ambivalent scores of the students. This finding correlates with that Cortesi (2014) who reported a significant but negative correlation between preoccupied (ambivalent) attachment and grades of high school students in Nairobi.

Lastly, the study revealed a significant but negative relationship between disorganised attachment and academic performance of students in biology (Wald = 19.157, $p < 0.05$). Hence, students who experience disorganised attachment with their parents tend to have poor performance in biology.

Conclusion/recommendations

Conclusively, the style of attachment existing between parents and students has a profound significant effect on the academic performance of the students specifically in Biology. This effect depends to a large extent on the type of attachment style between the student and his/her parent. In this study, being securely attached to parents largely increases the likelihood of having good performance in biology. Conversely, students with avoidant, ambivalence, and disorganised attachment are mostly likely to have poor performance in biology.

Based on the stated observations, it is recommended that:

1. Parents should form a better habit that encourage cordial interpersonal relationship between them and the child, whereby they can discuss issues together, and as a matter of priority, check their children class activity at least twice in a week to discuss on them
2. Parents should liaise with the school managements to identify and enhance their children academic improvement.

Reference

- Bowlby, J (2015), Attachment Theory: Main Characteristics of Attachment and Family Matters,
- Cassidy J. & Berlin, L.J. (1994), The insecure/ambivalent pattern of attachment: theory and research. *Child Dev.* 1994;65(4):971-91.
- Cortesi, C. (2014), Understanding the impact of adolescent attachment on academic success. Dissertation, paper 893, Retrieved on April, 20th from http://ecommos.luc.edu/luc_diss/893
- Hazan, C, & Shaver, P. (1987), Romantic love conceptualized as an attachment process. *J Pers Soc Psychol.* 1987;52(3):511-24.
- Leblanc, É. Dégeilh, F. & Daneault, V. Beauchamp, MH. & Bernier, A. (2017), [Attachment Security in Infancy: A Preliminary Study of Prospective Links to Brain Morphometry in Late Childhood](#), *Front Psychol.* 2017;8:2141. doi: 10.3389/fpsyg.2017.02141
- Majinbo, E. (2017). Influence of attachment styles on academic performance of adolescents in High Cost Private Secondary Schools in Nairobi County, Kenya. *European Scientific Journal*, 13 (10): 90-104.
- Mazur (1986), Learning and Behavior, New Delhi: Prentice Halls
- National Institute of Child Health and Human Development (NICHD), Early Child Care Research Network, (2008), Mothers' and fathers' support for child autonomy and early school achievement. *Developmental Psychology*, 44(4), 895-907.
- Ndiyo, N. A. (2010). *Fundamentals of research in behavioural sciences and humanities*. Calabar: Wusen Publishers.
- Omolewa, B.V. (2002), Causes of family problem, Ibadan: in text Printers Limited.
- Simpson, JA & Rholes, WS (2017), Adult attachment, stress, and romantic relationships, *Curr Opin Psychol.* 2017;13:19-24. doi: [10.1016/j.copsyc.2016.04.006](https://doi.org/10.1016/j.copsyc.2016.04.006)
- Sincere, S. (2012), Bowlby Attachment Theory, Retrieved April, 2019 from Explorable.com: <https://explorable.com/bowlby-attachment-theory>
- Sroufe LA. (2003), The role of infant-caregiver attachments in development. In: Belsky J, Nezworski T, editors. *Clinical Implications of Attachment*. Hillsdale: Erlbaum; 1988. pp. 18-38.
- Waters E, Cummings EM. A secure base from which to explore close relationships. *Child Dev.* 2000;71:164-72. [PubMed]
- Reisz, S. Duschinsky, R. & Siegel, DJ. (2018), Disorganized attachment and defense: exploring John Bowlby's unpublished reflections. *Attach Hum Dev.* 2018;20(2):107-134. doi: [10.1080/14616734.2017.1380055](https://doi.org/10.1080/14616734.2017.1380055)

RISKY SEXUAL BEHAVIOUR AND PATTERN OF CONTRACEPTIVE USE AMONG YOUNG PERSONS IN A NIGERIAN UNIVERSITY.

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Abstract

Worldwide there is increasing concern about the health and developmental problems of young people. This is particularly important in Nigeria with the increase number of adolescent pregnancies and perinatal morbidity and mortality. Understanding the sexual behaviour of adolescents and their usual contraception pattern could help in for designing counselling measures to reduce or prevent the risky behaviours. Therefore, the study assessed the knowledge of sexual health and practice of contraception among young persons in a Nigerian University. A descriptive cross-sectional design using a multistage sampling technique to recruit students from all the (thirteen) faculties in University of Ibadan. Four hundred and thirty (430) undergraduate students with almost equal proportion of males and females who consented were selected. A structured questionnaire with predetermined validity and reliability was used for data collection Four hundred and thirty questionnaires were distributed and same number retrieved and analyzed, making the response rate to be 100%. Data collected were analysed using Statistical Package for Social Sciences, version 20. The results revealed that the mean age at menarche of the participants was 13.8 ± 2.1 years, while the mean age at sexual debut was 18.5 ± 5.2 years. Also, 49.2% of the students have had sexual experience before, with 34.7% having multiple sexual partners. Awareness of contraception among the participants was high (85.5%), with condom (71.86%) and pill (70.23%) being the most known methods of modern contraception. Withdrawal (62.56%) and periodic abstinence (50.7%) were the most known methods of traditional contraception. More than half (55.58%) had used one method of contraception or the other before, but condom (42.7%) and emergency contraceptive (38.5%) were the most used methods, while the least was withdrawal (18.8%). Although contraception and contraceptive methods awareness was high among the participants, a number of students still engaged in risky sexual behavior. Efforts should be directed at educating them on the dangers involved in risky sexual behavior.

Keywords: Sexual Health, Awareness, Contraception, undergraduates

Introduction

Adolescents and youth constitute a large proportion of the world's population. Almost half of the world population consists of young people below 25 years of age. Investing in the health of young people is essential for the economic and social development of nations as this present opportunities for building human capital and alleviating intergenerational poverty across societies. There are over 1.2 billion adolescents in the world today and their numbers are steadily increasing. Current world population estimates indicate that adolescents aged 10-19 years and young people aged 10-24 years constitute 22 percent and 26 percent of the world population respectively.

The Physiological changes that occur in the life of adolescents and young persons during puberty often

serve as a motivating force in their quest to experiment with sex. Some naturally explore and take risks in many aspects of their lives, including sexual relationships. Young people from Sub-Saharan Africa are more at risk of experiencing reproductive health problems than youth from other regions because of the social and low economic conditions in the region. In Nigeria, researches have confirmed that risky sexual behavior is associated with young people. These risky behaviors include: early debut in sexual activities, sex with many partners, low and inconsistent use of condoms, use of drugs and alcohol, anal sexual intercourse and mouth to genital contact. Multiple sexual relationships and unprotected sexual encounters are cause for concern among young men and women and particularly those who reside in urban areas. With the increase in the interval between age at first sex and age at marriage, many young

people are predisposed to adverse reproductive health outcomes such as STI/HIV/AIDS, unwanted pregnancy and unsafe abortion.

Of all the age groups, young people have the highest unmet need for contraception. Condom use is still very low (29.8%) and testing for HIV is rare. The results of the needs assessment for adolescent friendly health services carried out in Kabale district in Uganda, found out that young people fear to discuss these sexual desires and actions with adults. Parents expect teachers to take responsibility, while teachers expect parents to be responsible for such sexual and reproductive health education, because both feel inadequately prepared to discuss these issues. Some religious leaders advocate that young people should not be given sexual and reproductive health information and services, because they believe it makes the situation more confusing for the youths. This results into reproductive health consequences; unplanned pregnancies, sexually transmitted infections (STIs) like Human Immunodeficiency Virus (HIV).

Youth friendly sexual and reproductive health services are described by the World Health Organisation as "services that are accessible, acceptable, equitable and appropriate to meet the sexual and reproductive health needs of young people". Young people receive services within an environment that is friendly and welcoming, are able to come back again and also refer their friends for the same services. Contraceptive use among sexually active adolescent women in developed countries ranges from 31 percent in Serbia and Montenegro to over 90 percent in the United Kingdom. In low-income countries, about 33 percent of adolescents who want to avoid pregnancy are using a modern contraceptive method, compared to 58 percent in high income countries. Several reasons have been suggested for these disparities including lack of access to adequate and accurate information, fear of side effects; along with geographic, social, and economic barriers. Another reason could be that adolescents are less motivated to use contraception since they are entering into the childbearing period. The highest rates of adolescent pregnancies are seen in Sub-Saharan Africa (115.25 births per 1,000 women) and the lowest in Europe (19.29 births per 1,000 women).

A study conducted by Imaledo and colleague among students of University of Port Harcourt, Nigeria, found out that many young people in higher institutions are sexually active and most of the students lack the necessary reproductive health information to practice safe sex. It further confirmed that sex is a phenomenon currently ravaging higher institutions in Nigeria as a lot of students are engaged in premarital and heterosexual relationships on campus. In another related study conducted in Muhimbili and Dar-es-Salaam Universities Tanzania, results showed that the difference between contraceptive usage and sexual risk behaviour

exposes a high proportion of women to the risks of unintended pregnancy and other sexually transmitted infections as majority of the participants in their study were not using contraceptives. Condoms, withdrawal and periodic abstinence methods were found to be the most popular methods ever used or currently being used. A very similar pattern on the choice of contraceptive method was reported among Nigerian undergraduate students.

Low level of utilization of contraceptives has been associated with high rates of unplanned pregnancies and unsafe abortions among Sub-Saharan African youth. A study conducted among female nursing students of University of Calabar revealed that 55% of students who were sexually active had knowledge of family planning, especially condom use. In a similar study, a little above half of the students who had unplanned pregnancies resulted in abortion. Low utilization of contraception has also been attributed to limited capacity of the health care system and structure within which family planning services are offered.

Despite this fact, there is limited information about sexual behaviour, contraceptive knowledge and use among female university students in Nigeria, this underscores the need to understand the sexual risk behaviour, knowledge and pattern of contraceptives use among this high-risk group in order to promote proper use of contraception.

Objectives

1. Assessed knowledge of sexual health and practice of contraceptive among undergraduates in a Nigerian University.
2. Assessed Sexual Practices of the Participants.
3. Assessed participants' awareness and pattern of contraceptive use
4. Examine attitude of the Participants to Sexual Health and Contraceptive Use

Theoretical framework and Application to study

This study was guided using two theoretical model; Sigmund Freud psychosexual theory, which address the development of personality and addresses the issue of sexual health. Focus will be on the genital phase where most young people in the University belong. The second model is the KAP model. This addresses the issue of practice of contraception.

Sigmund Freud Psychosexual Theory

Psychological development is the history of our erotogenic zones (areas of the body capable of producing sexual pleasure when stimulated). On the broadest level, Freud thought of the whole body as one large erotogenic zone. But some areas are more sensitive than others. The stages of psychosexual development are each centered on the recognition and experience of the pleasure (and conflicts) that these zones generate. According to Freud, there are 5 stages of the psychosexual development, but in this study emphasis will be made on the last stage, which is of more relevance to the study (James Staub). The

stages are: Oral Stage, Anal Stage, Phallic Stage, Latency stage and Genital Stage.

The Genital Stage

With the onset of puberty, pleasure once again organizes itself around the genitals, and sexual desire becomes directed toward heterosexual relationships. Puberty, as much as it is a transformation in body, is also a transformation of psychology: adolescents start thinking about sex. If all the conflicts of the earlier stages were resolved appropriately, the adolescent will develop a Genital ("healthy") Personality, one capable of Love and Work. Most of the participants in this study are adolescents and young people that are in the genital phase of Freud psychosexual theory. As a result of the biological and psychological changes they are attracted to the opposite sex and express the desire to love and being loved by the opposite sex. When an adolescent becomes fixated in any of the previous stages, developmental conflict occurs. Fixation occurs when one receives too little or too much pleasure in any given stage. When these frustrations and overindulgences happen in early life, they lock away a certain amount of the libido in the stage in which they occur. When a fixated people encounter stress in their adult lives, they regress to the stage that they didn't resolve properly and respond to the stressor immaturely. Some of these fixated stages demonstrate as risky behaviors such as, smoking, rape, substance abuse, and other harmful practices.

Knowledge, Attitude, and Practice (KAP) Survey Model.

A KAP model means **K**nowledge, **A**ttitude and **P**actices. To properly carry out this type of survey it is important to establish a basic premise and provide definitions for each word.

K: Knowledge is a set of understandings, knowledge and of "science." It is also one's capacity for imagining, one's way of perceiving. Knowledge of a health behaviour considered to be beneficial, however, does not automatically mean that this behaviour will be followed. The degree of knowledge assessed by the survey helps to locate areas where information and education efforts remain to be exerted. When the University undergraduates have sound knowledge regarding their sexual health and contraception, it influence their decision positively. As they make informed decision regarding their lives.

A: Attitude is a way of being, a position. These are leanings or "tendencies to...." This is an intermediate variable between the situation and the response to this situation. It helps explain that among the possible practices for a subject submitted to a stimulus, that subject adopts one practice and not another. Attitudes are not directly observable as are practices, thus it is a good idea to assess them. It is interesting to note that numerous studies have often shown a low and sometimes no connection between attitude and practices. Sound knowledge gives the ability to practice healthy sexual living and seek health care when appropriate. Attitude could either be positive or negative. It is based on the decision of the student of

the University makes with regards to their sexual health and contraception.

P: Practices or behaviours are the observable actions of an individual in response to a stimulus. This is something that deals with the concrete, with actions. For practices related to health, the students collect information on consumption of tobacco or alcohol, the practice of screening, vaccination practices, sporting activities, sexuality, and seeking health care when needed.

Materials and Methods

The study adopted a descriptive cross-sectional survey to assess risky sexual behaviour and pattern of contraception use. It was conducted among undergraduate students in University of Ibadan, Oyo-State, Nigeria and the sample for the study was drawn randomly from all faculties of the university using multistage sampling technique. The sample size consisted of 430 students out of a total number of 12,662 students in the University, determined using Taro Yamane's formula for calculating sample size.

A 32-item validated structured questionnaire was the instrument used for data collection. The instrument has five (5) sections; section A contained questions on personal demographic data, while B elicited questions on their pre-existing knowledge of sexual health. In addition, C contained questions about students' pre-existing attitudes about sex and how this can affect their use of contraception, D identified the utilization level of contraceptives and E elicited questions on perceived strategies for accessibility of sexual information to the undergraduate students. The validity of the questionnaire was established through face and content validity criteria. Each item on the instrument was examined for content clarity, scope and relevance to the study. The reliability of the instrument was established by test re-test method with a reliability coefficient of 0.79.

Ethical approval with assigned number UI/EC/15/0046 was obtained from the Ethical Committee of the College of Medicine, University of Ibadan. Voluntary consent was obtained from the participants and they had the freedom to withdraw their consent to participate in the study at any point of the study continuum. A total of 430 questionnaires administered were retrieved, giving a response rate of 100%. Data generated was analysed using Statistical Package for Social Sciences. Descriptive statistical methods were used.

Results

Socio-demographic characteristics of Respondents

Overall, 430 students of the university of Ibadan were selected for the study. Approximately, there were equal proportion of male and females and more Christians 68.8%. More than 60% were younger than or equal to 24 years. More than 85% were not married. Majority of the respondents were of Yoruba tribe. The mean age at menarche was 13.8 ± 2.1 years, while the mean age at sexual debut was 18.5 ± 5.2 years as shown in Table 1.

Table 1: Demographic Characteristics of Participants

Variable	Frequency	Percentage
Sex		
Male	213	49.5
Female	217	50.5
Age (Years)		
<19	78	18.1
20-24	191	44.4
25-29	108	25.1
>29	53	12.3
Religion		
Islam	134	31.2
Christianity	296	68.8
Tribe		
Yoruba	328	74.4
Hausa	14	3.3
Igbo	71	16.4
Others	17	5.9
Level of study		
100	30	7.0
200	61	14.2
300	113	26.3
400	140	32.6
500	62	14.4
600	24	5.6
Age at Menarche		
Mean \pm SD		13.8 \pm 2.1 years
Age at sexual debue		
Mean \pm SD		18.5 \pm 5.2 years

Sexual Practices of the Participants.

Sexual practices of the participants showed that 49.2% of the students have had sexual experience before and 34.7% of those that have sexual experiences before have multiple sexual partners. Results also show that 42 (21.43%) of those that have had sexual experience(s) before had been pregnant at one time or the other before.

Awareness and Pattern of Contraceptive use.

Results on the awareness of contraception among the participants showed that majority (85.5%), have heard about contraception before. The most known method of modern contraception among the participant was found to be condom 309 (71.86%); followed by pill 302 (70.23%); and injection 241 (56.05%). The least known were found to be Norplant/implant (24.65%); diaphragm (30.93%) and spermicidal (36.51%). On the other hand, the most know traditional method was found to be withdrawal (62.56%), followed by periodic abstinence (50.7%). A little above half of the participants 55.58% had used one method of contraception or the other before; the most used method was found to be condom (42.7%); closely followed by emergency contraceptive (38.5%), while the least used was withdrawal (18.8%).

Table 2: Sexual Practices of the Participants

Variable	Yes (%)	No (%)
Have had sexual intercourse before	196 (49.2)	198 (49.7)
I have more than one sexual partner (n = 196)	68 (34.7)	128 (65.3)
Have been pregnant before (n = 196)	42 (21.43)	154 (78.57)

Table 3: Awareness and Pattern of Contraceptive Use.

Variable	Yes (%)	No (%)
I have heard about Contraceptives before	348(85.5)	59(14.5)
Modern Contraceptive methods that have heard about		
Pills	302 (70.23)	128 (29.77)
Injection	241 (56.05)	189 (43.95)
Condom	309 (71.86)	121 (28.14)
IUCD	176 (40.93)	254 (59.07)
diaphragm	133 (30.93)	297 (69.07)
spermicidal	157 (36.51)	273 (63.49)
Norplant/Implants	106 (24.65)	324 (75.35)
Emergency contraceptives	172 (40.00)	258 (60.00)
Traditional methods that have heard about		
Periodic abstinence	218 (50.70)	212 (49.30)
Withdrawal	269 (62.56)	161 (37.44)
Lactation amenorrhea	92 (21.40)	338 (78.60)
Herbs	200 (46.51)	230 (53.49)
I have used contraceptives before	239(55.58)	191(44.42)
Method of contraception used		
Condom	102	42.7
Emergency contraceptives	92	38.5
Withdrawal	45	18.8

*-multiple responses allowed.

Table 4: Attitude of the Participants to Sexual Health and Contraceptive Use

Variable	Strongly Agreed (%)	Agreed (%)	Undecided (%)	Disagreed (%)	Strongly Disagreed (%)
It is good to use alcohol before having sex.	8 (1.9)	21 (5.0)	132 (31.3)	81 (19.2)	180 (42.7)
It is good to smoke cigarette, use herbs or other substances before having sex.	4 (0.9)	17 (4.0)	137 (32.5)	76 (18.0)	188 (44.5)
It is not good to have premarital sex when you are an adult.	112 (27.7)	108 (26.7)	52 (12.8)	81 (20.0)	0 (0.0)
Using condoms can help prevent sexually transmitted infections.	161 (38.5)	192 (45.9)	13 (3.1)	32 (7.7)	20 (4.8)
There is no need for contraception when your partner is looking healthy.	24 (5.7)	52 (12.3)	31 (7.3)	192 (35.5)	123 (29.1)
You can have more than one sexual partner at a time without any negative consequence	10 (2.4)	38 (9.0)	16 (3.8)	133 (31.5)	225 (53.3)

Attitude of the Participants to Sexual Health and Contraceptive Use

Table 4 showed that majority of the respondents opined that it is not good to use alcohol, smoke cigarette, use herbs or other substances before having sex. More than 40% disagreed with the morals of abstaining from sex till marriage, while about 85% believed that using condom can help prevent sexually transmitted infections. However, more than 70% disagreed that there is no need for contraception when your partner is looking healthy and that one can have more than one sexual partner at a time without any negative consequences.

Scores of knowledge of contraceptive for each respondent was computed using questions 26 and 27 in the questionnaire. There were 12 responses in all. Maximum score attainable was 12 while minimum score attainable was 0. The average rating score was 6. When the respondents were quizzed about their knowledge of contraceptives, the mean score (9.5) was greater than the average rating scale (6.0) and 61.2% of the respondents had a score which was greater than the average rating scale. Both indices points to the fact that the respondents have a good knowledge of both traditional and modern methods of contraceptives. Moreover, a large proportion have heard about contraceptives. Prevalence of condom utilization was 25.1%. Major contraceptives used were condom, emergency contraceptives and withdrawal method. Major reasons given by those not using contraceptives include fear of side effects, culture and religion.

Discussion

Mean age at menarche among the participants was observed to be 13.8 ± 2.1 , while the mean age at first sexual debut was found to be 18.5 ± 5.2 years. This is closely related to the average 12.41 age at menarche found out by in a study among adolescents girls in Kuwait. An earlier study submitted that since nineteenth century, the average age of first menarche has declined at the rate of approximately

4 months a decade. In the United States the average age of first menarche is 12.3 years. Statistics from Europe indicate an average age of menarche that ranges from 12.3 years in Greece to 13.3 years in Finland. Other international statistics revealed that the average age of menarche was 13.0 years for Australia and Russia and 13.2 years for Norway. All of these are still close to age at menarche found out among students that participated in this study.

Sexual practices of the participants showed that about half of the students that participated in the study have had sexual experience before, this corroborated the assertion of Imaledo and colleagues that many young people in higher institution were sexually active. Multiple sexual partners was one of the risky sexual behaviors that had been documented among adolescents. This was also reflected by the findings of this study with consequences of unwanted pregnancy. Also it is similar to high rate of sexual activities and risky sexual behavior reported in Benin.

Awareness of different contraceptive methods showed that majority of the students have heard about contraception before and were aware of different methods of contraceptive, both modern and traditional methods. From this study condom and pill were the two most known methods of modern contraception, while withdrawal and periodic abstinence were the two most known methods of traditional contraception. Kapoor, Kishore & Gupta, in a study among youth in Delhi had documented that awareness of contraception and contraceptive methods was very high with condom being the most known contraceptive method. This is also close to the submissions of Hoque, Ntsipe, & Mokgatlhe-Nthabu. Earlier in Uyo - Nigeria, it was found out that the level of awareness of contraception was very high also with condom been the most known method of contraception.

Our results showed that more than half of the students

the other before, with condom been the most used form, followed by emergency contraceptives. Umoh, &Abah, found out that condom, withdrawal method and the pills were the most commonly used forms of contraception among participants in their study, but our study established that withdrawal was the least used despite been one of the most known method. This could be because it takes a very disciplined couple to use withdrawal method. Ease of availability of condom and pill might be responsible for their high rate of use among participants in our study as they can easily buy any of this from the drug dispensary shops. Also, the two methods most used by participants in our study did not require expert opinion or visit to a family planning outlet before use. Hoque, Ntsipe, & Mokgatle-Nthabu, in their own submission also put forward that condom and oral pills were the most used form of contraception among university students in Botswana.

Our findings also corroborated the assertion of Imaledo and colleagues that more young people in higher institution were getting sexually active and most lack the necessary reproductive health information to engage in safe sexual practices. The study further confirmed that sex is a phenomenon currently ravaging higher institutions in Nigeria as a lot of students were engaged in premarital and heterosexual relationships on campus.

Conclusion

The high rate of early sexual debut observed were among participants in this study might most likely be true of many other tertiary health institutions in Nigeria. Although contraceptive awareness among the participants was very high, but its utilization was still low.

Implication to Nursing

Nurses need to and endeavor to promote and protect the health of this group of the population, as they form majority of the population and engage in harmful sexual practices. This could lead to high morbidity and mortality, thereby crippling the productive capacity of the society at large. The practice of contraception is important because this can affect the reproductive capacity and years of young people, especially with increasing incidence and prevalence of incurable STI's, HIV/AIDS, and other sexually transmitted diseases. In addition, prevention of unwanted pregnancies, which lead to abortion and its associated complications. Nurses can help promote healthy sexual lives and use of contraceptives by creating awareness, advocacy, health education, community mobilization and participation, early detection and prompt treatment of cases and mentorship.

References

Al-Awadhi, N., Al-Kandari, N., Al-Hasan, T., AlMurjan, D., Ali, S., and Al-Taiar, A., (2013). Age at menarche and its relationship to body mass index among adolescent girls in Kuwait. *BMC Public Health*, 13:29. DOI: 10.1186/1471-2458-13-29

(2010). Age at menarche in Canada: Results from the National Longitudinal Survey of Children & Youth. *BMC Public Health*, 10:736. (doi:10.1186/1471-2458-10-736)

Anderson, S. & Must, A. (2005). Interpreting the continued decline in the average age at menarche: Results from two nationally representative surveys of U.S. girls studied 10 years apart. *Journal of Pediatrics*, 147, 753-760

Avery L, and Lazdane G. What do we know about sexual and reproductive health of adolescents in Europe? *European Journal of Contraception & Reproductive Health Care*. 2008; 13, (1) 58-70.

Bankole, A., Ahmed, F.H., Neema, S., Ouedraogo, C., &Konyani, S. 2007. Knowledge of Correct Condom Use and Consistency of Use among Adolescents in Four Countries in Sub-Saharan Africa. *African Journal of Reproductive Health*, 11, (3) 197-220.

Darroch J E, Singh S, and Frost J J. Differences in Teenage Pregnancy Rates among Five Developed Countries: The Roles of Sexual Activity and Contraceptive use. *Family Planning Perspectives*, 2001b; 33(6), 244-281

Echendu DA, Joseph IBA, Nkemakolam OE, Chima I, Akinsewa A, Ejike O. Awareness and use of contraception by women seeking termination of pregnancy in south eastern Nigeria. *Asian Pacific Journal of Tropical Disease*. 2011; 71-75

Echendu, D.A., Joseph Iba, Nkemakolam O.E., Chima I., Ahinsewa A., Ejike O., Awareness And Use Of Contraception By Women Seeking Termination Of Pregnancy In South Eastern Nigeria. *Asian Pacific Journal Of Tropical Disease* 2011; 71-75.

Fagbamigbe A.F ,Adebowale A.S, Olaniyan F.A , "A Comparative Analysis of Condom Use among Unmarried Youths in Rural Community in Nigeria", *Public Health Research*, Vol. 1 No. 1, 2011, pp. 8-16. doi: 10.5923/j.phr.20110101.02.

Federal Ministry Of Health. National HIV/AIDS Reproductive Health and Survey. 2008. Abuja, Nigeria.

Guttmacher Institute & IPPF. Facts on the Sexual and Reproductive Health of Adolescents Women in the Developing World, Guttmacher Institute, Washington, 2010.

Hoque, M. E., Ntsipe, T., & Mokgatle-Nthabu, M. (2013). Awareness and practices of contraceptive use among university students in Botswana. *S a h a r a J*, 1 0 (2) , 8 3 – 8 8 . <http://doi.org/10.1080/17290376.2013.869649>

Imaledo JA, Peter-Kio OB, and Asuquo EO. Pattern of risky sexual behaviour and associated risk factors among undergraduate students of the University of Port-Harcourt, Rivers State. *The Pan African Medical Journal*. 2012; 12, PMC 3489398

Iwuagwu SC, Ajuwon AJ, Olasheha IO. Sexual behaviour and negotiation of male condoms

- by female students of the University of Ibadan. *Journal of Obstetrics and Gynaecology*. 2000; 20 (5): 507-513.
- Kapoor, R., Kishore. J & Gupta, N. (2008). Awareness about Contraceptive Practices Among Youths in Delhi. *Health and Population Perspectives and Issues*, 31 (1): 52-62.
- Khan S and Vinod M. *Youth Reproductive and Sexual health. DHS Comparative Reports No. 19*, Macro International Inc. Calverton, Maryland, USA, 2008.
- Magreat J, Somb MM, Obure J, and Mahande MJ. Sexual behaviour, contraceptive knowledge and use among female undergraduates' students of Muhimbili and Dar es Salaam Universities, Tanzania: a cross-sectional study. *BMC Women's Health*. 2014, 14:94 <http://www.biomedcentral.com/1472-6874/1494>.
- Manlove JK, Ikramullah E, & Terry-Humen E. Condom Use and Consistency Among Male Adolescents in the United State. *Journal of Adolescents Health*. 2008; 43, (4)325-333.
- Ogbuyi CO. Knowledge about HIV/AIDs and Sexual practice among University of Ibadan Students, *Afr. J. Med. Sci*. 2005 34(1) 25-31.
- Orji EO, Adegbenro CA, Olalekan AW. Prevalence of sexual activity and family planning use among undergraduate in Southwest Nigeria. *Eur. J. Contracept. Reprod. Health Car*. 2009, 10(4): 255-260.
- PRB, Meeting Young Women's Reproductive and Sexual Health Needs. Policy brief, Population Reference Bureau. Measure communication, Washington DC, 2000.
- Rahamefy OH, Rivard M, Ravaoarino M, Ranaivoharisoa L, Rasamindrakotroka AJ, Morisset R. sexual behaviour and condom use among University students in Madagascar, *Sahara J*. 2008, 5(1):28-35.
- Ringheim K and Gribble J. Improving the Reproductive Health of sub-Saharan African Youths: A route to achieve the Millennium Development Goals, Population Reference Bureau, Washington DC, 2010.
- Sedgh G, Bankole A, Okonofua F, Imarhiagbe C, Hussain R, Wulf D. Meeting Young Women's Sexual and Reproductive Health Needs in Nigeria. 2009. New York
- Steingraber, S. (2007). The falling age of puberty in U.S. girls: What we know, what we need to know. San Francisco, CA: Breast Cancer Fund.
- Umoh, A. V., & Abah, M. G. (2011). Contraception awareness and practice among antenatal attendees in Uyo, Nigeria. *The Pan African Medical Journal*, 10, 53.
- UNAIDS 2007. *Monitoring the Declaration of Commitment on HIV/AIDS. Guidelines on construction of core indicators. 2008 reporting*, United Nations Programme on HIV/AIDS (UNAIDS), New York.
- UNAIDS, USAID, Meeting the behavioural Data Collection Needs of National HIV/AIDS and STD Programmes, 1998, available at: <http://www.fhi.org/NR/rdonlyres/ealy1f6uifftby2nxrllsob4hxe475g62sjbyhhf7cx3bdaucrfk6b5eitsqxvvsyz5csxp5na7h/bevარიordatacollectionneeds.pdf>
- United Nations. The Millennium Development Goals Report 2011, United Nations, New York, 2011.
- Wellings K, Collumbien M, Slaymaker E, Singh S, Hodges Z, Patel D, and Bajos N. Sexual behaviour in context: a global perspective. *The Lancet*, 2008; 368, (9548) 1706-1728.
- WHO, Adolescent Friendly Health Services: An Agenda for Change, 2002b.
- World Bank, The World Bank Indicators, 2011: The World Bank.
- World Health Organisation, Geneva. World Report on Violence and Health: Summary, World Health Organisation, Geneva, 2002a.
- World health organization, Child and Adolescent health and development, 2015

EFFECT OF CONSUMER HEALTH EDUCATION ON KNOWLEDGE AND ATTITUDE OF SECONDARY SCHOOL STUDENTS IN SOUTHERN IJAW LOCAL GOVERNMENT AREA OF BAYELSA STATE

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Abstract

The purpose of the study is to determine the effect of Consumer Health education (CHEP) programme on knowledge and attitude of Secondary School Students in Southern Ijaw L.G.A. of Bayelsa State. To achieve this, four research questions were formulated and tested. Based on quasi experimental research design, and review of relevant literature and an instrument called Consumer Health Education knowledge and attitude questionnaire (CHEKAQ) was utilized. Data was collected from 408 secondary schools' students and analyzed using percentages and simple mean (averages). The findings reveal that students level of knowledge of consumer health was high (60.76%). Also, the level of knowledge of students who were exposed to CHEP was very high (77.93%) while those who were not was (43.02%). On the other hand, students attitude regarding consumer health was positive $X=2.25\%$. It is therefore recommended that government at various levels in Nigeria, non-governmental organizations and schools' management board should sponsor CHEP not only in schools but also in the community. This can be achieved through involvement of both students and members of the community in programme of health educators

Introduction

The purpose of health services is to improve the health status of the population. Examples of health services are immunization of children, to reduce the incidence of particular diseases and the provision of safe water, to prevent mortality and morbidity from water borne diseases. Others include the care of pregnant women and children otherwise known as maternal and child health services (MCH), which could contribute to the reduction of maternal and child mortality. When these services are purchased and consumed by a wise consumer, they are called consumer health services. Consumer health services consist of a wide range of activities that are purchased to satisfy individual's health needs. Health services are provided by wide range of health workers which include, physician health educators, nurses, sanitary inspectors and the entire staff of the health institution.

People need to have adequate consumer health knowledge, skills, positive attitudes and sound consumer practices. This will help them live a healthy life. This can only be achieved effectively by objective planning, implementation, and periodic evaluation through workshop and seminars because consumer health education is based on preventive, promotive and curative treatment. Consumer health education is the process of exposing people to the knowledge, skills and practices needed by individuals, families, and cooperate bodies to become competent in selecting health care products and services (Ukpore,

1996). Gordian (1980) opined that consumer education is the means of creating and achieving change in society so that instead of being misformed and manipulated by our society, we can adapt to our needs.

International Organization of Consumer Union (2006) defined consumer education as critical awareness, social responsibilities and solidarity among consumers. Consumer education involves asking questions and subsequently making decisions, which are both political and personal, and it involves such specifics as defining their problem, determining their effects of values and standards, seeking information about alternatives, choosing, evaluating, reviewing and revising all major decisions. Consumer education as used in the present study refers to the acquisition of facts, skills, attitudes and practices capable of enabling an individual consumer to adapt to personal environmental and social changes with the aim of promoting health and healthy living. The ultimate objective of consumer education is to equip the individual with knowledge and skills to become a competent or wise consumer (Ukpore, 1996). Ukpore (1996) defined competent consumer as an individual who is aware of the values, goals, standards of goods and services and is capable of establishing priorities by taking rational decisions and acting responsibly in the consumer society. This simply implies that the consumer is able to attach values to health information, products and services.

Everyday people make decisions involving consumption of information, goods and services for themselves and for other people especially children. Some of these decisions are based on what they know about their daily wants or needs to maintain, protect and promote their health. Some of these needs or wants may be health products (HPS), health services (HSS), non-health products (NHP) or non-health services (NHS). The decisions or choice we make should be based on the correct information or knowledge of the values, goals, standards and priorities regarding our needs, including health knowledge of what we need or consume which can come from different source including such ones as members of our families, teachers in schools as well as other sources as books, friends, advertisements, commercials, labels, mass media to mention. Information on consumer health services and products from these sources, may be either authentic or conflicting or both and if this is so it may mean that they may affect students health positively or negatively. If students have low level or inadequate knowledge regarding the value of what health products and services they consume it may have deleterious effect on their health. On the other hand, if they have very high level of knowledge, regarding the health products and services and actually apply it, this may produce describable effect on their health.

Literature has shown that consumption of genuine health services (such as consulting a qualified physician), health products (for example prescribed drugs or medicines that help to protect, promote, and maintain our health) will positively influence our health. This is predicated on our knowledge of where to obtain genuine the services from, and our choice of genuine health products and competent health providers. We also need knowledge on how to solve consumer problems when they arise. Knowledge and practice of this is likely to influence our beliefs especially as it relates to health consumerism.

Okafor (2006), study shows that there is lack of knowledge, attitude and beliefs of secondary school students on consumer health education, secondary schools lack of Health teachers, no qualified health personals to head the available ones in some schools. His study further showed deficits knowledge on consumer human rights, there is so much belief on traditional herbs and immediate gratification on services, wise consumerism is not practice.

Secondary school students represent a group that is gullible, facing a lot of health problems, which need solutions. This situation can adequately be handled if they are armed with adequate knowledge of consumer health and positive attitude towards consumer health matters. Presently, knowledge of what constitutes consumerism and attitudes of secondary school students in Bayelsa appear not to be known or documented. Hence, to the best knowledge of the present researcher, no study has been conducted to determine the effect of CHEP on

consumer health knowledge and attitude of the students in Southern Ijaw LGA of Bayelsa State.

Accordingly, the purpose of the study is to determine the effect of a consumer health education programme (CHEP) on the knowledge, and attitude of secondary school students in Southern Ijaw Local Government area of Bayelsa State. Specifically, the study seeks to.

Accordingly the following research questions are posed to guide the study.

- What is the effect of CHEP on consumer knowledge of students?
- What is the effect of CHEP on consumer attitude of students?
- What is Consumer Health Knowledge (CHK) of students in control and experimental schools using (CHKABQ) and?
- What is the Consumer Health Attitude (CHA) of students in control and experimental schools using CHKABQ?

Review of Related Literature

Abundant literature exists in the area of knowledge, attitudes and beliefs regarding health matters generally but scarce in the area of consumer health. Literature pertinent to the study is hereby organized and presented under the following sub-headings:

Conceptual Framework

This section deals with such concepts as consumer health or consumerism, consumer knowledge, and attitude of consumer health. Consumer health is that aspect of health, which deals with those information, goods people use to protect, maintain, and promote their health. Consumer health (education) is an aspect of education, which is aimed at educating people on consumer information or knowledge, attitude and skills practice. It is aimed at helping people to become acquainted with the various types of consumer information, products and services. Consumer education can help one to distinguish between what is traditional medicine, orthodox medicine and spiritual medicine or healing and how to deal with different types of nostrums which is still very much in circulation in Nigeria.

Aspects of consumer health according to Federal Ministry Education (1985) include: - meaning of consumer health, consumer health protection, factors influencing choice of consumer health products, evaluation of consumer health services (such as traditional medicines, orthodox medicine and alternate systems of healing), quacks and quackery as well as nostrums.

Consumerism as categorized by Payne and Hahn (1990) is discussed under seven topics, which include health-related information; services and products; validity and reliability of health-related information; reception of health services from a variety of health care providers in many types of facilities and self-care. Other topics according to them are health insurance,

using health care products in an informed and responsible manner and health care quackery in the area of drugs, food and services. Categorization by Hahn and Payne (1999) shows that consumerism can be discussed under these areas, Health information; health care providers, self-care; health care cost and reimbursement or health insurance; health-related products, and health care quackery, and consumer fraud.

Sizer-Webb, Whitney and Debruyne (1999) categorized consumer health and the health care system into four broad areas. These are paying for health care, health insurance; choosing among health care providers (physicians and others) and health claims and quackery. Roth (2000) choose to discuss the subject of health consumerism in five sections. According to them, health consumerism involves self-care, basic promises, practices and providers of complementary and alternative medicine; effective communication with health care providers of complementary and alternative medicine and different types of insurance plans. Consumer health is also examined by Merki (1990) under the following sub-headings, building consumer health habits, influences of consumer choices, quackery, consumer problems and choosing health services.

From the forgoing categorizations there are the basic aspects of consumer health that can benefit every consumer especially secondary school students. The areas include meaning of consumer health, consumer health protection, factors influencing choice of consumer health products and services, quacks and quackery in the area of drugs, food and devices and nostrum, and health insurance.

A consumer is anybody who purchases goods and services (Merki, 1990), some of the things a consumer buys or pays for include health products (foods, drugs, devices services), health information (health books, magazines) and services (immunization or antenatal services), products are things manufactured and purchased to satisfy individual wants. Sometimes we plait or have someone to cut our hair. When we do this, we are paying or purchasing a service. Service is, therefore, an activity that is purchased to satisfy someone's wants. When we purchase a health or health-related service, this is called health services.

One who pays for a health products or service is called a health consumer. The health products or goods we pay for or use may include a cough syrup, shampoo, or skin cream. Sometimes we pay a fee to see a doctor or physician. Doing this is buying a health service. Briggs (2004) state that health services are those activities performed by health care professionals, or by others under their direction, for the purpose of protecting promoting, maintaining or restoring health. Sometimes, we buy goods and services that are directly related to health, but they may still affect our health. For example, buying sunglasses may not only be for its looks, but also as

health product to protect our eyes from the sun's harmful ultraviolet rays, and others may not. To make a healthy consumer decision, one needs to have information about consumer products or services. This means that facts and knowledge about a product or service that one needs to buy or patronize is absolutely necessary in order to make a wise decision or to be a wise consumer.

Briggs (2007) stated that a wise consumer also means building consumer skills. Skills are actions or behaviours that can help a consumer to wisely choose health information, products and services. A wise consumer is one who uses available scientific information to guide his choice of goods and services. Being a wise health consumer means using money wisely to get the most benefits out of what one spends; buying healthful and useful goods and services, that is those that will from those that can harm people and knowing what to do if one has a health problem help one to maintain a high level of health; buying safe goods and services and staying away (Merki, 1990). She further outlined four benefits of a wise consumer. First, a wise consumer can promote or protect his or her health. This means that when you purchase healthful or useful products or goods you can improve your health. Buying safe products lessens the risks of harm. Secondly, a wise consumer saves time and money. This means that you will not waste money on products or services that do not work or that are not efficacious. It also means that you will not have to spend more money later trying to solve a problem caused by an unwise purchase. Thirdly, a wise consumer can build self-confidence. Using consumer skills will make a wise consumer become sure of himself or herself, that is, he or she can be sure of what he or she is doing concerning his or her health. This will help to build self-esteem. Finally, a wise consumer protects his or her right. As consumers, we have problems. Wise consumer can be a helper and adviser to those who have problems, especially against fraudulent health providers. As wise consumers, we can be defenders of our rights and those of other people.

Merki (1990) opined that a consumer has many rights. A consumer has right to safety (right to purchase goods and services that will not cause harm), a right to choose (a right to select from goods or services at competitive prices), a right to be informed (right to truthful information about available goods and services), a right to be heard (a right to join in the making of laws about consumers); a right to have problems corrected and (a right to complain about a supplier of goods or services when you have not been treated fairly) and a right to consumer education (a right to learn the skills will help that can you make wise choices).

Having a right to consumer education implies that anybody who is a consumer should be taught or given information, skills and attitudes about the various aspects of consumer health. This may imply that secondary school students such as those in Southern

ljaw LGA should be provided with consumer education on various aspects of consumer health. They need to be educated on the concepts of consumer health, scope of consumer health, importance of consumer health as well as consumer principles, rights, responsibilities, skills and practices.

Consumer health information is concerned with obtaining facts that are related to health. This involves learning about available health products and services. For instance, a wise consumer is expected to possess scientific facts concerning dental health care, basic nutrition concepts and behaviour, food fads, fallacies and scans, drug products, skin care products and beauty aids. Other aspects of consumer health information are health insurance, consumer protection, or consumer laws; consumer protection agencies, secrets in advertising and frauds, quacks and quackery. A very important aspects of knowledge by a consumer is ability to know where authentic health services can be obtained and learning about fake products, quacks and their services.

Theoretical Literature

Theoretical Model for Developing the Guide Chauhan (1979) posited that models of teaching have been developed to help a teacher to improve his capacity to reach more children and create a richer and more diverse environment for them. He defined model of teaching as an instructional design, which describes the process of specifying and producing particular environmental situations, which cause the students to interact in such a way that a specific change occurs in their behaviour. He further put forward that a model of teaching serves useful purposes of providing in definite terms what the teacher has to do and has a comprehensive design of instruction with him through which he or she can achieve the objectives of the course; helps in the development of curriculum for different classes at different levels of education, specifying in detail the different types of instructional materials, which are to be used by the teacher to bring about desirable changes in the personality of the learners and helps the teaching-learning process and improves effectiveness of teaching. One of such models, according to him, is information processing model.

Information processing, according to Weil and Joyce (1978), means the way in which people, especially students and teachers, handle stimuli, organize data, sense problems and solve them. The authors stressed that the model of this category develop creativity and general intellectual ability of the learner. They emphasized the use of specific strategies or models within academic disciplines such as Health Education.

According to Chauhan (1979), information processor models have been evolved on the following assumptions: that teaching is the creation of appropriate environment; and that content, skill, instructional roles, social relationships, types of

activities, physical facilities and their use, all form an environmental system whose interact with each other to constrain the behaviour of all participants, teachers as well as students. He further stated that different combinations of these elements create different types of environments and elicit different outcomes, and the models of teaching create learning environment. They provide rough specification for environment in the classroom teaching-learning process.

The author also identified the characteristics of information processing models to include: scientific procedure which implies that teaching is not a haphazard combination of facts but on the other hand, it is a systematic procedure to modify the behaviour of learners; specification of learning outcome implying that all models of teaching specify the learning outcomes in detail on observable student's performance. What the student will perform, after completing an instructional sequence is specified in detail, and specification of environment, which implies that every model of teaching specifies in definite terms the environmental conditions under which a student's response would be observed. Other characteristics are: criterion performance, which implies that a model specifies the criteria of acceptable performance, which is expected from the students. The model of teaching delineates the behavioural outcomes, which the learner would demonstrate after completing specific instructional sequences, and specification of operations implying that all models of teaching specify mechanisms that provide for students' reaction and interact with the environment. One of such models that has the characteristics outlined above is the model that highlights the interaction between teacher and student is information processing during instruction, which was developed by Corno (1981) and named model of cognitive organizing in the classroom. Joyce and Weil (1972) noted that the focal information processing variable, cognitive organizing refers to parallel efforts by teachers and students of filter and transform mentally a variety of classroom information.

Solomon (1979), in the model described parallel processing activities for teachers and students that come together when teachers and students interact. The author posited that during instruction, teachers should carry out more or less information integration and elaboration, depending on their level of planning at the start of a lesson, and on the cognitive abilities of the students being taught. Students would be expected to engage in parallel cognitive organizing at somewhat lower level than the teachers to the extent that the information presented is not organized for them, the teacher demands such processing, or the student is actively accessing his or her own cognitive schemata to help learn the information presented, rather than accepting the categories and examples provided by the teachers.

In this model, there is a major emphasis placed on the interlace between what the teacher and the

instructional materials used are accomplishing for the student in the way of cognitive organizing, and on the cognitive organizing students must be made to carry out on their own. This is a design, which describes the process of specifying and producing particular environmental situations, which cause the students to interact in such a way that a specific change occurs in their behaviour. He further put forward that a model of teaching serves useful purposes of providing in definite terms what the teacher has to do and has a comprehensive design of instruction with him through which he or she can achieve the objectives of the course, helps in the development of curriculum for different classes at different levels of education, specifies in detail the different types of instructional materials which are to be used by the teacher to bring about desirable changes in the personality of the learners and helps the teaching-learning process and improves effectiveness of teaching. One of such models, according to him, is information processing model.

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Methodology

Research Design

In order to achieve the purpose of the study, the quasi-experimental research design was utilized for the study. Quasi-experimental research design according to Ali (1996) is a design that uses non-randomized group and this option according to him, occurs when the researcher cannot randomly sample and assign his subjects. Campbell and Stanley (1963) stated that quasi-experimental design is suitable for a study where from the onset, full experimental control is lacking. Ali (1990) also affirmed that one type of quasi-experimental design is the non-randomized pre-test design or non-equivalent design thus: Where, O_1 or O_3 stands for pre-test, O_2 or O_4 stands for post-test, x stands for treatment.

Population for the Study

The population for the study comprised all the students in all the fifteen secondary schools in Southern Ijaw Local Government Area of Bayelsa State. According to Bayelsa State Education Board (2009), there are 4,350 students (2,450) senior students. The boys are 1634 while girls are 187.

Sample and Sampling Technique

The sample for the study was 408 of senior secondary

school students in Southern Ijaw Local Government Area of Bayelsa State. It is $20/100 \times 2450 = 490$ subjects. This sample is 10 per cent higher than Nwana (1982) rule of the thumb which states that "when a population runs into few thousands, ten per cent or a fewer percentage of the population could be used. As regards the sampling technique purposive sampling was be used. Nworgu (2003) stated that, in purposive sampling, specific elements which satisfy some predetermined criteria are selected. Thus the sample that was used posses homogeneous characteristics as the parent population. Furthermore, the geography of the area which is riverine makes it possible that purposive sampling is used, and since it was difficult to move them at will because of transportation difficulties. More so, the subjects may also be having their regular academic activities. The sample selected is divided into two groups of 245 subjects per group for both the experimental and control groups. This gives room for equal number of male and female subjects.

Instruments for Data Collection

Two instruments: The Consumer Education Evaluation Instrument – CHEEI (See Appendix I) and the Consumer Health, Education Knowledge, and Attitude Questionnaire (CHEKABQ) was developed by the investigator. CHEEI consists of a twelve-item statements concerning the desirable qualities of the content of CHEP programme in which validators were required to rate the CHEP for its appropriateness or otherwise for use in teaching the students consumer health using the following criteria: Very Appropriate (VA), Appropriate (AP), Inappropriate (IA), and Very Inappropriate (VI) corresponding to their feelings of how well the contents of the programme will represent each of the objectives of the programme. Ezedum (1999) and Samuel (2000) found that this type of rating yielded good results in their studies.

The CHEKABQ Questionnaire was divided into four sections: A, B, C, and D. Section A contain two socio-demographic variables of class and gender. Section B contains ten items, which measured the consumer health knowledge made up of multiple type questions. Section C consisted of 15 items, which measured consumer health attitude of students. This section had four response options of strongly agree (SA), Agree (A), Disagree (DA) and Strongly Disagree (SD).

In order to achieve the purpose in National Health Education Curriculum for senior secondary school, published by Federal Ministry of Education-FME (2006), which was known as Consumer Health Education Programme (CHEP). This was used in teaching the students in the experimental group. On the other hand, the plan for the control group was taught by the health science teachers using the Consumer Health Education Programme without any input from the investigator. Students from both experimental and control group were given pre and post test before teaching to ascertain their level of consumer health knowledge, and attitude.

Method of Data Analysis

The data generated for the study is analyzed using the Statistical Package for Social Science (SPSS) on the computer. The steps taken are as follows: Research question 1 will be answered by using means to determine the appropriateness of the components that make up the CHEP. Research questions 2, 3 and 4 answered using mean scores and standard deviations. The criterion mean chosen for the study will be 2.50.

Results and Discussion

Results of Findings

Research Question One.

What is the level of CHEP on consumer health knowledge of students? Data answering this research question are contained in table 1.

Table 1: Effect of CHEP Students Level of Knowledge of Consumer Health

CHEP	N	X	SD	Decision
	408	60.76	27.699	High Level

Data in Table 1 indicate a mean score of 60.76 per cent which is more than 40 per cent. This shows that the knowledge of the students on consumer health was high.

Research Question Two

What is the effect of CHEP on consumer attitude of students? Data answering students attitude towards consumer health.

TABLE 2: Student's Attitude on Consumer Health (n = 408)

S/N	Question	X	SD	Decision
1	I prefer patronizing qualified health providers.	3.84	.496	Positive
2	Some ailments are better handled by traditional health care providers.	2.23	.918	Negative
3	I need to know how to get the best value for my money	3.59	.729	Positive
4	I do not bother about choosing nutritious foods	1.62	1.004	Negative
5	I like eating foods that are packaged in industries because all of them are hygienically prepared.	3.04	1.159	Positive
6	I like patronizing quacks because they can cure certain diseases or ailments that qualified medical practitioners cannot cure.	1.59	.979	Negative
7	All trained health providers are qualified to give advice on all health matters.	2.57	.969	Positive
8	It is not only your doctor or nurse that can give your advice on what health goods or services you consume.	2.90	1.074	Positive
9	It is a waste of time consulting consumer advocacy groups for solving my consumer health problems.	1.31	.819	Negative
	Overall X	2.52	0.905	

Table 2 shows an overall mean score of X = 2.52 in the attitude of students towards consumer health education matters, which is greater than the criterion mean of 2.50. This implies that the overall attitude of students was positive. The table further indicates

accept the items on "I do not bother about choosing nutritious food (X = 1.62) and "I like patronizing quacks because they can cure certain diseases or ailments that qualify medical practitioners cannot cure (X = 1.59), and it is waste of time consulting consumer advocacy groups for solving my problems (X = 1.31) all others had mean scores which were above the criterion mean of 2.50.

Research Question Three.

What is the mean difference in the attitudinal score of students in the experimental and control schools? Data answering this research question are contained in table 3

Table 3: Consumer health knowledge of students according to groups

Group	No	Pretest		Posttest	Mean
		\bar{X}	SD	\bar{X}	SD
Experimental	236	53.05	23.89	77.93	20.28
Control	172	66.05	35.22	43.02	16.09

Table 3 shows that the grand post test consumer health knowledge mean score of the students who not exposed to CHEP ($\bar{X} = 43.02$) was slightly less than their pretest consumer health knowledge mean score of students who were exposed to CHEP ($\bar{X} = 66.05$). The table 3 further shows that the pretest consumer health knowledge mean score of students exposed to CHEP ($\bar{X} = 77.93$) was higher than that of students not exposed to CHEP ($\bar{X} = 43.02$) representing 24.40 mean gain. The Table 3 further reveals that the grand mean score of students exposed to CHEP ($\bar{X} = 77.93$) was higher than of students in the pretest ($\bar{X} = 53.08$) in the experimental group. This represents 24.85 mean score difference.

Research question four

What is the difference in the consumer health attitude of students in the control and experimental schools using CHKABQ? Data answering this research question are contained in Table 4.

Table 5: Attitude of Students in Experimental and Control Groups.

S/N	Attitudinal Items	control ($n_1 = 202$)		experimental ($n_2 = 206$)	
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂
1	I prefer patronizing qualified health providers.	3.96	.207	3.73	.649
2	Some ailments are better handled by traditional health care providers.	1.75	.811	2.69	.764
3	I need to know how to get the best value for my money	3.96	.261	3.23	.852
4	I do not bother about choosing nutritious foods	1.24	.763	2.00	1.071
5	I like eating foods that are packaged in industries because all of them are hygienically prepared.	2.99	1.186	3.09	1.131
6	I like patronizing quacks because they can cure certain diseases or ailments that qualified medical practitioners cannot cure.	1.12	.441	2.06	1.129
7	All trained health providers are qualified to give advice on all health matters.	1.99	.338	3.15	1.037
8	It is not only your doctor or nurse that can give your advice on what health goods or services you consume.	3.60	.549	2.211	.017
9	It is a waste of time consulting consumer advocacy groups for solving my consumer health problems.	1.04	.320	1.571	.047
	Overall \bar{X} 2.52	2.30		2.63	

Table 4 shows the posttest mean attitudinal scores of students in experimental and control schools. The table further shows that the overall posttest mean score of students in experimental schools ($\bar{X} = 2.63$) was slightly higher than of the students in the control schools ($\bar{X} = 2.30$). The mean score of students in both is experimental schools was greater than the criterion mean of 2.50, indicating that the attitude was positive for this group.

Discussion of Findings

Knowledge of Students Regarding Consumer Health Education

The findings in table 1 and 4 revealed a very high level of knowledge of consumer health knowledge of students in Southern Ijaw LGA of Bayelsa state regarding all the dimensions of consumer health education programme. This finding was expected and therefore not surprising. This may be from the fact that mass media (TV, Radio and News papers) carry consumer health information and advertisement. Also, charlatans educate the masses on

their consumer health products. This finding agrees with the finding of Okafor (2006) whose respondents show average level of knowledge on consumer health knowledge. The finding also revealed that the students who were exposed to consumer health education programme had high knowledge than those who were not exposed to the programme. This finding is not surprising. It is similar to the finding of Okafor (2006) who also asserted that students should embark on consumer research for a better living. More so, the finding revealed that the female students have higher knowledge compared to the male students. This finding is expected because the female are the ones that go to market to purchase or buy consumer products. They are more exposed to consumer products than the male counterparts

Attitude of students towards consumer health education.

The finding in Tables 2 and 4 on attitude of students findings revealed positive attitude of the students towards consumer health education. This finding is expected because secondary school students are adolescents who by their nature and characteristics are poised for knowledge and also are exploratory. This finding is in line with the finding of Briggs (2007) who observed that one can have a positive attitude towards consumer health if one should learn to be a wise consumer. The finding also revealed that the males students have positive attitude contrary to the females negative attitude. This finding is surprising. This positive is because the females are supposed to have higher attitude since they are the ones who are usually concerned with the purchase of consumer health especially food products from the market. The males who do not go to markets often to buy food products are less likely to be concerned with the purchase consumer health products is likely to show positive attitude to the consumer health education programme. Furthermore, the students in the experimental group show whose had slightly higher positive attitude to consumer health education programme than the students in the control group. This finding is similar to the finding of Thompson, Ribera Wingen back and Vastal (2006) whiles revealed significant positive effect after a post-test on professional workshop on food irradiation.

Differences in the consumer health knowledge, and attitudes

The positive gain made in the consumer health knowledge, attitudes were not surprising because the investigator strongly that eight weeks of teaching consumer health education might have been sufficient to bring about positive change in these variables. This indeed was the very essence of CHEP. Given the fairly period of CHEP (a maximum of 8 weeks), it is not surprising that some changes in the consumer health knowledge attitudes were of moderate magnitude if CHEP was to continue, even stronger and gain in consumer knowledge, attitudes scores may have accrued with the experimental group.

Conclusions and Recommendations

Conclusions

Based on the findings of the study, the following conclusions were drawn.

1. Students overall level of consumer health knowledge was high while their attitudes was positive.
2. There was significant difference in the consumer health knowledge of students exposed to CHEP and those not exposed to CHEP
3. Male and female student differed in their consumer health knowledge
4. There was significant difference in the consumer health attitude and knowledge of student
5. Experimental and control groups differed in the consumer health knowledge, attitude.

Recommendations

Based on the findings of the present student, discussion and conclusions, the following recommendations are made:-

- Federal and state, non-governmental organizations and schools management board should sponsor CHEP not only in schools but also in the community. Both students and members of the community should be made to participate in the programme so that negative attitude can be altered.
- After CHEP had been successfully concluded and positive consumer health and attitudes, there is need for health educators to always make follow-up to ascertain whether these behaviours are actually put into practice and sustained by the participants.
- The positive effects of CHEP in the improvement of consumer health knowledge and attitude should be used as a weapon by health educators to convince the federal, state and local government and non-governmental agencies to see the need for sponsoring CHEP projects in school and community settings and workplace. This would go a long way in enhancing positive consumer health change.
- All health educators should be proud of their area of specialty and teach in schools with joy to achieve the goal of health education which is to prevent, promote and protect the health of our future leaders (school students) and even every individual and the nation at large.
- Health science should be taught in schools by teachers who are trained for it (Health educators).

References

- Ajezen, N. (1999). "Consumer Reaction to Canned Sterilized whole Milk and Products". *Journal of Dairy Science* 52 (8), 1334 – 1339.
- Ali, A. (1990). Approaches to education research: Analysis criticisms, and relevance. *Perspective in Education Research and National Development* Vol. 1. Onitsha.

- Ali, A. (1996). *Fundamentals of research in education*. Awka: Mwka: Meks Publishers (Nigeria).
- Arukwu, C. (1989). *Consumer Laws and Activities*. Hillary Press Lagos.
- Backman, P. (1983). *Comparative Shopping of Goods and Services*. Presthon Press India.
- Balaji, A. (2006). *Social foundation of thought and action*. A social cognitive theory. Eaglewood cliffs, New Jersey: Practice-Hall.
- Bandura, A. (1975). *Social learning theory*. Englewood cliffs, New Jersey: Prentice-hall.
- Barret & Jarvis (2005). Assessment of health knowledge of primary school pupils in Kaduna State, Nigeria. *Nigerian School Health Journal* 15. (1 and 2).
- Bayelsa State Education Board (2007). *Perspective in Education Research and National Development* Vol. 1.
- Briggs, L. (2004). *Health Professionals Activities*. Okon Press Calabar.
- Briggs, L. (2007). *Building Consumer Skills*. Okon Press Calabar.
- Bronson, L. (1990). *Health Related Product and Services*: Lagos, Macmalian Press.
- Burbwa, S. N. (2008). *Food consumption beliefs, attitude and practices among youths in Kastina-Ala Local Government Area of Benue State*. Unpublished M.Ed. Project, UNN.
- Burke, Wayne, Oliver and Robertson (1988). Consumer evaluation of references price and advertisement. Adesuna Press Lagos.
- Cambridge International Dictionary of English Language 1996. *International Conference in Nutrition Education*. N. E. (Oxford) 10 (2) 67-74.
- Capbell, D. T. & Stanley, J. C. Experimental and quasi experimental designs for researchers. London: McNacky and Company.
- Carroll and Miller (1991). *Quackery on Consumers Services* Gbade Press Lagos.
- Chauhan W. (1979). *Models of Teaching in Education* Both Press Ivory Cost.
- Comforth, M. (2004). *Dialectical materialism: An Introduction*. London: Lawrence and Wishant Ltd.
- Consumer Education and Protection council of Nigeria 2000.
- Darke, et. al. (2006). *Defensive consumer* Mosuon Press Lagos.
- Donatelle, R. J., Davis, L. G. and Hoover, C. F. (1991). *Access to health*. New Jersey: Prentice-Hall Eaglewood Cliffs.
- Dowell, L. J. (1969). The relationship between knowledge and practice. *Journal of Education Research* 62 (5), 201-205.
- Eno-Obong, H. N. (2001). *Eating right: A nutrition guide*. Calabar: University of Calabar Press.
- Ethum Babalola and Erhum, (2001). *Quack and Counterfeiting Practices*. Ede Press. Ogon State.
- Ezedum, C. E., Onyedika, O. I. & Eze, B. U. (2002). Reproductive health knowledge of in-school adolescents in Udo Local Government Area, Enugu State, *Journal of Health education and Sport Science* (JOHESS).
- Federal Ministry of Education (1985). *Secondary School health science curriculum*. Lagos: The Author.
- Federal Ministry of Education (2008). *Secondary School health science curriculum*. Lagos: The Author.
- Federal Trade Commission FTC (1983). *Secondary School health science curriculum*. Lagos: The Author.
- Federal Trade Commission FTC (2006). *Secondary School health science curriculum*. Lagos: The Author.
- Fulune, O. (2001). *Deceptive Barging Advertisement* Sula Press Lagos.
- Galli, N. (1978). *Foundation and Principles of health education*. New York: John Willey and Sons, Inc.
- Gordian, V. (1980). *Consumers Health Education in developing society*. USA Housbon Press.
- Gosby, (2002). *Consumers Beliefs and Norm in the Society*. Ibadan Adeyami Press
- Grazioli and Jarvenpa (2000). *Consumers evaluation* Motin Press. Adisababa
- Green, L. W., Kreuter, M. W., Deeds, S. G. & Patridge (1980). *Health Education Planning: a Diagnostic Approach*. Palo AHO, California: Mayfied Publishing Company.
- Hahn, D. B. & Payne, W. A. (1997). *Focus on health*. Boston WCB McGraw-Hill.
- Hobson, W. (1996). Preparation for health education *Health Education Journal* 16 (1), 24-34.
- Hornby, A. S. (2006). *Oxford Advanced Learner's Dictionary of Current English*. Oxford: Oxford University Press.
- Hosokawa, M. C., Roberts, and Hansen P. I. (1980). *Health Education rural Missouri. Phase 11. Health Education* 15 (2), 30-31.
- Hosokwawa, M. C., Roberts, C. R. & Hansen, P. I. (1980). *Health education in rural Missouri. Phase II Health Education* 15 (12), 31-36.
- Igbanugo, V. C. and Onibokun, J. A. (1993). Incidence of drug use among senior secondary school children of medium and high social-economic status. *Nigerian School Health Journal*, 8 (1) 96.
- Insel, P. M., & Roth, W. T. (2004). *Core concepts in health* (9th ed.). New York: McGraw Hill Higher Education.
- International Market and Consumer Protection (2006). Consumer reaction to canned sterilized whole milk and products. *Journal of Dairy Science* 52 (8), 1334-1339.
- International Organization of Consumer Unions (2006). Critical awareness, practices and services on consumerism. *Health Education Research Journal* 24 (8) 41-73.
- Jaycee B. (2008). *Community Nursing Practice for Tropics*: India Gondi Press.
- Joyce & Weil (1972). *Class Room Information*. Johnson Press. Gambia
- Kessler, D. A. (1994). Addictive nature of nicotine Tabaccor. Alert, Geneva. WHO.

- Korzier, B., Erb, G., & Olivieri, R. (1991). *Fundamentals of nursing: Concepts, process and practice* (14th ed.). California: Addison Wesley Publishers.
- Korzierlerb and Olivieri (1991), Consumer reaction to canned sterilized whole milk and products. *Journal of Dairy Science* 52 (8), 1334–1339.
- Kosikowski, F. V., Ajezen N. (1991). Consumer reaction to canned sterilized whole milk and products. *Journal of Dairy Science* 52 (8), 1334–1339.
- Martins Y. (1990). *Deceptive Consumer Services*. Yellow Press. Port Harcourt
- Merki, M. B. (1990). Discussion for teen health. Illinois. Glencoe/Mamillan/McGraw-Hill.
- Moghbaddam, F. M. (1998). *Social psychology: Exploring Universal across culture*. New York: W. H. Freeman and Company.
- Moxley C. O. & Wimberly C. C. (1982). *Nutrition for health and health care*. New York: West Publishing Company.
- Murdary, J. W. (1983). *Interpersonal relationships for health professionals: A social skills approach*. New York: Macmillan Company.
- National Agency Food and Drug Administration Commission (2003).
- New York Times (2003). Performing Medical Treatment. *Journal of Nigeria International Council of Health, Physical Education, Recreation Sports and Dance (ICHPER-SD)* XLII (4), 6-9.
- Nnayelugo C. and Okeke U. (1987). *Food and Nutrition intake of college students*. Unpublished M.Sc. UNN.
- Noar G. O. & Zimmerman P. N. (2005). *Measurement and Evaluation in Education*. Bauchi: Usman Printing Press Ltd.
- Nwana, O. C. (1982). *Introduction of education research for student teachers*. Ibadan: Heineman Educational Books Limited.
- Nwimo, I. O. (2006). Reproductive Health Knowledge of Secondary School Students in Enugu State, *Journal of Nigeria International Council of Health, Physical Education, Recreation Sports and Dance (ICHPER-SD)* XLII (4), 6-9.
- Nworgu, B. (2006). *Introduction to measurement and evaluation for students*. Ibadan: Obi Printing Press.
- O'Dea, J. A. (2001). Consumption of nutritional Supplements among adolescents: Usage and perceived benefits, *Health Education Research Journal*, 18, (1) 98–107.
- O'Dea, J. A., & Caputi, P. (2001). Association between socio-economic status, weight, age and gender, and the body image and weight control practices of 6 – to 19 – year old children and adolescents. *Health Education Research* 16, (5), 521–532.
- O'Donnell, M. P. & Harris, J. A. (1994). *Health promotion in the work place* (2nd ed.). New York: Delma Press.
- Odoem, B. (1988). *Consumer Protection Acts and Decrees* Musa Press. Musi Lagos.
- Ogbazi, G. N. & Okpala J. (1994). Writing research report; Guide for researchers in education, the social sciences, and the humanities. Enugu: Time Press Ltd.
- Ogbuji, C. N. (2003). The characteristics, needs and health problems of the school child in C. E. Ezedum (eds). *School Health Education*. Nsukka: topmost Printing Press.
- Okafor, R. U. (1997). Sexual knowledge and sources of sexual information of secondary school students in Anambra State, *Nigerian Health and Movement Education Journal*, 1 (1), 9 – 19.
- Okafor, R. U. (2006). *The health educations action points on the Nri Igbo food myths and taboos*. A paper presented at the annual national conference of the Nigerian school health association at Rivers State COE Port-Harcourt, 27–30, October 2004.
- Okoro, C. I. (2001). *Nutrition knowledge, practices and nutrient intakes of low income families in Owerri Urban in Imo State*. Unpublished M.Ed. Thesis, University of Nigeria, Nsukka. Enugu State.
- Omoregbe, J. (1998). *Epistemology of Knowledge: A systematic and historical study*. Lagos: Joja Press Ltd.
- Onyibe O. (1993). *Quackery in Agriculture* Musa Press: Kano.
- Owie, I. (2003). Health education base theories and models. *Nigerian Journal of Health Education* 11 (1), 15–37.
- Payne, W. & Hahn, D. B. (1990). *Understanding your health*. Toronto: Mosby College Publishers.
- Payne, W. A. & Hahn, D. B. (1999). *Understanding your health*. St. Louis: time Mirror College Publishing.
- Prendergast, C. Chuem A. and LanW. (2002). *Understating Consumer Demands* Hong Press. Hong Kong. China.
- Prochaska, J. O., & Diclemente, C. C. (1984). Self-changing processes, self sufficiency and decisional balance across five stages of smoking cessation. In P. Engstrom, P. Anderson, & L. E. Morteson (eds). *Advances in Cancer Control Epidemiology and Research*. New York: Liss.
- Robinson, M. (2005). *Chambers 21st century dictionary*. New-Delhi: Allied Chambers (India) Ltd.
- Rosenstock, P. (1990). *Health Belief Models* Toasting Press USA.
- Roth M. (2005). *Health Communiersm in five Sections* Landy Press. New York.
- Samuel, E. S. & Enenta, C. B. (2002). Preventive mental hygiene practices of secondary school students in Nsukka Local Government Area of Enugu State. *Journal of Health Education and Sports* 3 (1), 8–17.
- Samuel, E. S. (2000). Development and evaluation of teaching guide on food and nutrition for secondary schools in Enugu State. *Unpublished Ph.D. Thesis*, University of Nigeria, Nsukka.
- Samuel, E. S. (2003). Effect of teaching and guide on in-school adolescent's nutritional knowledge. *The Educational Psychologist* 1 (1), 1–12.

- Samuel, E. S. (2003). Level of Nutritional Knowledge and Sources of information of secondary school students in Kabba-Bunu Local Government Area *Journal of Health and Kinesiology* 4 (1), 78–91.
- Samuel, E. S. and Nfor, K. (2006). Gender differentials in the knowledge attitude of in-school adolescents in Jalingo Local Government Area of Nigeria, *Journal of Health Promotion* 2(1), 143–155.
- Samuel, S. O., (1977). Patterns of drug abuse among youths in Kwara State, Nigeria: Implications for counseling. *Health and Movement Education Journal*, 1 (1), 45–52.
- Sizer-Webb, F., Whitney, E. N., and Debruyne, L. K., (1999). *Health Making life choices: Teacher's edition*, Cancinnati: West Education Publishing.
- Sizer-Webb, F; Whitney, E. N. & Debruyne, L. K. (1998). *Health: Making choices*. New York: West Publishing Company.
- Solomon, J. K. (1979). The model describes parallel processing activities for teachers and students. Uyo Akwa Ibom State.
- Tedesco B. and Holloway C. (2005). *Deceptive Health Promotion*. Buron Press. Ghana.
- The New International Websters Pocket Dictionary of the English Language 2006.
- Thompson, O. P. Ribera J. K. & Miniard, W. N. (1982). *Family and Consumer Science teachers changes in attitude and knowledge*. Lagos, Unilag Printing Press.
- Udoh, C. K. O. (1980). *Nutrition*. London: The Macmillan Press Limited.
- Ukpore, B. A. (1996). Effects of consumer education instruction on consumer economic competencies achievement of secondary school students. Ph.D Thesis Delta State University, Abraka.
- Ukpore, B. A. (2006). Effects of consumer education instruction on consumer economic competencies achievement of secondary school students. Ph.D Thesis Delta State University, Abraka.
- WHO/UNFPA/UNICEF (1989). *The reproductive health of adolescents: A strategy for action*. Geneva: WHO.
- Williams, U. (1982). *Consumer Education Life Long Experience*: Lagos. Macmillan Press.
- World Health Organization (1990). Treatment and prevention of acute diarrhoea. Guidelines for the trainer of health workers in Geneva.