ASSESSMENT OF EXTRINSIC AND INTRINSIC MOTIVATIONAL FACTORS INFLUENCING SCIENCE TEACHERS TO ATTRITION AND RETENTION IN PUBLIC SECONDARY SCHOOLS IN MINNA METROPOLIS, NIGER STATE

BY

HARUNA, Haruna Aku
MTech/SSTE/2017/7597

DEPARTMENT OF SCIENCE EDUCATION
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

DECEMBER, 2021

ASSESSMENT OF EXTRINSIC AND INTRINSIC MOTIVATIONAL FACTORS INFLUENCING SCIENCE TEACHERS TO ATTRITION AND RETENTION IN PUBLIC SECONDARY SCHOOLS IN MINNA METROPOLIS, NIGER STATE

BY

HARUNA, Haruna Aku
MTech/SSTE/2017/7597

A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF TECHNOLOGY IN SCIENCE EDUCATION (MATHEMATICS EDUCATION)

ABSTRACT

The study examined the assessment of extrinsic and intrinsic motivational factors influencing science teachers to attrition and retention in public secondary school in Minna metropolis Niger state. Descriptive survey design was employed and a total of 132 out of 1320 science teachers in Minna metropolis Niger state constituted the sample. Five research questions and two null hypotheses guided the study and a 40 items questionnaire was used as instrument for data collection. The questionnaire was validated by science education experts from Federal University of Technology Minna. Pilot test was carried out and a reliability coefficient of 0.74 was obtained using Cronbach alpha for the sections in the questionnaire. Data collected from the administration of the research instrument were analysed using descriptive statistic of Mean and Standard Deviations for research questions and inferential statistics of ANOVA for research hypotheses. The findings show among others that teacher attrition takes place for a number of reasons which include; low social recognition for teachers and lack of opportunities for professional development among others. Based on the findings, it was recommended that government should intensify programmes for teachers' development and capacity building. The society in general and employers of teachers in particular should do all that is needed to accord the teaching profession its rightful pride of place among professions.

TABLE OF CONTENTS

Content	Page

CHAPTER ONE

APPENDICES 76

LIST OF TABLES

CHAPTER ONE

1.0   **INTRODUCTION**

1.1   Background to the Study

Globally, education is regarded as a veritable instrument for the achievements of national goals. It involves the development of human behaviours through the process of teaching and learning. Condy (2012) views education as the total development of the individual through acceptable methods and techniques according to the ability and interest to meet up with the needs of the society, by contributing meaningfully and equally for the enhancement of the society. Education is the key to the development of individuals and national potential and all kinds of rights and powers (Krieg, 2014).

Flowers (2013), opined that education is the light, without which, the whole world would be in darkness. It is the basis of scientific and technological breakthroughs and the basis of modernity, which have made all nations of the world accord immense priority to it, even though, the levels of priority range from one country to another. The success of an educational enterprise particularly, in terms of quality, depends to a very large extent, on the regular supply of teachers in adequate quantity and quality. The Federal Republic of Nigeria (2016), asserts that no nation can achieve economic, social and technological progress and self – sufficiency without a good system of education to sustain its achievement. The strength and level of development of any country lies on the development of her human resources, therefore education is the bedrock of all human sectors. It is the instrument for change and modernization; this possibly makes the truth saying that no

nation can rise above the quality of education it received. However, what makes a good system of education depends on the quality of human resources available in the system.

According to Ibukun (2014), the quality of human resources in form of teachers, often dictates the extent of the effectiveness and attainment of educational outcome. In order to achieve any socio-political, economic and scientific development in a country, there is the dire need for qualified teachers who are equipped with the desired knowledge, skills, competence and commitment, and who are empowered to perform their tasks professionally. The National Policy on Education gave credence to this, when it asserted that, no educational system can rise above the quality of its teachers. Hence, there is the need to always appraise the nation's system of teacher education with a view to ensuring adequate supply of quality of teachers, in the right mix, to man the various levels of the educational system in the country.

Teacher plays pivotal roles in the development of any nation. No nation can successfully develop manpower base without the efforts of teachers. Teachers are the trainers of other professionals, needed for economic, technological, political, cultural, and social development of a nation. Specifically, they train the engineers, architects, quantity surveyors, who in turn help in ensuring the quality of infrastructure; the lawyers, judges, managers, who help to maintain law and order, as well as peace; the bankers, business administrators, insurance experts, who help to develop the economy; and the doctors, pharmacists nurses, just to mention a few, who in one way or the other help to protect the life of the citizens. Teacher also helps in promoting values in the society, maintain

discipline among pupils or students in schools, the values, which are transferable to the same society (Samuel, 2019).

According to Marshal (2012), the quality of teaching is gradually deteriorating all over the world which shows that the skills of teaching have greatly declined due to inadequate preparations on the part of the teachers and the stagnant compensation scheme by the educational institution management. This condition in the recent years for the teachers has led to inadequate compensation structure and very few growth opportunities. The role of employees in organizational (educational) success is disputable and teachers "both in-role and extra-role" are critical for effective functioning of schools. Traditional approaches in educating teachers are criticized for disconnecting from the reality.

To tackle such situation, Farrell and Oliveira (2013) pointed out that it is essential for teachers to develop the skills and knowledge (pedagogy and proficiency), and promote their thinking and reflection skills on their teaching. Moreover, teachers would also need to develop their professional identity and position themselves well in the career. Although there is no systematic body of knowledge that determine what comprehensive teacher education programmes should be. Teacher preparation programmes need to be responsive to the expectations, needs and practices of student teachers. It is therefore necessary to ascertain these conditions of service that influence the satisfaction of teachers. A successful school also rest on its team of committed and productive teachers working with it. The skills of a teacher are therefore the key human capital to operate the school efficiently and have to be retained for the development of the organization. Moreover, when skilled teachers leave a school, they can take a lot of know-how with them (Tuner 2013).

Teacher's attrition is particularly damaging in subjects such as Mathematics and Sciences where there are shortage of teachers because school leaders generally have to expend more effort and resources to find a suitable replacement. Where none are available, investigation shows that school leaders tend to lower recruitment standards, make increased use of temporary teachers or increase class sizes, all of which have been linked to reduce pupil attainment (Adams, 2012). Working conditions are among the most important extrinsic determinants of teacher retention and are arguably highly amenable to change by policy makers and school leaders. In particular, existing research consistently identifies the quality of leadership and the extent of collaborative teamwork between teachers as the most important features of school working environment. There are a number of reasons to think that Science teachers' patterns of entry and exit from the profession are distinctive from other teachers. First, leaving rates are higher for science teachers even when compared with similar teachers (Ingersoll, 2012).

Over the years there has been substantial evidence to suggest that among all school resources, well-prepared, expert, and experienced teachers are among the most important determinants of student achievement. Studies at the state, local and individual level instituted that teachers' experience, as well as their academic background, preparation for teaching, and certification status, matters for teachers' effectiveness. It is with these strong evidences about how much teacher effectiveness matters to student achievement, the No Child Left Behind Act requires that highly qualified teachers staff all schools (Darling-Hammond and Youngs, 2010). Underpaid teachers are typically underprepared and not supported as they confront lower levels of resources, poorer working conditions, and the stresses of working with students and families who have a wide range of needs. Beginning

teachers are particularly vulnerable to attrition because they are more likely to be assigned to low-performing students. Despite the added challenges that come with teaching students with higher needs, most beginners (teachers) are given no professional support, feedback, or demonstration of what it takes to help their students succeed. The result is that new teachers are the most at risk of leaving the teaching profession (Ingersoll, 2012).

According to Tuchman (2013), attrition is due neither to teacher shortages nor to growing student enrollments or increasing teacher retirements. The chronic demand for new teachers is largely due to teacher turnover: teachers moving from or leaving their teaching jobs. Retaining teachers is the greatest challenge facing schools today (Alliance for Excellent Education, 2012).To attract high-quality teachers (i.e., those who are well prepared, experienced, and accomplished), suggests that schools must match their retention efforts to the characteristics and motivations of the teachers and teaching candidates they hope to attract. For example, one highly qualified, board-certified teacher provided some insight when he asserted that the following conditions would have to be met before he would even consider working in a high-needs school. When teachers cite reasons for leaving their job, most involve non-salary-related dissatisfaction, teachers most frequently cite excessive workloads and high-stakes testing, disruptive student behavior, poor leadership and administration within schools, and views of teaching as a temporary profession. Most strategies identified in the research as cost effective and influential in convincing teachers to remain relate to improving teachers' work environment and providing professional development (Wilson *et al.,* 2015).

These high attrition rates mean students incessantly face inexperienced teachers and that schools face the higher economic costs of periodically hiring and training of new teachers. High turnover rates also disrupt the team-based, organizational structure and functioning of a school as well as interrupting the planning and implementation of a coherent, comprehensive, and unified curriculum (Guarino *et al.,* 2014).The advantages of having highly qualified science teachers are clear but it is not so clear what attracts and keeps highly qualified teaching staff and what drives them out of schools and the profession. The burning questions challenging educators from the federal to the local level today are:

a.   What will increase the power of the teaching profession to recruit and retain well-prepared, experienced, accomplished, high-quality teachers?

b.   What will create a stable, expert teaching force in all kinds of schools and districts?

Where teachers that are leaving a school are quitting the profession entirely, this causes additional damage to pupils/students' attainment at the systemic level. Teachers quickly become more effective, in terms of their ability to improve attainment, during their first few years on the job (Reeves, 2014). Performance of teachers mainly depend on the teacher's characteristic such as knowledge base, sense of responsibilities and inquisitiveness which are intrinsic; the student characteristics such as opportunity to learn and academic work, the learning aspect such as involvement and success and the classroom phenomena such as environment and climate. The requirement that schools staff all classrooms with "highly qualified teachers" has created challenges for many schools, particularly those in inner city and poor rural areas (Sanchez 2017).

While money does "sweeten the offer," both novice and experienced teachers are attracted primarily to principals who are good instructional leaders, to like-minded colleagues who are committed to the same goals, to teaching conditions and readily available, relevant instructional materials, and to learning supports that enable them to be effective (Darling-Hammond and Youngs, 2010). Building a professional teacher corps is a process that only begins with recruiting highly qualified teachers. Once recruited, these teachers need professional development, coaching, mentoring, and other supports to develop a strong sense of their own efficacy based on high-quality teaching skills and experience. Ultimately, with these types of supports, teachers become highly effective at producing high-quality, student learning and fostering high student achievement. When school leaders and policymakers understand the reasons for teacher attrition, they develop policies that stem attrition through better preparation, assignment, working conditions, and mentor support: all of which contributes toward the goal of ensuring qualified teachers for all students (Darling-Hammond and Youngs, 2010).

According to Peck (2012), Schools can enhance the beneficial effects of strong initial preparation with strong mentoring and induction programs during the first years of teaching. A number of studies have found that well-designed mentoring programs improve retention rates for new teachers. They also improve teachers' attitudes, feelings of worth, and instructional skills. Providing expert mentors with release time to coach beginning teachers reduced attrition by more than two thirds.

Retention increases when effective principals are actively involved in teacher induction, providing "professional socialization" in the form of frequent discussion, monitoring, and

feedback. In schools where there is a climate that sets high expectations for student learning combined with the belief that all students can learn, beginning teacher's express loyalty to, and the intention to stay, in a particular school because the mission, vision, and values of the school culture match their own. Good teachers are strongly attracted to school systems that focus on finding, keeping, and supporting good teachers (Spinella, 2013).

Effective teachers want to work in environments that support and appreciate them. They are sustained and nourished by other good teachers who become their trusted colleagues, coaches, and mentors and who share a commitment to creating a good learning environment for their students. Effective leaders attract effective teachers and together they create a great school environment where their teaching and learning can flourish (Darling-Hammond and Youngs, 2010).

Higher salaries may be necessary as an extrinsic factor, but may not be sufficient to attract and retain high-quality teachers, especially in rural schools. Strong administrative leadership in teacher support would, at the very least, lower class loads and increase curricular resources, but would especially provide opportunities. The shortages of teacher in Nigeria continue to be a high-level profile of scrutiny in subjects like Sciences as categorized by the teachers training agency either as priority or shortage. After the home, the school is the most important place for students to learn and develop their educational and social competencies. Teacher's play pivotal roles providing education to their students. Only highly qualified and committed teachers, especially teaching staff can produce effective results by producing good quality of students who will contribute meaningful in the nearest future. (Warren 2015). On that, teachers are the ones charged or saddled with

the responsibilities of achieving effective teaching that would result to a better performance of students in both external and internal examinations in Nigeria. It has been pragmatic that among the factors that influence the performance of students in Sciences in schools are retaining good teachers and consistently recruiting qualified ones to replace old and retiring staff of the educational system. This is informed by fact that the younger teachers are lured to new opportunities by higher salaries and greater responsibilities based on attractions, bonuses and other special gift which the teaching profession hardly or inadequately offers to the teachers on board (Olson, 2012)

1.2   Statement of the Research Problem

The issue of teacher shortage has been a topical and recurring problem in Nigeria. It has been noticed that the number of available teachers in schools is far below the needed capacity for effective teaching. Teachers Registration Council of Nigeria in 2018 indicated that, 250,000 teachers must be available in Nigeria annually, to tackle the acute shortage of teachers at the basic and secondary levels. The problem of acute shortage of teachers is being worsened by teacher attrition. There has been high-level teacher attrition in secondary schools in Nigeria. Teacher attrition not only undermines the achievement of school objective, it also constitutes wastage of resources, occasioned by leaving costs, costs of replacement, training cost of replacements, and indirect cost of down time needed for new teachers to gain proficiency (Ibukun,2014). Even though there are studies on teacher attrition and retention, those factors influencing it from deeper perspective, are few in literature, in spite of the negative effects of the menace in schools and the educational system generally. In the light of this shortcoming, this study is poised to add to the volume of researches on the assessment of extrinsic and intrinsic motivational factors among

science teachers to attrition and retention in public secondary schools in Minna metropolis, Niger state.

1.3   Aim and Objectives of the Study

The aim of the study is to examine the assessment of extrinsic and intrinsic motivational factors among Science teachers to attrition and retention in public secondary schools in Minna metropolis, Niger state.

Specifically, other objectives of the study are:

1.   Determine the extrinsic determinant to attrition among Science teachers in Public Secondary Schools in Minna metropolis, Niger State.

2.   Determine the intrinsic determinant to attrition among Science teachers in Public Secondary Schools in Minna metropolis, Niger State.

3.   Find out the extrinsic determinant to the retention of Science teachers amongst Public Secondary Schools in Minna metropolis, Niger State.

4.   Find out the intrinsic determinant to the retention of Science teachers amongst Public Secondary Schools in Minna metropolis, Niger State.

5.   Examine the dimension of Science teacher's attrition in Minna metropolis, Niger State.

6.   Find out possible strategies of improving science teacher's retention in public secondary schools in Minna metropolis, Niger state.

1.4 Research Questions

The following research questions were used to guide the study:

1. What are the extrinsic determinants of Science teachers to attrition in public secondary school in Minna metropolis, Niger state?

2. What are the intrinsic determinants of science teachers to attrition in public secondary school in Minna metropolis, Niger state?

3. What are the extrinsic determinants of science teachers to retention in public secondary school in Minna metropolis, Niger state?

4. What are the intrinsic determinants of science teachers to retention in public secondary school in Minna metropolis, Niger state?

5. What is the dimension of Science teacher's attrition in Minna metropolis, Niger State?

6. What are the strategies of improving science teacher's retention in public secondary schools in Minna metropolis, Niger state?

1.5 Null Hypotheses

The following null hypotheses were formulated and tested at 0.05 level of significance

H_{O1}: There is no significant difference between the influence of intrinsic and extrinsic determinants of science teacher to attrition in public secondary schools in Minna metropolis, Niger state.

H_{O2}: There is no significant difference between the influence of intrinsic and extrinsic determinants of science teacher to retention in public secondary schools in Minna metropolis, Niger state.

1.6   Significance of the Study

The findings of this study would be useful to stakeholders in educational such as teachers, school administrators, curriculum planners, researchers and scholars, and the government.

To the science teachers, findings of this study would be beneficial to them, it guides them in selecting appropriate approaches that would reduce attrition and improve retention in public secondary school and hence, improve the quality of science teaching and learning. This would be possible because the findings of this study encourage the government to subject the science teachers to effective training and retraining programs.

School administrators, would benefit from suggestions on how to improve teaching and learning environment for science teachers to enhance better curriculum implementation in Mathematics. Teacher continuous career developments would also be encouraged by the school administrators hence; their ability to create an environment for retention would be improved.

To the curriculum planners, findings of this study would help identify some grey areas of the curriculum that would address science teacher attrition and possible strategies to retention while planning the curriculum.

The study would also benefit researchers and scholars who are interested in developing further studies on the subject matter. Therefore, to the government, the findings of this study is expected to motivate officials and gear them towards providing resources that will enable teachers to particularly stay in the job and further commit themselves towards developing the school in order to yield results and impact knowledge positively to the students.

1.6   Scope of the Study

This study was carried out in Minna Metropolis of Niger State which is located in the north central Nigeria. The study was limited to secondary school's science teachers in both Bosso and Chanchanga Local Government Area of Niger State. It focuses on secondary school science teachers' assessment to extrinsic and intrinsic motivational factors on attrition and retention. The study was restricted to the use of questionnaire with duration of four weeks.

1.8   Operational Definition of Terms

The following are operational definitions of terms used in this study.

Discipline Referrals: refer to written documentation by an educator, reporting inappropriate student behaviours.

Extrinsic factors: refers to external motivational factors that gears science teachers to teach in public schools.

Gender: refer to the male and female science teacher.

Intrinsic Factors: refers to science teachers having desire to teach, such as the joy of teaching and working with young people.

Perspective: refer to the teacher's point of view derived from experiences and knowledge.

Principal Behaviours: refers actions or attitudes displayed by the school principal during interaction with teachers, students, and other members of the school body.

Relationships with Colleagues: The interactions and associations between teachers in the school building.

Retention: Remaining in the profession. The term can also refer to returning to the same position in a different school or district.

Salary: The monetary amount a teacher earns for performing the duties of the job.

School Climate / location: The environment created by the organization and influenced by internal and external factors.

Teacher Attrition: Attrition rate is defined as the number of teachers who leave the profession or transfer to another system from the beginning of the school year to the beginning of the next school year, excluding retirement.

Teacher Preparation: The education and training received by the teacher to enable success in the classroom prior to entering the teaching profession.

Teacher Responsibilities: The duties that have been assigned to a teacher to perform as requirements of the job.

Years of Teaching: The amount of time an educator has spent in the teaching field.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Conceptual Framework

2.1.1 Teachers attrition

Teachers are the basic ingredients in the educational advancement of any nation, so the education system must be responsible and responsive enough to ensure the recruitment, training and retention of adequate, skilled and high performing teachers for the nation's educational goals to be achieved. However, teacher attrition especially at the secondary school level in public schools has become a major challenge to achieving the educational goals. Teacher attrition, also referred to as teacher turnover, is a phenomenon that is characterized by teachers leaving work in the classroom to take up and pursue other professional responsibilities inside or outside the educational system (Ibukun,2014). It is the educational sector labour mobility by which, among other reasons, teachers seek professional 'greener pastures' which in turn leaves the school bereft of much needed teaching staff. In other words, attrition could be the number of employees quitting their jobs which includes both voluntary and involuntary separation. The problem of attrition is insurmountable whether in the education sector or any other profession, some attrition is inevitable. This is because, some teachers will retire, some others will quit for reasons that are personal, and some others will be dismissed from their jobs whilst some others are encouraged to leave the profession (Warren, 2015).

Balogun (2013) described teacher attrition as a major problem facing recruitment and retaining of teachers in the Nigerian educational system. Adverse teacher mobility represents educational capital wastage, especially when teachers leave the classroom to pursue careers outside the educational system. Human capital acquired through training and experience in the job is lost when teachers leave the profession. Teacher attrition is costly because the government is forced to spend huge amounts of funds to recruit and induct new teachers as replacements; while at the same time school principals still scramble each year to fill vacant positions left by both retiring and departing teachers.

According to Warren (2015), high teacher turnover restricts children to low-quality education and gives rise to unequal distribution of teachers. He further observed that teacher attrition is highest among newly employed teachers posted to the rural areas with few amenities, facilities and experienced teachers to mentor them. He reported that 20% of teachers leave the profession within the first five years. Economically, teacher attrition is costly. High teacher attrition forces the government, as well as proprietors of private schools, to expend school resources, more often than necessary, to recruit, hire and induct new teachers. It is not uncommon to observe principals of public schools making regular visits to educational boards to request for teachers to fill vacant teacher positions, especially in core subject areas such as Mathematics and the Science subjects.

The teaching profession has the highest attrition rate of all professions. The introduction of educational programmes such as Universal Basic Education has brought about a large increase in enrolment at the primary and secondary levels of education, without a corresponding increase in teaching strength of schools. Teachers continue to retire, while

others move to other jobs outside the education system for a variety of reasons. It becomes expedient to investigate the causes of teacher attrition. Teaching is often referred to as a noble profession but most people's assessment of the monetary and non-monetary benefits in the profession vis-à-vis other professions compel prospective teachers to seek alternative careers and teachers to leave the profession. This state of affair is worrisome and calls for urgent solution. Attrition is the steady decrease in membership of an organization by way of retirement, resignation or death (Peck, 2012).

Under each presidential term, there has been educational reform that does not last long enough to examine the effectiveness of the reform. The government develops strategies and policies to make Nigeria a leading nation in the education world. The reforms did not work due to lack of collaboration with the people who make the greatest impact on educational success, teachers. Additionally, the reforms have made the teaching profession more undesirable, causing a high teacher attrition rate. Teachers do not leave because they cannot handle the obstacles that come along with interacting and teaching children. They only leave due to the overload and displeasure shown towards them by leadership on the system. Another side of this issue is the influx of new teachers in the classroom every year. Many times, they are new to the teaching and do not have any knowledge on the population their school serves. It is not surprising that nearly half of all teachers who left the profession within the first five years of teaching are from inner city schools (Ingersoll, 2012).

This is overwhelming for all the parties in the school as the principals have to provide more staff development and mentor ship for new teachers. Students are constantly adjusting to new teachers. They are unable to build bonds and create a coherent environment and

culture incapable enough for learning in the school because the membership always changes; as a consequence, creating underachieving schools thereby adding more pressure on faculty and staff and giving little room for improvement. Teacher attrition has been a major issue for past years during the implementation of the No Child Left Behind Act. It is a systemic problem that is increasing as more mandates are employed by the Department of Education. Since the federal government put into law that "highly qualified" criteria for teachers, teacher attrition, especially in rural schools, has further challenges to staff all classrooms in schools with "highly qualified teachers.

According to Halliday (2013), almost half of all new teachers eventually leave the profession within five years of service. Teacher attrition is expected due to promotions, retirement, job performance, and personal reasons. This has to be factored into the number of teachers leaving. Longevity in education is shortening and is becoming obsolete. The number of teachers retiring is increasing every year. More teachers are choosing to retire because of the dissatisfaction of their job. There are other variables that take precedence in teachers deciding to leave.

Teaching is a profession that has impact on this nation. Teachers make up 4% of the workforce in Nigeria. Teacher attrition has existed for decades and has been neglected, and its effects have become more evident in the past two decades. Rondinelli and Puma (2015) developed a strategic plan of action for recruiting and retaining effective teachers for urban schools. The plan consisted of four major components:

1. Increasing the quantity and quality of people entering and returning to teaching in urban districts (per-collegiate recruitment, higher education recruitment, and recruitment from alternative candidate pools);

2. Shaping the content of preparation programs to encourage teacher candidates to pursue and succeed where they are mostly needed (ensuring that programs have a clear vision and provide in-depth knowledge, extensive experiences, consistency, and meaningful evaluation);

3. Improving the recruitment and hiring process (improving the recruitment and hiring process, providing financial incentives, improving teaching conditions, and offering differential pay); and

4. Supporting teachers' professional growth once working in a district (teacher placement and high-quality induction programs). This plan is relevant to this study because it examines the components that influence teachers to remain in urban schools. This plan can be effective if school leaders examined the plan and incorporated it into their leadership techniques.

Educational administrators have to examine the factors that create high turnover in public schools. The report suggests that improvement in the instructional program through support will increase student achievement and reduce teacher attrition. By the current trends of attrition rate, the number of teachers needed is going to triple if qualified and non-qualified teachers continue to leave by great numbers. The constant changes and demands of the education system have become a daunting task for educators. It has a significant effect on teacher attrition because it pressures the school leaders to develop strategies that force

teachers to produce; ultimately, causing a stressful environment for the administrators, teachers, and students.

2.1.2   Reasons for turnover

In an investigation by Macdonald (2013), there are three categories that explained the high turnover rate in the United States and some other leading countries in the world: demographic factors, workplace satisfaction factors, and organization or relational factors.

2.1.2.1 *Demographic factors*

Age appeared to have a large impact on turnover in private industry. For instance, older employees were much more likely to stay than their younger counterparts. Younger employees were more prone to leave because of changing career paths -possibly due to degree completion, a willingness to relocate, or fewer family and financial obligations (Lind, 2018).

Conferring to Monk (2019), job turnover is at its peak during the beginning stages of employment then quickly decreases during the next 5 years. This decrease continues for up to 15 years. Change in turnover rate is attributed to the observation that employees who remain with a company gain a sense of loyalty. So, motivation to stay in one's job increases over time However, older employees are less likely to leave their field of work but are more likely to transfer positions within their field than their younger counterparts. Therefore, there may be a change in the trend of age and job turnover.

2.1.2.2 Workplace satisfaction factors

Along with the idea that age has effect on job turnover, a positive correlation was found between lack of job satisfaction and turnover rate. Three main elements in job satisfaction affect turnover: pay, benefits, and opportunities for career growth and advancement. First, the low amount of pay is one of the strongest predictors of decisions to leave a company. Higher pay decreases employees desire to find a better paying job. Anxieties about an employee's financial affairs are lessened by high pay which in turn increases job retention. The second element was benefits. These include healthcare and retirement. Competitive healthcare and retirement may help a company retain employees (Boyd *et al.,* 2017).

Imazeki (2019) stated that the loss of pension benefits due to leaving a job early may encourage an employee to stay in his or her job. Finally, opportunities for advancement within a company encourage an employee to refuse other jobs offered to him or her (Jones 2014). Promotions within companies lead to elevated satisfaction and greater job involvement. Promotions often also result in increased pay, which, as stated earlier, lead to a decline in turnover. There are other findings that support these reports regarding pay, benefits, and opportunities are for advancement. In a more recent study, each of these factors still had a positive impact on job retention (Condy 2012).

2.1.2.3 *Organizational and relational actors*

Organizational and relational factors have had an effect on job turnover. Pentrose (2020) found that employees who are rewarded for their job efforts are more likely to stay with a company. Since the 1980s private firms and public agencies have been increasing job performance by encouraging their employees to be more active in decision-making.

29

Positive relationships with coworkers and supervisors within the workplace show a negative correlation with turnover. Open communication between coworkers and their supervisors decreases the desire of workers to leave. Having a sense of trust in their supervisor is another factor decreasing employee turnover (Schlechty & Vance, 2014). This view has been affirmed through leadership research showing trust between employee and employer increases subordinate satisfaction, high organizational commitment, and higher performance. They also found a positive correlation between relationship factors and job retention.

The preferred workplace which will decrease job turnover offers its employees flexibility. Flexibility is given not only in work schedules but also in the location where the job is completed. In this flexible environment, managers are encouraged to look at positive results rather than the amount of time it takes someone to complete the task or where he or she accomplishes it. This could reduce conflicts between the employee's families and work (Pentrose, 2020). Harry, a psychology at the University of Wisconsin, discovered in the mid-1900s a great deal about a human's motivation and his or her need to achieve and push himself or herself further. He discovered that motivation comes more from within a person than it does through rewards such as monetary compensation or other prizes. He first studied this while observing primates. When the primates were given puzzles, they worked steadily to solve the puzzles on their own with no applause or any other form of positive reinforcement from the scientists. Harlow labeled their motivation as intrinsic motivation. They had the desire within themselves to succeed which was contrary (Peck, 2012).

According to Rondinelli and Puma (2015) society believed at that time and on which society still largely bases its ideas of motivation, many companies thought that people were highly motivated by their salary and bonuses. The idea that people will increase their job performance for more money and extrinsic rewards has been proven incorrect by Harlow and later Edward Deci. People are less willing to give of their time and services under market norms. If someone is asked to move a couch, for example, he or she is more likely to help for free than if offered a small stipend. Mixing market and social norms can cause problems. In the industrial age, business practices tend to be guided more by market norm beliefs. Most people worked from 7am to 5pm and were paid according to the numbers of hours they worked. There was no question what they would be paid and work ended when they left the doors of the building. This has now changed. Many more people today work for a salary rather than an hourly wage. Their jobs do not end when they leave work. They check their business e-mail at home, carrying work into their family lives. (Samuel, 2019).

Spinella (2013) stated that once rewards are offered, people tend to do whatever is necessary to get the job done. This may include cheating, making poor ethical decisions such as using steroids to increase muscle mass or speed, or taking short-cuts to get the bonus at work. Once rewards are promised they then must always be given for that particular task – which makes them addictive. When compensations are offered, the autonomy people experience in performing a task free of payment is lost. People lose the feeling of being in control of the situation and feel as though they are then in a way made to perform; and not by their choice. Thus, a great decreased in motivation. Offering rewards also leads to an increase in bad behaviour, encourages cheating and short-cuts, incites addictive behaviors, and supports short-term thinking over long-term thinking. People are

less likely to do the same task for which they previously received an incentive if the incentive is no longer offered. Consequently, he concluded that concrete incentives can actually reduce motivation. They suggested that not all rewards will produce negative outcomes.

2.1.3 Causes of teachers attrition

Boyd *et al.* (2017) posits that many factors can contribute to teacher attrition and retention. The researchers mentioned further that among reasons that determines whether a teacher will remain on his job or quit the profession depend on individual factors, but these may vary from one country to another. They speculated that not minding these, there are factors that are peculiar to different areas and countries, the main cause of teacher intention to leave is the low salaries and unsatisfactory working conditions. Reports in sub-Saharan Africa suggests that attrition and turnover is associated with the HIV and AIDS epidemic and also due to such reasons as lack of adequate salaries, allowances, housing and promotion.

Attrition and retention of classroom educational managers is a complicated issue, with reasons to remain or leave usually linked to personal variables, still, some themes and patterns may be connected (Boyd *et al.*, 2017). A variety of constructs can be related to the challenges of teacher attrition, nonetheless, the variables varies from one country to the other. The dimensions may not be the same in Nigeria, but not withstanding the differences in these variables that are common to all countries as reported in past studies include the following:

a.   **Inadequate Salary*:* Recent happenings have shown that economic satisfaction plays important roles in the life of classroom teachers. Financial remuneration cannot be underrated as it plays a role in taking care of the family and the staff in question. Hanushek *et al.* (2014) argues that salary is a source of remuneration that is perceived as very crucial to working people, adequate reward can define ones willingness to stay on a profession, while poor remuneration could be a factor that encourages a worker to quit his current career.

Boyd *et al.* (2017) investigates the impact of variation in pay and intention of teachers to leave. The outcome of their research revealed that teaching profession generally does not provide enough financial rewards to lower teacher attrition problems. In this situation, it cannot be denied that monetary rewards are indeed among the factors that could be useful in stemming the tide of teacher attrition in schools.

Hanushek *et al.* (2014) reports that teachers in Bangladesh are highly under-remunerated compared to their peers in other profession, the monthly pay of teachers in the country is meager and makes it more daunting to attract people into the profession. In Nigeria, Samuel (2019) institute that teachers are not satisfied with their salaries. He gagged some secondary school teachers and reported that about 62.94% took up menial jobs as strategy to adjust to economic situations since they could not cope with their required daily expenditures if they had to rely on government pay alone.

b.   **Poor Working Conditions:** Another important variable that results in teacher attrition is the unenviable work environment in most schools. If a working

atmosphere is not conducive for teachers, not minding the staff level of commitment, there is no how such persons can efficiently carry out their duties as required. Working conditions was classified by Azuka (2018) as professional work atmosphere and demographic characteristics of the school. They view it to include professional teaching circumstances which play an important part in judgments to quit teaching at a particular education institution, and that it contributes to judgments to quit.

Buckley *et al.* (2016) argues that large class sizes were the most indicated factor that made some teachers quit their jobs in some schools particularly in low socioeconomic communities with inadequate facilities. The significance of working in safe structures and properly furnished educational institutions cannot be underestimated. They added that those teachers who work in low income settings frequently lack enough facilities to do their work as expected.

In Nigeria, there are insufficient teaching facilities such as; Textbooks, Maps, world globes, laboratory apparatuses and other tools for instructors and learners to work and study with. It was revealed that many teachers discharge their duties in conditions that are unsatisfactory, this they author reports has potential to reduce self-esteem and is generally de-motivating for the personnel involved. Educational institutions in many developing countries do not possess the requisite standard of infrastructures such as pipe-borne water, electricity, staff rooms, and toilets and so on. These environmental factors can also lead to distress at work (Jones, 2014).

Teachers want to teach students how to enhance their natural abilities, but the push to teach a standardized curriculum and increase AYP (Annual Yearly Growth) make

the teacher put aside his or her desires to mold the students and instead create an environment similar to a factory. However, most secondary school students in Nigeria study in an environment that is not conducive, the basic tools are deficient and this scenario has contributed in no small measure in lowering the morale of teachers.

c. **Leadership Style:** Principals with bad leadership styles may force their employees to quit. This can result to dissatisfaction of teachers and lead to attrition. Disrespect from school administrators is most often cited as reasons for teacher attrition. Boyd *et al.* (2017) investigates the involvement of teachers in school policy decisions and found that in New York, working conditions, particularly management encouragement is a critical factor to retain teachers. Azuka (2018) opines that teachers in Nigerian schools who are not encouraged by their school principals signified their interest to quit teaching career entirely should they have a better career prospect elsewhere.

d. **Posting to Rural Communities:** Teachers posted to local communities' encounter difficulties in coping with such environment. In addition, schools located in rural areas find it difficult to retain their personnel. This is because teachers in such areas feel isolated and alienated and hence there is a high tendency to quit either entirely or go to another school situated in an urban community (Chianson, 2018). However, getting young teachers to work in rural communities is the most daunting task due to social isolation.

2.2 Teacher Retention in the Public School

Organizations in different industries seem to have a challenge in recruiting and retaining the right talents probably as a result of economic downturns or through voluntary turnover (Kogoe, 2016). Results from previous studies in this area of investigation revealed that loss of knowledgeable personnel could lead to poor performance of organizations and this would impact outcomes of such firms. Employee turnover can be perceived in different ways depending on the context. In schools and among teachers, employee turnover is the rate of departure among staffs engaged in a school for a given period. If it is one or two teachers leaving for different reasons at the end of a session, the impact will not be as much as excessive turnover, which can be costly and detrimental to instructional cohesion in schools (Chianson, 2018).

In order to prevent the loss of large amount of staffs, policies in western nations such as the United Kingdom and United States of America have been put in place. Every teacher that leaves the teaching profession drastically cuts into the school budget and is a factor in whether or not students attain high performance in their studies. The National Academy of Education published an Education Policy White Paper concerning teacher quality that stated if students from low socioeconomic backgrounds received instruction from highly effective teachers in elementary schools for three consecutive years, they could pass standardized assessments at the middle school level. Unfortunately, evidence also indicates that all students regardless of their background are "harmed academically" by poor teaching for three years running. Effective teachers who are committed and willing to teach to a

diverse student population are essential to the success of a school and can make a difference in the lives of each student (Tuchman, 2013).

Marshal (2012), argues that personnel turnover is a phenomenon that can be viewed from an array of dimensions, depending on the subject of discussion. However, considering job turnover in schools, it can be viewed as the degree of departure among personnel that are employed to work for the schools in a particular period. The authors find that the job turnover problem involves a very challenging task to the employee involved and the government despite the angle it is looked at. To the employee, it means some definite loss of income that could have accumulated should the person not quit the job in question. These issues are consequential in the Nigeria perspective because losing one's job would result to other adverse external problems due to the fact that the person may not be able to cater for himself and the extended family. It was reported that personnel turnover is even a greater problem to the government of the day apart from the earlier reported problems that would be encountered by the individual involved (Tuchman, 2013)

In view of the above, it is pertinent to note that job turnover issues are counter-productive to the attainment of schools' goals and government objective of providing jobs for the citizenry. Due to the persistent labour turnover in schools and high job dissatisfaction among teachers in Nigeria and other parts of the world, this study seeks to find out those factors that encourage teachers' attrition (Hirsch, 2015). Boyd *et al.* (2017) opines that employees play vital roles in any organization. Ultimately employees contribute immensely to the performance and success of the organization and are the most valuable resource that any organization can rely on. Whether in the developing or developed countries, the

challenge for most organizations is how best to retain their employees for the long term in the organization. This loss of employees has been seen as a consequence in the performance of firms which have a long term impact on the companies. Hirsch and Emerick (2017), argues that employee retention is a process in which the employees are encouraged to remain with the organization for a maximum period of time or for the completion of a particular project. However, there are policies and practices organizations may use to retain or stop their talent from leaving the company.

Kogoe (2016) found that the high turnover rate of teachers in the USA costs the education system about $7billion annually. Nevertheless, the situation is not so different in Nigeria, where the turnover rate is suggested to be above 15%, teacher attrition and retention in the education sector has become a matter of great concern. The high rate of teacher attrition impacts negatively on school improvement efforts as it disrupts the stability and continuity of teaching. He opines that managing teacher retention emphasizes on the strategies that result to employee retention that thoroughly inspire such cohesion, productivity and level of staff commitment to duty. He describes five philosophies of retention management that could enhance personnel satisfaction, commitment and output. According to him, staff requires to feel they are valued and trusted. Employers should also understand that when they partake in the growth and development plans of their employees. This may encourage such employees to remain in the organization because such could be interpreted to mean that the organization cares about employee welfare. Majority of employee's desire to stay longer on the job and to feel more knowledgeable and more answerable, at any stage on the job.

Ingersoll (2012) highlights that a serious organization would motivate its staffs constantly emphasizing on performance and results. The employer supports the staff in areas of their competence, other skills they deserve to acquire and avenues to acquire such skills. In view of this, the employees obtain more knowledge as the move up the ladder on the job and take up more accountability and responsibility. The preparation, recruitment, and retention of teachers can be viewed as a pipeline that springs leaks over time. In many developing countries, the number of new teachers cannot keep up with population growth. In Western countries, where sufficient numbers of teachers are prepared, many newly prepared teachers either choose not to teach at all or leave teaching within a few years.

According to Samuel (2019), schools are being pushed from social norms to market norms by having standards-based testing and implementing performance-based pay. The federal government allocates more money on budget compared to other sectors other than security. He argued that more Testing and more money will not increase the quality of education in Nigeria, increasing teacher and administrative pay he suggested will only help in short-term. It will not improve education over time.

Efang (2019) suggested that an increased focus on policies that support social norms in school may be more likely to improve the quality of education students receive. He questioned the use of standardized tests as the only or primary measure of student learning. He suggested that the focus in education should be on how the standards being taught will lead to success in social goals like the elimination of poverty, a decrease in crime, an increase in human rights, and success in technological goals. Such technological goals may be saving our natural resources and the exploration of space or success in medical goals

like curing diabetes, obesity, and cancer. He argued that this would allow teachers, administrators, and even parents and students to see a bigger picture of education.

2.2.1 Demographic characteristics that influences teacher attrition and retention

According to Luczak (2014) demographic characteristics are personal characteristics which include information such as ethnicity, race and family size. It is also seen as personal statistics on information such as gender, age, sex, education level, income level, marital status, occupation, religion, birth rate, death rate, average size of family, average age at marriage. For example, considering age, it is expected that employees are energetic and enthusiastic at an early employment. As more time is spent on the job, their performance is expected to improve with their maturity up to a certain age but when their energy levels go down and therefore performance also slows down. This is what necessitates the establishment of a retirement age.

Kitavi and Westhuizen (2016) points out that the demographic factors have an influence on whether employees will be committed to their work or not. However, he observed that how well the employee performs, how many years they are ready to dedicate in service and how well they act in the best interest of the school's objectives heavily depends on how much the organizations take care of the needs that are related to their demographic characteristics. He however failed to bring out how the same can be put into practice.

Hannaway (2012) defined demographic characteristics as the presence of differences among members of a social unit. The workforce is more diverse in terms of gender, race, ethnicity, national origin and comprises of people who are different and share different attitudes, needs, desires, values and work behaviours. He delineates workplace

demographic characteristics as the variety of differences between people in an organization including race, gender, ethnic group, age, personality, cognitive style, tenure, organizational function, and education background. There are a number of demographic characteristics contributing to diversity. The most widely recognized include, age, gender, ethnicity, and education. Among the demographic characteristics influencing performance are discussed below.

2.2.1.1 *Principal Behaviours*

Many secondary school administrators are ill-prepared to meet the demands posed by the changing nature of their jobs. Organized and systematic training in educational leadership and effective and transparent management that goes beyond the occasional workshop presently offered in most systems is urgently needed for principals. Principals' critical new roles as instructional leaders within schools, builders of learning communities among teachers, and developers of strong community participation in schools are widely recognized, although few principals have any preparation for this array of new responsibilities. A national or regional institution that specializes in advanced degrees or certification for educational leadership could be one option to address this need (Fowlkes, 2014)

Concerted effort to improve school leadership is one of the more promising points of intervention to raise the quality of secondary education across much of Africa. Mechanisms for recruiting teachers to become principals or head teachers are unsystematic and not necessarily based on professional criteria. The position of principal is often not professionalized or seen as a career choice (Venkatesh, 2018). It is sometimes filled by

senior teachers who rotate through the position for limited periods of time. A more systematic approach to the selection and training of principals would lead to stronger school leadership. The educational leader needs to recognize that relationships are a fundamental and intrinsic part of being; we cannot separate our existence from our relationships. Hence, leadership activities that focus unduly on the technical and bureaucratic elements of an organization are devoid of meaning. Educational leaders who acknowledge that human interactions are basic to our lives, to the creation of meaning, and to the development of understanding are more likely to take full account of the why, who, what, where, and when of schooling. (Shields, 2016)

Hirsch (2015) agreed that effective principals place a great amount of effort into professional learning on themselves and their teachers. He suggested that principals provide support for teachers learning inside and outside the school. He furthermore highlighted that principals need to recognize that all teachers can be leaders. There are various ways principals can build relationships among school faculty. Building relationships between the principal and faculty can happen if the principal occasionally offers to lend a hand (Tuchman, 2013).

2.2.1.2 *School location/climate*

There are different definitions for school climate. The structural approach regards climate as an essential characteristic of an organization which is free of individuals' perceptions. This definition can be challenged by evidence from studies showing different work climates within a single organization. The perceptual approach views climate as people responding to situation from a psychological approach. It is the interactions they participate in that

create the climate. Based on this approach, climate guides behavior and results in the general behavior of groups. This approach may not be effective because it is based on individual perspectives; instead of a collaborative understanding. The perspective has individuals developing a collective understanding of the environment. This creates a shared perspective that the entire organization agrees upon through interaction (Akyeampong and Stephens, 2017)

An underlying factor that is not sufficiently addressed in current research is how the working conditions influence who remains in the classroom and who leaves. These working conditions may include such items as daily workload, school supplies and resources, paperwork, school climate, and apathetic students. Working conditions continue to show up on surveys as one of the major determining factors that teachers list as a primary reason for leaving education. One's working conditions affect one's performance, and thus the satisfaction derived from one's work. When teachers feel demoralized, disrespected, and unsatisfied, their morale suffers and this affects their work. In many cases, the minute items such as adequate supplies and support within the school seem to matter the most to teachers. When a school system fails to address these basic needs, teachers will quit trying to make a difference in the lives of students. These conditions are exasperated further in low-income schools and rural communities (Kelly, 2014).

Earthman (2012) stated, "The condition of a school building not only influences student achievement, but can also influence the work and effectiveness of a teacher". Several researchers have indicated the importance of analyzing the impact of building conditions on the morale and attitudes of staff members. Accountability has placed incredible emphasis

on high standards for student achievement and the number of highly qualified teachers. If building conditions have an impact on student achievement and teacher effectiveness and job satisfaction, it is important to investigate how building conditions may impact teacher attrition. Tye and O'Brien (2012) also reported work conditions as a cause for teacher attrition. Based on their survey of a number of teachers who had already left the profession, these authors concluded that the causes of teacher disaffection were systemic rather than personal. School climate is influential in teacher attrition. The research shows "teachers with positive perceptions about their working conditions are much more likely to stay at their current school than educators who are more negative about their conditions of work, particularly in the areas of leadership and empowerment" (Hirsch and Emerick, 2017).

2.2.1.3 *Salary and promotion*

One major reason why people work is to earn income in money terms. This is needed to meet some personal and domestic need, such as clothing, feeding, and payment of rent, school fees etc. Salaries have a large motivating tendency in it. It is not the increase in salaries, wages that only matters, but also, prompt and regular payment of it (Donovan 2013). Salary can be described as the money that an employee receives for doing his job. Money is believed to have a great tendency of bringing out a higher performance in employee when he is adequately paid. It is believed that man is an economic being; whose attitude to work can only be influence of money. Wages and salaries paid to workers are important because with money, people can satisfy the needs for status, security, recognition and affiliation. For example, in Nigeria, a person's social world depends largely on the size

of his earnings or acquired monetary wealth exhibited in either building raised, types of house he can afford to live in and the type of car he uses.

Kunje (2012) remarked that teachers in Nigeria are poorly motivated and dissatisfied with their living and working conditions. This could be explained by their low wages when compared with other professionals, low status in the society, mass promotion of teachers, inadequate fringe benefits and irregular payment of teachers' salaries. This marked the beginning of the teacher motivational crisis in Nigeria, as the public began to look down on those teachers who remained in the classroom as second-strong public servants. All over the world, teachers are regarded as direct implementer of any educational programmes and their roles in nation building cannot be over-emphasized. Before any nation can be transformed into technological giant, teachers would be the gratified ones who would in return give back to the nation the maximum of their intellectual capacity. The pertinent question is "Why is the profession, so noble in outlook be so abhorred by most people? The readily given answer is that there is little or virtually no job satisfaction in teaching as found in other jobs.

Teaching has poor salary structure or earning power. Salary is not commensurate with the job and is not as lucrative as other jobs, Teaching has a negative public image, low social status, lack recognition by society and its workers (teachers) are regarded as second-class citizens and it has poor conditions of service, slow promotion rate due to lack of duty-post and inadequate method of promotion. Teachers earn poor treatment by Ministry Official, particularly the inspectors who make a rule without consulting teachers (Gaynor, 2012). He described conditions of service as that general requirement; necessities and desirable

factors that tend to make the working environment conducive and favourable and thus enhance worker's performance. There are various components of conditions of service which can affect employee's performance in an organization and these include the following: salary, status, working conditions promotion, fringe benefits, job security and involvement in decision-making.

Promotion is an upward mobility of an employee which changes his present position to one that makes him assume greater responsibility. Apart from bringing him more money, promotion has a higher motivating effect and it serves as a mark of recognition of individual performance. Hence promotion can be seen as a feedback that the workers have performed well. It has been observed that promotion tends to put a new life in the individuals and activate their knowledge, skills and their level of commitment to the organization goals. But if on the other hands, the individuals within an organization are deprived their promotions, they would become disconnected and consequently leads to labour turnover (Gaynor, 2012). He suggested that in administering promotion to workers, important factors such as experience, training, skills and intellectual capacity must be considered. He further stressed that striving for promotion may be caused not only by the need for status, but also the needs for achievement or recognition of competence. It follows; therefore, that workers will strive to perform effectively in their job if they are assured that by doing so, will increase their chances of being promoted. Therefore, receiving a desired promotion at the right time would no doubt increase the extent to which a worker is urged to carry out his work effectively.

Thus, despite the fact that it is stated in article 77 section 9 of National policies of Education, FRN (2016) stated that promotion opportunities will be created at every educational level to allow for professional growth at each level, teachers' promotion has not been implemented accordingly. Rather than based on merit, promotion is based on favoritism, nepotism and used political weapons. Teachers' job performance are measured as those ratings used in evaluating employee, who include pedagogy, teachers' productivity, rate of giving extra-lessons to students, teacher, student relationship, changing teaching/learning process, use of instructional aide, improvisation of instructional aide, participate in extra curriculum activities, mastery of subject area, teacher-teacher relationship, above all, students' academic performance. Teachers' performance are also measured by relating teachers' behaviours with the duties and responsibilities expected of them within the school system and which are crucial to their actualization of set educational objectives (Coggshall, 2013)

2.2.1.4 *Years of experience*

There are different definitions given to experience. According to Claycomb and Hawley (2013), experience is a process of gaining knowledge or skill by repeated traits. It is also an event or series of events participated in or lived through. In the view of Dinham (2012) experience is the particular instance of personally encountering or undergoing through something. The above definitions all point to the fact that the more years one stays on the job, the higher the performance, in that he/she has put into practice all the experiences he/she has acquired over the years; hence the saying that practice makes perfect. Experience can therefore be referred to as the length of years of service one has put on it.

Older teachers approaching retirement produce a significant portion of teachers leaving the classroom. Years of experience have been an important factor in previous studies. Literature shows that teachers with the least amount of experience and those close to retirement produce the highest number of attritions. The information found in the literature analysis is consistent. The "revolving door" will continue to turn if strategies are not implemented (Hanushek *et al.,* 2014).

2.2.1.5 *Relationships with colleagues*

An organization cannot be effective if all members are not working in one accord. The teaching profession is different from corporate organization. It is based on trust. respect, and creating nurturing relationships. Jarzabowsi (2012) posited that true collegiality creates "community" and "community achievement." Teamwork creates a more efficient organization that promotes unitary success. Leonard and Leonard (2013) report that separate planning times, classroom and breaks detour relationship building among teachers. More schools are moving to common planning time and team teaching to create interdependence. The Alliance for Excellent Education (2012) reported 52% of teachers leaving stated lack of involvement in policies were one of the factors that contributed to their decision to leave. In order for a school to function as a team or organization, everyone has to be included in the functioning and decision making. It enables individuals to feel like a contributor an influential to the success of the group. "Schools that provided mentoring and induction progress particularly those related to collegiate support, had lower rates of turnover among beginning teachers" (Guarino *et al.*, 2014).

Teachers link together students, other teachers, school administrators, families, and community members to foster the learning success and healthy development of their

students. The nature of these interactions among different stakeholders varies depending on the teachers' intent and the needs of their students. Students, particularly those at risk of school failure, can benefit from certain "protective supports provided by teachers". The teacher's role in creating an environment and building relationships conducive to learning goes beyond the traditional academic duties to include the provision of additional support and care. By developing nurturing, positive relationships with their students, teachers can buffer the impact of certain basic factors that may negatively impact on a student's academic achievement (Feiman-Nemser, 2016).

2.2.1.6 *Discipline referrals*

According to Brown *et al.* (2018), student discipline was a major factor for all participants in the study for deciding to leave their school system. Student discipline problems were identified as behavior, teenage pregnancy, and their inability to cope with unstable home life. These influences made it difficult for teachers to be effective and create a structured learning environment for the type of students they serve. In addition to student behavior, participants reported the lack of administration support with student discipline. Without administrative support and students refusing to behave, the participants decided to leave instead of continue teaching. Correspondingly, the Alliance for Excellent Education (2012) reported that teachers in rural areas left due to student discipline and lack of administrator support. Student discipline and socioeconomic status can be linked. When students are unable to perform well in class, they display inappropriate behavior to camouflage their deficiency. This is why high-poverty schools tend to have a higher number of student's discipline referrals. In recent years, student discipline problems have increased along with teacher attrition and the literature supports that student discipline is a major factor in

teacher attrition. The perspectives allow the researcher to analyze student discipline to create a plan to strategically reduce teacher attrition.

2.2.1.7 *Teacher responsibilities*

Many teachers, regardless of their years of experience, level, or subject taught claim that their workload is too demanding. This might encompass too many classes for a high school teacher or too many additional responsibilities beyond the classroom walls. Large amounts of paperwork and non-teaching duties contribute to an overbearing workload. In several studies, teachers respond that paperwork takes up valuable teaching time and increases their work after school hours and even at home (Connors, 2020). Planning periods are not used for planning the next day's lesson, but instead they are used for completing paperwork and attending required meetings. Teacher responsibilities have changed over the past years due to educational reforms and mandates. According to Hirsch (2015), teachers having to work more than five hours pass after school hours to perform task like grading papers and parent conferences. He conducted an international study on teacher workload and noted that it is causing high levels of stress for teachers. The study linked the stress to the change in site-based management, forced and centralized system accountability, lack of professional autonomy, relentlessly imposed change, constant media criticism, reduced resources, and inadequate salaries. These factors are contributing to increased absenteeism and teachers leaving the teaching profession and this problem can be seen throughout various countries.

Demographic Factors
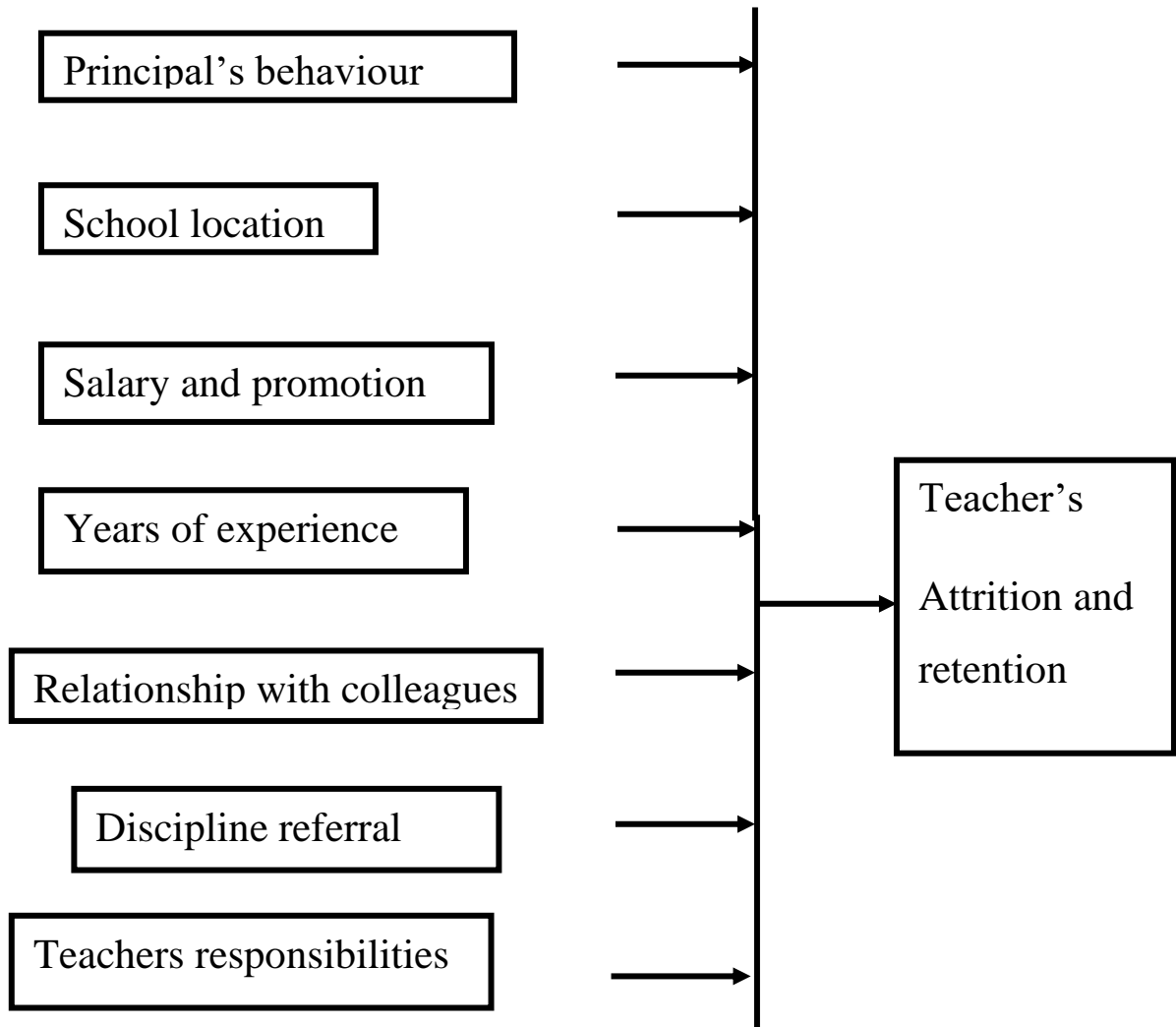
Figure 2.1: Relationship among the Variables

Source: Authors' work (2021)

2.3 Theoretical Framework

This study examined teacher perceptions of how principal behavior, school climate, teacher responsibilities, teacher preparation, gender, salary, years teaching, student discipline referrals, and relationships with colleagues have an effect on teacher attrition.

2.3.1 Human capital theory

Human capital theory was proposed by Theodore Schutz in 1961 and developed extensively by Gary Becker in 1964. The theory posits that knowledge and skills of a worker generate a certain stock of productive capital. The current world of work puts the importance of human capital at center of the current organization environment. Attracting and retaining intellectual capital a cadre of highly skilled employee with idiosyncratic skill is essential. Therefore, organizations must move from human resource to the notion of human capital. Human capital theory posits that the knowledge and skill a worker has to generate a certain stock of productive capital (Garson, 2013). This approach also sees people not as an expense item on their income statements rather as an asset capable of not adding to their organizations but also in some cases ensuring its very survival in the current competitive environment.

Jarzaboski (2012) defines human capital as human factor in the organizations the combines intelligence, skills and expertise that gives the organization its distinctive character. The human elements of the organization are those that are capable of learning, changing, innovating and providing the creative thrust which if properly motivated can ensure the long term survival of the organization. Human capital comprises intellectual capital (which are the unique knowledge and skills that people possess), social capital (which is flexible

networks among people that allow the organizations to link, embed and leverage its diverse knowledge possessed by organization that is stored in database and manuals). Emotional capital that is the ability to convert the potential in intellectual capital into committed realized action. According to Dinham (2012), key employee possess a significant amount of an organization's value and when these key employees leave companies , they take this value with them .it is indeed the knowledge ,skills and abilities of individuals that create value, which is why the focus has to be on means of attracting ,retention developing and maintaining the human capital they represent The present study examines retention factor with the underlying assumption that human capital is critically important.

2.3.2   Goal Setting Theory

The Goal Setting theory developed by Latham and Locke in 1979 states that motivation and performance are higher when individuals set specific goal, when goals are difficult but accepted and when there is feedback on performance. Precipitation in goal setting is important as a means of getting agreement to the setting of higher goals. Difficult goals must be agreed and their achievement enforced by guidance and advice, finally the feedback is vital in maintaining motivation, particularly towards the achievement of even higher goals. Goal Theory plays a key role in performance management, (Jones, 2014). The goal setting theory highlights four mechanisms that connect goals to performance outcomes: They direct attention to priorities, they stimulate effort, and they challenge people to bring knowledge and skills. Goal theory is a theory that proposes that all human action and behavior are motivated by a goal which is important to the performance of organization and hence individuals (Donovan, 2013).

This theory established an intimate link between goal setting and positive workplace performance and it predict that people will channel their effort towards the accomplishment of their goals, which in turn affect performance.

2.4 Empirical Studies

The weight of empirical studies indicates that demographic factors are relevant to understanding teacher's willingness to stay on teaching profession. Efang (2019) conducted a study to examine the relationship between demographic variables and teaching performance of teachers in Uyo Education Zone of Akwa Ibom State. The samples consisted of 400 teachers selected through stratified random sampling technique while data were analyzed using Pearson Product Moment Correlation (PPMC) and tested at 0.05 level of significance. The study discovered a significant relationship between demographic variables, age, experience (length of service) education, gender and tenure and employees" decision to stay or quit teaching profession.

Kelly (2018) reviewed that age was inversely related to teachers' decision to stay on teaching profession. This is informed by the fact that younger teachers are lured to new opportunities by higher salaries and greater responsibility. Attraction bonuses for talented people ("golden hellos") are becoming increasingly popular. She studied age as the most consistent in its relationship to turnover is the employee's age. This was revealed in a study by (Fowlkes, 2013) on the IT industry in Kenya and Tanzania. The finding revealed that age had a modest but significant effect on turnover intention. There are different perceptions of job satisfaction and motivation across the age spectrum. In their separate studies on retention of healthcare professionals, they found younger nurses had lower levels

of job satisfaction while the older age group of 40years and above had higher levels of job satisfaction.

In Brown *et al.* (2018) qualitative study on teacher attrition in Texas, findings showed that teachers attribute part of their decision to leave on administration behaviors. The researchers conducted semi structured interviews with eight teachers that had left the school system. They were selected through criterion sampling. The participants gave descriptive examples on the behaviors displayed that supported their decisions. The following behaviors were seen by the participants: (a) Excessive pressure, (b) Corrupt administration practices, (c) Disrespect to teachers, and (d) Reduction of teacher moral. The principal behaviors that were seen by the participants in this study can be seen in other school buildings throughout different school districts. This study investigates the perceptions of teachers of the impact principal behavior has on the teacher attrition.

Reeves (2014) conducted a study to investigate teacher attrition in poor, urban schools. They conducted their study in five metropolitan areas in New York. He used the Prentice & Gloeckler(1978) technique to collect data. Their findings showed that salaries do affect teachers' decisions in leaving or staying in the classroom. They reported that teachers that worked in the higher paying system would less likely leave. The study did report that in order to compete with other factors such student factors that influence attrition, a large salary increase would be needed to keep female teachers in those areas.

Flowers' (2013) study, Why Do Public School Teachers Leave Their Profession?" explored the variables that cause teacher attrition. The population for this study consisted of 21% male participation and 79% female participation. The data were collected through a survey

instrument applying the Likert scales, ranging from 1 = strongly agree to 5 = strongly disagree. The major finding of the study showed money to be the most significant variable in teacher attrition. Other findings in the study were too much paperwork, overwhelming focus on student performance on standardized tests, number of students in a class, lack of parental support, little opportunities for higher salaries, not enough planning time, stress, student discipline problems, and lack of respect from students.

Brown *et al*., (2018) conducted a qualitative study and reported that student discipline was a major factor for all participants in the study for deciding to leave their school system. Student discipline problems were identified as behavior, teenage pregnancy, and their inability to cope with unstable home life. These influences made it difficult for teachers to be effective and create a structured learning environment for the type of students they serve. In addition to student behavior, participants reported the lack of administration support with student discipline.

Marshall (2012), conducted the study, A Study of Factors Contributing to the Attrition Rate of Public School Teachers in Texas that examined factors that contributed to teacher attrition. The two groups used in this study were formerly employed teachers from the school system and school personnel directors. The former teachers answered surveys and the administrators were interviewed. The survey results indicated that "discipline is the biggest problem faced by a teacher was one of the strong responses from teachers. "Teachers' salaries are inadequate" and "My education did not prepare me" were the other strong responses given by teachers.

Peck (2012), conducted a study and the findings from the survey conducted reported student behavior is a key reason for teacher to leave or consider laying the classroom. It is

not solely the student behavior, but the lack of administrative support that influences their decision. In a 2002 study conducted by Tye and O'Brien (2002), student discipline problems were amongst the most frequent reasons why teachers leave the teaching profession.

2.5   Summary of Literature Review

Teacher attrition and retention is a momentous problem for the education system nationwide. Systems have not found a solution to this epidemic that has had a negative effect on student performance. Schools have resorted to hiring teachers on alternative certification routes due to the low numbers of "highly qualified" teachers available. Public secondary schools are faced with resignations from all levels of teachers throughout the entire school year; making continuous instability for leadership, parents, and importantly, students. Resignations force school leaders to hire unqualified emergency staff to fill vacant positions to provide service to students; avoiding a lapse in instruction. This study is necessary to inform the selected school system in determining the factors that cause teachers to leave. The findings and recommendations from this study will aid the public secondary schools and other school systems in their implementation of initiatives to reduce teacher attrition and improve retention. Through applying Symbolic Interactions, a more in-depth understanding of how teachers perceive their experiences to develop their perceptions of the influences on teacher attrition. The theories give reasons why teachers can become dissatisfied with different situations and conditions that can impact their needs and behaviours. Individuals respond differently to certain situations. There are reasons why some teachers leave the school system and others remain.

In transaction leadership, leaders lead through social exchange. It is the behaviour that are displayed during the interactions that teachers interpret and develop their own understanding of their school principals. These perceptions then create the school climate based on the teachers' understandings. Transformation leadership tries to inspire the members in the organization to reach a common goal and work as a community (Bass and Riggo, 2016). The literature review shows that when school principal's practice strategies that promote teamwork and "community" the organization is more successful. Effective school research across Nigeria supports that there are practices controlled by educators that will assist in eliminating the factors that influence teacher attrition.

The theoretical framework chosen for this study, post-positivism, bases evidence on human experience and perceptions. It presents a deeper understanding of the problem, not just giving evidence of the significance of the problem. It permits the researcher to determine the exact actions and situations that have occurred to attribute to teacher recruitment and retention in the selected Secondary school

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The research design adopted for this study was a descriptive survey design. Descriptive survey research is suitable where a group of people or number of items was studied by collecting and analyzing data from their representatives. The descriptive survey design was selected because it has high degree of representatives and creates a friendly environment for the researcher to obtain the participants opinion (Samuel, 2019).

3.2 Population of the Study

The population of this study consists of Science teachers from all the government secondary school in Minna metropolis (Bosso and Chanchaga Local Government Area) in the 2019/2020 session with a total population of one thousand three hundred and twenty teachers (1320).

3.3 Sample and Sampling Techniques

For the purpose of this study, a sample of one hundred and thirty two science teachers (132) was used. Purposive sampling was used because the target populations are homogeneous as members share the same characteristics. This sampling technique was chosen because the researcher has prior knowledge about the purpose of the study, so that eligible participants can be selected and approach to conduct the survey.

3.4   Research Instrument

The research instrument used for this study was a structured closed ended questionnaire which is named "Questionnaire on the assessment of extrinsic and intrinsic motivational factors influencing science teachers to attrition and retention (QAMOF) and was administered to science teachers in public secondary schools in Minna metropolis, Niger state. (QAMOF) consists of sections A, B, C, D E and F. Section A collected demographic data from science teachers (like name of school, year of experience, gender and school type). Section Band others consists of items on extrinsic and intrinsic factors on science teacher attrition and retention. A 5-point Likert rating scale of Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D) and Strongly Disagree (SD) was used.

3.5   Validity of the Research Instrument

For the purpose of this study, experts in Mathematics education and measurement were consulted to carry out the validation of the instruments. The valuators 'chosen include two experts in mathematics education in department of science education, Federal University of Technology, Minna and an administrator of a public senior secondary school in Minna, Niger State. The test items examined by the experts were: Content validation, appropriateness of the items, clarity of the statements in the instrument, to ascertain whether the test items are related and to give suggestions and criticisms that would assist towards improving the quality of the test items.

3.6 Reliability of the Research Instrument

The reliability coefficient of a test refers to the consistency with which the test repeatedly measure what it is assumed to measure, after repeated use, if aside from a small margin of

measurement error, if the results contained from a test are not different from each other, then such a test is said to be reliable (Jones, 2014). In order to determine the reliability of the research instruments, a pilot study was carried out using 30 senior secondary school science teachers in Gurara local government of Niger state. A test retest was used to determine the reliability of the instruments. These teachers were not part of the targeted population used in the study. The administration was carried out once and a reliability coefficient index of 0.74 from the variables on the assessment of extrinsic and intrinsic motivational factors on science teacher's attrition and retention in public schools in Minna metropolis Niger state was obtained using Cronbach Alpha formula to measure the internal consistency of the items. Based on the coefficient obtained, the instrument was considered reliable.

3.7   Method of Data Collection

An introductory letter was collected by the researcher from the department of Science Education, Federal University of Technology Minna, which was presented to the appropriate authorities of sampled establishments in order to give the researcher access to science teachers respectively. Respondents were briefed on the objectives of the study and how to fill the questionnaires by the researcher and the research assistant who was trained on the bare bones of the research to ensure that valid data are collected. After gaining permission, the researcher carefully administers the questionnaires to the respondents and waited behind in other to ensure compliance and complete return. The filled and completed copies of the questionnaires were taken for further analysis.

3.8   Method of Data Analysis

The data collected from sampled teachers was analyzed using Descriptive statistics and inferential statistics. The descriptive (Mean and standard deviation) was used to answer research questions. The decision mean of 3.0 was used as items with weight mean of 3.0 and above was considered agreed and any item with weight mean less than 3.00 was considered disagreed as a decision rule for attitude rating. The inferential statistics, the analysis of variance (ANOVA) was used to test the null hypothesis at 0.05 level of significant. The data was analyzed using statistical package for social science (SPSS) version 21.0.

CHAPTER FOUR

4.0   RESULTS AND DISCUSSION

4.1 Results

The followings are answers to the research questions:

Research Question One: What are the extrinsic determinants of Science teachers to attrition in public secondary school in Minna metropolis, Niger state?

The descriptive statistics of Mean and Standard Deviation was used to answer this research question and the summary of the results is presented in table 4.1

Table 4.1: Mean Response on the extrinsic determinants of Science teachers to attrition in public secondary school in Minna metropolis.

No	Items	N	$\bar{x}$	S.D	Decision
1	Teachers leave their job temporarily on secondment to other government establishment.	132	3.93	0.774	Agreed
2	Teachers leave the teaching profession to work in new areas not related to teaching	132	3.48	0.502	Agreed
3	High performing teachers leave when they are appointed into political offices	132	4.63	0.485	Agreed
4	Many science based teachers leave teaching to pursue other careers	132	3.96	0.795	Agreed
5	Some teachers remain in their job and do other business.	132	4.15	0.860	Agreed
6	Teachers leave their job due to inadequate instructional materials and facilities	132	3.51	1.052	Agreed
7	Student discipline referrals is a major reason why teachers seek new job offer in other organization	132	3.02	1.413	Agreed
8	Some teachers take teaching as a temporal job while awaiting other jobs	132	3.96	0.851	Agreed
9	Teaching job is the only alternative to my survival at the moment	132	4.05	0.809	Agreed
10	Principal behaviours and other organizational matter is a key factor for teachers seeking other job alternatives	132	3.97	0.791	Agreed
			3.87		

Decision Mean = 3.00

Table 4.1 reveals the Mean Response on the extrinsic determinants of Science teachers to attrition in public secondary school in Minna metropolis. All items produced high mean scores which were above bench mark of 3.0. Items with higher Mean rating includes item 3: High performing teachers leave when they are appointed into political offices ($\bar{x}$= 4.63, SD =0.485), item 5: Some teachers remain in their job and do other business. ($\bar{x}$= 4.15, SD =0.860). The table also reveals grand mean of 3.87 which shows most Science teachers in public school attrition is as a result of extrinsic determinants.

Research Question Two: What are the intrinsic determinants of science teachers to attrition in public secondary school in Minna metropolis, Niger state?

The descriptive statistics of Mean and Standard Deviation was used to answer this research question and the summary of the results is presented in table 4.2

Table 4.2: Mean Response on the intrinsic determinants of Science teachers to attrition in public secondary school in Minna metropolis.

No	Items	N	$\bar{x}$	S.D	Decision
1	Many teachers leave their job because of principal behaviuor	132	4.49	0.636	Agreed
2	Teachers feel uncomfortable when they are not involved in policy making in the school	132	3.94	0.794	Agreed
3	Excessive workload is a determinant for teachers attrition in public schools	132	4.07	0.885	Agreed
4	Lack of appraisals from educational authorities discourages teachers and may lead to attrition	132	3.51	1.053	Agreed
5	Many teachers are in the teaching industry because of a high level of unemployment	132	3.47	0.501	Agreed
6	Teachers with higher educational qualifications tend to leave the teaching job more than their counterparts with lower qualifications	132	4.47	0.736	Agreed
7	Student discipline referrals plays a major role in science teachers' attrition in public schools	132	4.00	0.929	Agreed
8	School environment encourages teachers to stay in the jobs	132	3.50	1.045	Agreed
9	Teachers are carried away by more lucrative job opportunities especially with higher pay	132	3.03	1.39	Agreed
10	Others resign their job permanently	132	3.94	0.858	Agreed
			3.84		

Decision Mean = 3.00

Table 4.2 reveals the Mean Response on the intrinsic determinants of Science teachers to attrition in public secondary school in Minna metropolis. All items produced high mean scores which were above bench mark of 3.0. Items with higher Mean rating includes item 1: Many teachers leave their job because of principal behaviour ($\bar{x}$= 4.49, SD = 0.736), item 6: Teachers with higher educational qualifications tend to leave the teaching job more than their counterparts with lower qualifications. ($\bar{x}$= 4.47, SD = 0.860). The table also reveals grand mean of 3.84 which show that intrinsic motivational factors are major causes of Science teacher's attrition in public secondary schools in Minna metropolis, Niger state.

Research Question Three: What are the extrinsic determinants of science teachers to retention in public secondary school in Minna metropolis, Niger state?

The descriptive statistics of Mean and Standard Deviation was used to answer this research question and the summary of the results is presented in table 4.3

Table 4.3: Mean Response on the extrinsic determinants of science teachers to retention in public secondary school in Minna metropolis.

No	Items	N	$\bar{x}$	S.D	Decision
1	Lack of transparency in hiring qualified teachers	132	3.98	0.810	Agreed
2	Due processes are not followed during recruitment of teachers	132	3.93	0.793	Agreed
3	Low social status accorded to the teaching profession	132	4.46	0.647	Agreed
4	Family resettlement (migration)	132	3.93	0.774	Agreed
5	Young teachers' leaves for employment in better paying jobs.	132	4.12	0.847	Agreed
6	Teachers leave their profession to acquire improvement in academic qualification.	132	4.58	0.495	Agreed
7	Gender discrimination	132	2.70	1.296	Disagreed
8	Poor school environment	132	4.11	0.826	Agreed
9	Long distance of school from my home location.	132	3.55	1.006	Agreed
10	Lack of professional development opportunities for Teachers	132	3.11	1.391	Agreed
			3.86		

Decision Mean = 3.00

Table 4.3 reveals the Mean Response on the extrinsic determinants of science teachers to retention in public secondary school in Minna metropolis. Ten (10) items were listed, Nine (9) of the items has high mean scores which were above benchmark of 3.0. Items with higher Mean rating includes item 3: Low social status accorded to the teaching profession ($\bar{x}$ = 4.46, SD = 0.647) and item 6: Teachers leave their profession to acquire improvement in academic qualification. ($\bar{x}$= 4.58, SD = 0.495), while item 7: Gender discrimination ($\bar{x}$ = 2.70 and SD = 1.269), this shows that the science teachers disagreed with the item. The findings also show the grand mean of 3.86 which indicates that Science teacher's retention in public secondary schools in Minna metropolis, Niger state can be as a result of extrinsic motivational factors.

Research Question Four: What are the intrinsic determinants of science teachers to retention in public secondary school in Minna metropolis, Niger state??

The descriptive statistics of Mean and Standard Deviation was used to answer this research question and the summary of the results is presented in table 4.4

Table 4.4: Mean Response on the intrinsic determinants of science teachers to retention in public secondary school in Minna metropolis

No	Items	N	$\bar{x}$	S.D	Decision
1	Low salary	132	4.07	0.840	Agreed
2	Late payment of salary	132	4.07	0.764	Agreed
3	Lack of teachers participation in decision making Process	132	3.73	0.872	Agreed
4	Excessive workload	132	4.59	0.494	Agreed
5	Student discipline referral	132	4.05	0.785	Agreed
6	Inadequate access to rest and holiday	132	3.72	1.021	Agreed
7	Posting to rural and remote area/zones as primary place of assignment	132	4.55	0.584	Agreed
8	Other issues related to health and medical challenges	132	3.91	0.805	Agreed
9	Inadequate years of teaching experience	132	4.02	0.886	Agreed
10	Unequal work distribution or dual behavior of my supervisor in the school of teaching.	132	4.42	0.689	Agreed
			4.11		

Decision Mean = 3.00

Table 4.4 reveals the Mean Response on the intrinsic determinants of science teachers to retention in public secondary school in Minna metropolis. All items produced high mean scores which were above bench mark of 3.0. Items with higher Mean rating includes item 4: Excessive workload ($\bar{x}$ = 4.59, SD = 0.494), item 7: Posting to rural and remote area/zones as primary place of assignment. ($\bar{x}$ = 4.55, SD = 0.584). The table also reveals

grand mean of 4.11 which indicates that Science teacher's retention in public secondary schools can be as a result of intrinsic motivational factors

Research Question Five: What are the strategies of improving science teacher's retention in public secondary schools in Minna metropolis, Niger state?

The descriptive statistics of Mean and Standard Deviation was used to answer this research question and the summary of the results is presented in table 4.5

Table 4.5: Mean Response on the possible strategies of improving science teachers' retention in public secondary schools in Minna metropolis.

No	Items	N	$\bar{x}$	S.D	Decision
1	Teacher's salaries should be increased to a very reasonable extent.	132	4.15	0.860	
2	There should be provision of professional development opportunities for teachers.	132	3.49	1.030	
3	There should be equal distribution of work among teachers	132	2.96	1.384	
4	There should be reduction in the workload of teachers.	132	3.86	0.926	
5	Lack of professional development opportunities for teachers.	132	3.42	1.085	
6	Teacher's salaries and allowances should be paid on time.	132	3.21	1.409	
7	Teaching profession should be position in such a way that the masses see it as a great profession and accord it with great respect.	132	3.79	0.973	
8	Teachers should be allowed to participate in key decisions that affect them.	132	3.88	0.989	
9	School location is a major factors for teachers retention	132	3.48	1.023	
10	Teachers years of experience is a key factor for retention	132	2.99	1.390	
			3.52		

Decision Mean = 3.00

Table 4.5 reveals the Mean Response on the possible strategies of improving science teachers' retention in public secondary schools in Minna metropolis. Ten (10) items were listed, Eight (8) of the items had high mean scores which were above benchmark of 3.0. Items with higher Mean rating includes item 1: Teacher's salaries should be increased to a very reasonable extent. ($\bar{x}$ = 4.15, SD = 0.860) and item 8: Teachers should be allowed to participate in key decisions that affect them. ($\bar{x}$= 3.88, SD = 0.989), while item 3: There should be equal distribution of work among teachers ($\bar{x}$ = 2.96 and SD = 1.030) and item 10: Teachers years of experience is a key factor for retention ($\bar{x}$ = 2.99 and SD = 1.390), this shows that the science teachers disagreed with the items. The findings also show the grand mean of 3.52which indicates most Science teachers in public school retention can be as a result of possible strategies.

4.2   Hypotheses Testing

Hypothesis One (HO$_1$): There is no significant difference between the influence of intrinsic and extrinsic determinants of science teacher to attrition in public secondary schools in Minna metropolis, Niger state.

To test this null hypothesis, ANOVA on the influence of intrinsic and extrinsic determinants of science teacher to attrition in public secondary schools in Minna metropolis as presented in Table 4.6.

Table 4.6: Summary of ANOVA Result of difference between the influence of intrinsic and extrinsic determinants of science teacher to attrition in public secondary schools in Minna metropolis

Group	Sum of Square	Df	Mean Square	F	p-value
Between Group	8.015	1	8.015	0.658	0.418
Within Group	3189.742	262	12.175		
Total	3197.758	263			

* = significant at 0.05 level

Table 4.6 shows the ANOVA results of difference between the influence of intrinsic and extrinsic determinants of science teacher to attrition in public secondary schools in Minna metropolis and the table revealed that $F(1, 262) = 0.658$, $P>0.05$. On this basis hypothesis one was accepted. Therefore, there was no statistical significant difference between the influence of intrinsic and extrinsic determinants of science teacher to attrition in public secondary schools in Minna metropolis.

Hypothesis Two (HO$_2$): There is no significant difference between the influence of intrinsic and extrinsic determinants of science teacher to retention in public secondary schools in Minna metropolis, Niger state.

To test this null hypothesis, ANOVA on the influence of intrinsic and extrinsic determinants of science teacher to retention in public secondary schools in Minna metropolis as presented in Table 4.7.

Table 4.7: Summary of ANOVA Result of difference between the influence of intrinsic and extrinsic determinants of science teacher to retention in public secondary schools in Minna metropolis

Group	Sum of Square	Df	Mean Square	F	p-value
Between Group	464.015	1	464.015	37.976	0.000
Within Group	3201.258	262	12.219		
Total	3665.273	263			

* = significant at 0.05 level

Table 4.7 shows the ANOVA results of difference between the influence of intrinsic and extrinsic determinants of science teacher to retention in public secondary schools in Minna metropolis and the table revealed that F $(1, 262)$ = 37.976, P<0.05. On this basis, hypothesis two was rejected. Therefore, there is a statistical significant difference between the influence of intrinsic and extrinsic determinants of science teacher to retention in public secondary schools in Minna metropolis.

4.3   Summary of Findings

Findings that originated from this study revealed that:

1.   Attrition of science teachers in public secondary in Minna metropolis is as a result of extrinsic motivational factors.

2.   Attrition of science teachers in public secondary in Minna metropolis is as a result of intrinsic motivational factors.

3.   Retention of science teachers in public secondary in Minna metropolis can be as a result of extrinsic motivational factors.

4.   Retention of science teachers in public secondary in Minna metropolis can be as a result of intrinsic motivational factors.

5. Science teachers retention in public secondary school in Minna metropolis can be as a result of possible strategies for improving the work environment.

6. Therefore, there is no statistical significant difference between the influence of intrinsic and extrinsic determinants of science teacher to attrition in public secondary schools in Minna metropolis.

7. Therefore, there is a statistical significant difference between the influence of intrinsic and extrinsic determinants of science teacher to retention in public secondary schools in Minna metropolis

4.4 Discussion of Findings

Finding reveals that Science teachers in Minna metropolis public school attrition and retention is as a result of extrinsic determinants. This finding is in agreement with the following researches: Brown *et al.,* (2018) and Kelly (2018) who found out that that teachers attribute part of their decision to leave on administration behaviors, the researchers further stated that the teachers' (a) Excessive pressure, (b) Corrupt administration practices, (c) Disrespect to teachers, and (d) Reduction of teacher moral which leads to Science teachers 'attrition and retention in schools. All the above mentioned are result of extrinsic determinants.

Finding reveals the Mean Response on the intrinsic determinants of Science teachers to attrition and retention in public secondary school in Minna metropolis. Many teachers leave their job because of principal behaviour and Teachers with higher educational qualifications tend to leave the teaching job more than their counterparts with lower qualifications. This finding agrees with the following researches: Brown *et al.,* (2018) and

Kelly (2018) who found out that that teachers attribute part of their decision to leave on administration behaviors, the researchers further stated that the teachers' (a) Excessive pressure, (b) Corrupt administration practices, (c) Disrespect to teachers, and (d) Reduction of teacher moral which leads to Science teachers' attrition and retention in schools. The above mentioned can be attributed lack of extrinsic determinants.

Hypothesis one, the finding indicated no statistical significant difference between the influence of intrinsic and extrinsic determinants of science teacher to attrition in public secondary schools in Minna metropolis. This finding is in concurrence with the investigation of Efang (2019), that state no relationship between demographic variables and teaching performance of teachers. By implication science teacher to attrition in public schools can be because of the absence or influence of both intrinsic and extrinsic determinants in the teaching profession.

Hypothesis two, the finding indicated there was a statistical significant difference between the influence of intrinsic and extrinsic determinants of science teacher to retention in public secondary schools in Minna metropolis. This finding is not in accordance with the investigation of Efang (2019), that state no relationship between demographic variables and teaching performance of teachers. By implication science teacher to retention in public schools can be happened as a results of the absence or influence of either intrinsic or extrinsic determinants in the teaching profession from the findings of this study.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Findings of this study have revealed that Science teachers in Minna metropolis public school attrition are result of extrinsic determinants. It reveals further that Science teachers in Minna metropolis public school attrition is as a result of intrinsic determinants and Science teachers in Minna metropolis public school retention can be as a result of extrinsic determinants. These reasons for science teachers' attrition and retention are due to fact that almost extrinsic and intrinsic determinants that can keep theses science teachers from switching their jobs are not in place or are not adequate.

5.2 Recommendations

Based on the findings, the following recommendations are made:

1. The government should make deliberate and sincere efforts to recruit and retain the best caliber of people into the teaching service by improving teachers' conditions of service and improving the social status of teachers.

2. Provision of accommodation, with amenities such as potable water, electricity and health services for rural schools will help entice new young teachers to accept postings to the rural areas.

3. Government should step up the recruitment of qualified teaching staff in vital core subjects that lack teachers in order to reduce excessive workloads for the limited number of existing teachers in these subjects.

4. Human capital development programmes through in-service training and study leave with pay must be emphasized to help teachers professionally actualize themselves.

5. Indigenes of places with peculiar circumstances (such as remote and inaccessible areas) that teachers reject postings and transfers should be recruited to teach in their local environments.

5.3   Contributions to Knowledge

The findings of this research have added to the pool of knowledge in the following ways:

1. It has succeeded in establishing the relevance of intrinsic and extrinsic determinants to science teachers in public schools within Minna metropolis.

2. It has provided answers to the questions of why science teachers in public schools within Minna metropolis move from one job to another.

3. The study added to existing literature's in intrinsic and extrinsic motivational factors influencing science teachers to attrition and retention in public secondary schools in Minna metropolis, Niger state

5.4   Suggestions for Further Studies

For further researches in this area, the following suggestions are made:

1. This study focused on public schools within Minna metropolis. Similar study can examine the variables on higher institutions of learning within the country.

2. A replicate of this study can be conducted among other non-science subjects.

3. Similar study can be conducted on other psychological construct that may lead to public school teachers' attrition within the country.

REFERENCES

Adams, D. (2012). Regional Study of Trends, Issues and Policies in Education, *Final Report*, Manila: Asian, 56-57

Akyeampong, K., & Stephens, D. (2017). Exploring the backgrounds and shaping of beginning student teachers in Ghana: toward greater contextualization of teacher education. *International Journal of Educational Development*, 22, (3/4), 262–274.

Alliance for Excellent Education. (2012). Teacher attrition: A costly loss to the nation and to the states. Retrieved April 21, 2020, from http://www.a1l4ed.org/files/archive/publications/TeacherAttrition.pdf

Alvarez, B., Gillies J. & Bradsher M. (2013). Beyond Basic Education: Secondary Education in the Developing World, Washington DC: World Bank Institute and Academy for Educational Development.

Azuka, E. (2018). Teachers' Knowledge, Attitudes, Skills and Practices in Teaching HIV/AIDS Prevention, Impact Mitigation and Psychosocial Life Skills in Schools and Colleges, UNESCO/UNAIDS *Project on Integrating HIV/AIDS Prevention in School* Curricula, Lusaka: UNESCO..

Balogun, R. (2013). When school leaders support new teachers, everybody wins. Association for Supervision and Curriculum Development. *Update*, 42(5), 1, 6-7.

Bass, B. M., & Riggio, R. E. (2016). Transformational leadership. Mahwah, NJ: Lawrence

Boyd, D., Lankford, H., Grossman P., Loeb, S., &Wycoff, J. (2017). Who leaves? The implications of teacher attrition for school achievement. Retrieved April 24,2019, from http://209.85.165.104/searchlq—cache:1

Brown, M, Gonzalez, L. E., & Slate, J. (2018). Teachers who left the teaching profession: A qualitative understanding. The Qualitative Report, 13(1), 1.

Buckley, J., Schneider, M., & Shang, Y. (2016). Fix it and they might stay: school facility. Retrieved April 22, 2018, from http: /www.edfacilties.org pubs! Teacher retention.

Chainson, J.C. (2018). Professional development for school principals: The Impact of U.S. Educational Reform, *International Journal of Educational Research*, 29, 4, 323–333.

Claycomb, C., & Hawley, W. (2013). Recruiting and retaining effective teachers for urban schools: Developing a strategic plan for action. Washington, DC: Educational Research and Improvement.

Coggshall, J. G. (2013). Prospectus for the profession: Public opinion research on teachers. Washington, DC: National Comprehensive Center for Teacher Quality.

Condy, A. (2012). Improving the Quality of Teaching and Learning through Community Participation: Achievements, Limitations and Risks—Early Lessons from the Schooling Improvement Fund in Ghana, *Social Development Working Paper* No.2, and London: DFID.

Connors, N. A. (2020). If you don't feed the teachers they eat the students: Guide to success for administrators and teachers. Nashville, TN: Incentive Publications.

Creswell, J. (2017). Qualitative inquiry and research design: Choosing among five approaches. Lincoln, NE: University of Nebraska.

Darling-Hammond, L., & Youngs, P. (2010). Defining "highly qualified teachers:" What does "scientifically-based research" actually tell us? *Educational Researcher*, 31(9), 13-25.

Dinham, C. (2012). Literature review on teacher transfer and turnover. Miami, FL: Miami-Dade County Public School. Retrieved April 15, 2018, fromhttp://drs.dadeschools.netJ Reports/Teacher Turnover.pdf

Donovan, B. (2013). Union head: New teachers need training. Gallup Independent Web Edition. Retrieved October 28, 2016 from http://www.gallupindependent.comll 2-08-00.html

Earthman, G. (2012). School facility conditions and student academic achievement. UCLA: Institute for Democracy, Education, & Access. Retrieved January, 10,2019, fromhttp://repositories.cdlib.orglidea/wws/wws-rrOO8- 1002

Edmonds, R. (1979). Effective schools for urban poor. *Educational Leadership*, 37, 15-24

Efang, G. (2019). *Statistical Profile of Education in Sub-Saharan Africa*, Paris: ADEA Retrieved 25 August 2020 from http:// www.adeanet.org/spessa99/

Farrell, J.P., & Oliveira, J.B. (Eds.) (2013). Teachers in Developing Countries: Improving Effectiveness and Management Costs, Washington DC: The World Bank. FAWE (*Forum for African Women Educationalists*)

Federal Republic of Nigeria (2016). Secondary Education Development: Education Sector Reform and Development Programme, *Technical Annex* No 5. Garki Abuja: Ministry of Education.

Feiman-Nemser, S. (2016). From Preparation to Practice: Designing a Continuum to Strengthen and Sustain Teaching, *Teachers College Record*, 103, 6.

Flowers, T. T. (2013). Why do public school teachers leave their profession? *Dissertation Abstracts International*, UMI No. 3100237.

Fowlkes, Y. L. (2013). The dynamics of creating and sustaining learning communities. *Dissertation Abstracts International*, UMI No. 3139256.

Garson, P. (2013). Teacher Deployment: What Went Wrong? in Fieldgate, K. (Ed.) *Helping to Establish a Culture of Learning and Teaching in South Africa, Guateng*, South Africa: Education Africa.

Gaynor, C. (2012). Decentralization of Education: Teacher Management, Washington DC: The World, 56-58

Gaynor, C. (2012). Irish Aid and Education: Strategic Challenges—Setting Priorities for Irish Aid Assistance to Education in the Developing World, Dublin: Ireland Aid Advisory Committee.

Guarino, C., Santibanez, L., & Daley, G. (2014). Teacher recruitment and retention: A review of the recent empirical literature. *Education Resource*, 76(2), 173-208.

Halliday, G. (2013). "Developing a Professional Teaching Service," London: Commonwealth Secretariat and Association for the Development of Education in Africa

Hannaway, J. (2012). "The Problems and Promise of Top-Down Decentralization: The Case of India," Paper presented at the World Bank Seminar on Educational Decentralization, 2, 2011, Washington DC.

Hanushek, E., Kain, J., & Rivkin, S. (2014). Why public schools' loose teachers. *Journal of Human Resources*, 39(2),326-354.

Henke, K., Samuel, M., & Paula, T. (2011). Education and Corruption, Paper Presented at the International Forum of the Association for the Study of Higher Education, 20, 2012, Sacramento CA

Hirsch, E. (2015). Arizona teacher working conditions: Designing schools for educator and student success. *Results of the 2006 phase-in teacher working conditions survey*. Hillsborough, NC: Center for Teaching Quality.

Hirsch, E., & Emerick, S. (2017). Teacher working conditions are student learning conditions: *A report on the 2006 North Carolina teacher working conditions survey*. Hilisborough, NC: Center for Teaching Quality.

Ibunkun, H. (2014). The workplace matters: Teacher quality, retention, and effectiveness. Washington, DC: National Education Association.

Imazeki, J. (2019). Teacher salaries and teacher attrition. *Economics of Education Review*, 24(4), 431449.

Ingersoll, R. M. (2012). Is there really a teacher shortage? Center for the Study of Teaching and Policy. Seattle, WA: University of Washington.

Jarzabowski, L. M. (2012). The social dimensions of teacher collegiality. *Journal of Educational Enquiry*. Retrieved April 23, 2019, from http:/www.literary.unisa.edu.au/jee/Papers/JeEVo13No2

Jones, M. (2014). Why teachers leave secondary education: A descriptive analysis of the 2010 National Center for Education Statistics from 2001 to 2011.*Unpublished Doctoral Dissertation*, Seton Hall University, South Orange, NJ.

Kelly, S. (2014). An event history analysis of Teacher attrition: Salary, teacher tracking, and socially disadvantaged schools. *Journal of Experimental Education*,72(3), 195-220.

Kitavi, M., & Westhuizen P.C. (2016)."Problems Facing Beginning Principals in Developing Countries: A Study of Beginning Principals in Kenya, *International Journal of Educational Development*, 17, 3, 251–63.

Kogoe, A. (2016). "Perceived Administrative Needs of School Executives in Togo," *Comparative Education*, 22, 2, 149–58.

Krieg, J. (2014). Teacher quality and attrition. Economics of Education Review, 25(1)Retrieved August 16, 2019, from http://www.eric.ed.gov/ERICWebPortal~ome.portal?nfpbtrue&ERICExtSearch~SearchValue_0Krieg

Kunje, D (2012). "The Nigeria Integrated In-service Teacher Education Programme: An Experiment with Mixed Mode Training, *International Journal of Educational Development*, 22, 305–20.

Leonard, P., & Leonard, L. (2013). The continuing trouble with collaboration: Teachers talks. Current Issues in Education, 6. Retrieved April 23, 2019,fromhttp://cie.ed.asu.edulvolume6/number15/

Lind, V. (2018). Teacher resiliency: A key to career longevity. Clearing House,75(4), 202 207.

Luczak, J. M. (2014). Who will teach in the 21st Century? Beginning teacher training experiences and attrition rates. *Dissertation Abstracts International,* 65(09), 3343.

Macdonald, D. (2013). Teacher Attrition: A Review of Literature, *Teaching and Teacher Education,* 15.

Marshall, I. (2012). A study of the factors contributing to the attrition rate of public-school teachers in Texas. *Unpublished Doctoral Dissertation*, Texas A & M University, Corpus Christi, TX.

Monk, M. (2019). In-Service for Teacher Development in Sub-Saharan Africa: A Review of the Literature Published between2018–2019, London: DFID

Olson, L. (2012). Finding and keeping competent teachers. Quality Counts Report. Education Week. Retrieved January 8, 2020, from http://rcarchive.edweek.org/sreports/qc00/templates/articIe.cfm~slug=intro.htm

Peck, B. J. (2012). A high school principal's challenge: Toward work environments that enhance new teacher satisfaction and retention. *Dissertation Abstracts International*, UMI No. 3072824.

Pentrose, P. (2020).Planning and financing sustainable education systems in sub-Saharan Africa, London: DFID.

Reeves, D. (2014). Accountability for learning: How teachers and school leaders can take charge. Alexandria, VA: ASCD.

Rondinelli, D., & Puma, M. (2015). *Decentralizing the Governance of Education*, Washington DC: USAID Advancing Basic Education and Literacy (ABEL) Project, *Academy for Educational Development* (AED), and Abt Associates.

Samuel, M. (2019). Planning Education in and after Emergencies, Paris: UNESCO, IIEP. Smith, A., and McDonagh, E. (2017). *The Reality of HIV/AIDS*, Christian Perspectives on Development Issues, Dublin/London: Trocaire/ Veritas/CAFOD.

Sanchez, C. M. (2017). Teacher turnover: A world of unmet needs. *Unpublished doctoral dissertation,* Arizona State University, Tempe, Arizona.

Schlechty, P., & Vance, V. (2014). The organizational context of school systems and the functions of staff development. In G. Griffin (Ed.), Staff development: yearbooks of the national society for the study of education. Chicago: University of Chicago Press.

Shields, C. M. (2016). Creating spaces for value-based conversations: The role of school leaders in the 21St century. *International Studies in Educational Administration* 34(2), 62-81.

Spinella, F. A. (2013). The principal's role in new teacher retention. *Dissertation Abstracts International*, UMI No. 3093178.

Tuchman, B.W. (2013) Measuring Educational Outcomes Fundamental of Testing. Atlanta: Harcourt Brace Jovanovich inc.

Turner, D. C. (2013). Teacher attrition in North Carolina Schools. *Dissertation Abstracts International*, UMI No. 3117427.

Tye, B. B., & O'Brien, L. (2012). Why are experienced teachers leaving the profession? Phi Delta Kappan, 84(1), 24-32.

Venkatesh, B. (2018). Leadership transitions: The key to organizational success. Academic Leadership, 6(3).

Warren, S. B. (2015). Variables affecting the recruitment and retention of male primary and secondary teachers. *Unpublished Doctoral Dissertation*, Union University, Jackson, Texas

Wilson, S.M., Floden, R.E., & Ferrini-Mundy, J. (2015). "Teacher Preparation Research: Current Knowledge, Gaps and Recommendations," East Lansing: Michigan State University, Center for the Study of Teaching and Policy. Retrieved from http://www.ctpweb.org

QUESTIONNAIRE ASSESSING EXTRINSIC AND INTRINSIC MOTIVATIONAL FACTORS INFLUENCING SCIENCE TEACHERS ATTRITION AND RETENTION IN PUBLIC SECONDARY SCHOOLS IN NIGER STATE

(QAMOF)

Dear Respondent,

This questionnaire is designed to elicit your responses on Extrinsic and Intrinsic factors that could influence attrition and Retention of Science Teachers in Niger State. Therefore, the researcher requests you to give an honest and sincere opinion that will provide accurate information.

Finally, the information provided can only assist the researcher in having accurate data/information for this research only. Therefore, the identity of respondents will remain the prerogative of the researcher only.

Thank you and God bless you. Ameen,

SECTION A: DEMOGRAPHY

1. Teacher Qualification: NCE   ( )
   B. Sc   ( )
   Master   ( )
   Others (Indicate) …………………………

2. Gender: Male ( )   Female ( )

3. Year of Teaching Experience: 1-10 ( )   11-20 ( )   21 and Above ( )

SECTION B:

ITEMS ON EXTRINSIC DETERMINANT OF SCIENCE TEACHERS TO ATTRITION IN PUBLIC SECONDARY SCHOOL IN MINNA METROPOLIS NIGER STATE

NOTE: SA – Strongly agree, A – Agree, N- neutral D – Disagree, SD – Strongly disagree.

S/N	EXTRINSIC DETERMINANTS TO ATTRITION	SA(5)	A(4)	N(3)	D(2)	SD(1)
1.	Teachers leave their job temporarily on secondment to other government establishment.					
2.	Teachers leave the teaching profession to work in new areas not related to teaching.					
3.	High performing teachers leave when they are appointed into political offices					
4.	Many science-based teachers leave teaching to pursue other careers					
5.	Some teachers remain in their job and do other business.					
6.	Teachers leave their job due to inadequate instructional materials and facilities					
7.	Student discipline referrals is a major reason why teachers seek new job offer in other organization					
8.	Some teachers take teaching as a temporal job while awaiting other jobs					
9.	Teaching job is the only alternative to my survival at the moment.					
10.	Principal behaviours and other organizational matter is a key factor for teachers seeking other job alternatives					

SECTION C
ITEMS ON INTRINSIC DETERMINANT OF SCIENCE TEACHERS TO ATTRITION IN PUBLIC SECONDARY SCHOOL IN MINNA METROPOLIS NIGER STATE

NOTE:SA – Strongly agree, A – Agree, N- neutral D – Disagree, SD – Strongly disagree.

S/N	INTRINSIC DETERMINANTS TO ATTRITION	SA(5)	A(4)	N(3)	D(2)	SD(1)
1	Many teachers leave their job because of principal behaviour					
2	Teachers feel uncomfortable when they are not involved in policy making in the school					
3	Excessive workload is a determinant for teachers' attrition in public school					
4	Lack of appraisal from educational authorities discourages teachers and may lead to attrition					
5	Teachers with higher educational qualification tend to leave the teaching job more than their counterpart with lower qualifications					
6	Many teachers are in the teaching industry because of high level of unemployment					
7	student discipline referral plays a major role in science teachers' attrition in public schools					
8	School environment encourages teachers to stay in the job					
9	Teachers are carried away by more lucrative opportunities with higher pay					
10	Others resign their job permanently					

SECTION D
ITEMS ON EXTRINSIC DETERMINANT OF SCIENCE TEACHERS RETENTION IN PUBLIC SECONDARY SCHOOL IN MINNA METROPOLIS NIGER STATE

NOTE:SA – Strongly agree, A – Agree, N- neutral D – Disagree, SD – Strongly disagree.

S/N	EXTRINSIC DETERMINANTS TO RETENTION	SA(5)	A(4)	N(3)	D(2)	SD(1)
1	Lack of transparency in hiring qualified teachers					
2	Due processes are not followed during recruitment of teachers					
3	Low social status accorded to the teaching profession					
4	Family resettlement (migration)					
5	Young teachers leave for employment in better paying jobs.					
6	Teachers leave their profession to acquire Improvement in academic qualification.					
7	Gender discrimination					
8	Poor school environment					
9	Long distance of school from my home location.					
10	Lack of professional development opportunities for Teachers					

SECTION E
ITEMS ON INTRINSIC DETERMINANT OF SCIENCE TEACHERS TO RETENTION IN PUBLIC SECONDARY SCHOOL IN MINNA METROPOLIS NIGER STATE

NOTE:SA – Strongly agree, A – Agree, N- neutral D – Disagree, SD – Strongly disagree.

S/N	INTRINSIC DETERMINANTS TO RETENTION	SA(5)	A(4)	N(3)	D(2)	SD(1)
1	Low salary					
2	Late payment of salary					
3	Lack of teacher's participation in decision making Process					
4	Excessive workload					
5	Student discipline referral					
6	Inadequate access to rest and holiday					
7	Posting to rural and remote area / zones as primary place of assignment					
8	Other issues related to health and medical challenges					
9	Inadequate years of teaching experience					
10	Unequal work distribution or dual behavior of my supervisor in the school of teaching.					

POSSIBLE STRATEGIES FOR IMPROVING TEACHERS RETENTION

NOTE:SA – Strongly agree, A – Agree, N- neutral D – Disagree, SD – Strongly disagree,

S/N	SCIENCE TEACHERS' PERCIEVE THAT	SA(5)	A(4)	N(3)	D(2)	SD(1)
1.	Teacher's salaries should be increased to a very reasonable extent.					
2.	There should be provision of professional development opportunities for teachers.					
3.	There should be equal distribution of work among teachers					
4.	There should be reduction in the workload of teachers.					
5.	Lack of professional development opportunities for teachers.					
6.	Teacher's salaries and allowances should be paid on time.					
7.	Teaching profession should be position in such a way that the masses see it as a great profession and accord it with great respect.					
8.	Teachers should be allowed to participate in key decisions that affect them.					
9.	School location is a major factor for teachers' retention					
10.	Teachers years of experience is a key factor for retention					

NIGER STATE MINISTRY OF EDUCATION, MINNA
LIST OF SCIENCE TEACHERS IN PUBLIC SECONDARY SCHOOLS IN MINNA METROPOLIS, NIGER STATE

S/N	NAME OF SCHOOL	MALE	FEMALE	TOTAL
1	GOVERNMENT TECHNICAL COLLEGE MINNA	11	09	20
2	MARYAM BABANGIDA GIRLS SCIENCE COLLEGE	17	09	26
3	MODEL SCIENCE COLLEGE TUDUN FULANI	11	10	22
4	FR. O'CONNELL SCIENCE COLLEGE, MINNA	14	10	24
5	GOVERNMENT DAY SCIENCE COLLEGE TUNGA, MINNA	12	11	23
6	GOVERNMENT GIRLS SCIENCE COLLEGE BOSSO ROAD, MINNA	13	10	23
7	GOVERNMENT VOCATIONAL TRAINING CENTER	10	08	18
8	ABDULLAHI DADA SECONDARY SCHOOL MAIKUNKELE	11	10	21
9	BOSSO SECONDARY SCHOOL MINNA	09	09	18
10	DAY SECONDARY SCHOOL CHANCHAGA MINNA'B'	08	04	12
11	DAY SECONDARY SCHOOL MAIKUNKELE 'A'	09	06	15
12	DAY SECONDARY SCHOOL MAITUMBI MINNA	12	07	19
13	FEDERAL GOVERNMENT COLLEGE MINNA	19	11	30
14	GOVERNMENT ARMY DAY SECONDARY SCHOOL	11	06	17
15	GOVERNMENT SCIENCE COLLEGE CHANCHAGA	15	09	24
16	GOVERNMENT SENIOR SECONDARY SCHOOL KAMPALA	10	04	14
17	HILLTOP MODEL SECONDARY SCHOOL	16	08	24
18	NIGER STATE SCHOOL FOR SPECIAL EDUCATION MINNA	10	03	13
19	SHEIKH MUHAMMAD SANBO COLLEGE OF ARTS AND ISLAMIC STUDIES TUDUN FULANI MINNA	06	04	10
20	AHMADU BAHAGO SECONDARY SCHOOL MINNA	09	08	17
21	DAY SECONDARY SCHOOL BARIKIN SALE	10	04	14
22	DAY SECONDARY SCHOOL KWASAU	07	04	11
23	DAY SECONDARY SCHOOL LIMAWA	11	09	20
24	GOVERNMENT DAY SECONDARY SCHOOL, BOSSO ROAD	12	07	19
25	GOVERNMENT GIRLS SECONDARY SCHOOL MINNA	17	05	22
26	WOMAN DAY COLLEGE	11	02	06
27	ZARUMAI MODEL SCHOOL	13	09	22