CHAPTER ONE

INTRODUCTION

Background to the Study

The need to provide a safe school for teachers, students and all stakeholders in the school system cannot be overemphasized. This is because of the importance of the school as an agent of education and reformation. According to Burton (2008), a school can generally be seen as a means to develop and strengthen individuals with pro-social attitudes and as a place where individuals are prepared for the part they are going to play in society. In the same vein, Van-Jaarsveld (2011) defined schools as the institutions where individuals go to learn, develop and get an education in order to prepare them for their futures. In Nigeria, formal schooling is carried out in three levels namely; basic (which includes primary schools and junior secondary 1-3), senior secondary and tertiary levels of education.

Secondary school education is the phase of education students receive after primary school and before the tertiary education. Apart from serving as the link between primary and tertiary education, it provides opportunity for a child to acquire additional knowledge, skills and traits beyond the primary level. Yusuf (2009) opined that the aim of secondary education is to develop in a child better literacy, numeracy and communication skills. In other words, the broad goals of secondary education aimed at preparing people for useful living in the society and for higher education have made it imperative that it should, among others, supply trained manpower in the applied science, technology and commerce at sub-professional levels. Furthermore, secondary education helps to inspire students with the desire for self-improvement and achievement of excellence; raises a generation of people who can think for themselves, respect the views and feelings of others and respect the dignity of labour (Federal Republic of Nigeria, 2013). However, it appears that the insecurity and unsafe school environment is a problem to achieving the above aims of secondary education.

Lack of respect for the authority of teachers and others in disciplinary acts threatens the teachers and the rights of other students and generally affects the quality of secondary school education in Nigeria (Ike, 2015). This is because teachers are disrespected and abused by both the parents and students in the school and in some cases the principal do not provide protection for their teachers. Increasingly, students are victimized in schools by fellow students, teachers, cultists and kidnappers. This is further enunciated by the plethora of school violence in some parts of Anambra State. Sadly, cultism and cult activities have been on the increase among secondary school students in Anambra State (Usman, 2016). According to Usman, there is rarely any academic session without reported incidents of cult related violent clashes in most schools in the country, which usually result in the loss of lives of promising youths. This situation is not different in Anambra State where the

State Police Command has consistently arrested young boys and girls of secondary school age in connection with all manners of cult related activities (Kalu, 2016).

Other security threats in secondary schools include bullying, cultism, exploitation of students by teaching staff and kidnapping. These threats portend a big challenge to the development of secondary education in Nigeria (Ike, 2015). Furthermore, issues concerning school safety and security are not limited to violence in the school. Ajayi (2007) explained that there are other security threatening issues that secondary schools face. Ajayi noted that the past decades have witnessed numerous tragic events in all part of the world. Haruna (2014) noted that other threats like robbery, theft, arson, extortion, strike actions, hate, crimes, demonstrations and rumours are other threats which can lead to lack of security or insecurity in schools and consequently violence and vandalism. This situation has increased the call by stakeholders in education on the need for the adoption of effective security practices by principals and managers of secondary schools in Nigeria and Anambra State in particular so as to forestall incidents of security threats on students and staff.

Security is defined as the degree of protection against danger, damage, loss and crime. In the views of Van Jaarsveld (2011), security is a form of protection where a separation is created between the assets and the threat. Thus, security is the precaution taken to safeguard an environment from impending danger or injury. It is a measure taken to prevent dangers and threats in order to make the school and other environments safe. A place where there is security is a place of safety (Cowan, Pollitt, Rossen & Vaillancourt, 2013). The evidence of a secured school is the existence and execution of security plans which are well drawn policies of protection that should be practised within the school. Security in school can be explained as a situation where students and educators are not exposed to any form of danger or risk of physical or moral aggression, accident and theft. According to Campbell (2007), school security refers to the strategies and procedures required to coordinate the diverse activities of the school, protect and manage school violence, reduce security risks and ensure that the school environment is safe for teaching and learning.

School security is the establishment and maintenance of protective measures that ensure a state of inviolability from hostile act or influences (Mentiki, 2012). This is to say that security measures are to be reinforced to keep students, teachers, other workers and the environment free from harm and danger. Creating and maintaining secure environment needs clear understanding and management by all students, teachers and non teaching staff. According to Adejoke (2014), it is essential that scholars and members of staff feel safe at school and it is for this reason that schools should have security plans in place which would be revised regularly. School with clear norms and expectations, fair procedures and the involvement of members of the community (educators, parents, learners, principals, administrators and community service) are less likely to experience high level of security threats (Rogers, 2009).

Despite the benefits of maintaining security in secondary schools in Nigeria and Anambra State in particular, it appears that school principals, who are the chief executive officers of public secondary schools, are failing to apply adequate security management practices or measures in their schools. This claim is further evidenced by the prevalent incidence of bullying, gansterism and cultism which is prevalent in secondary schools (Ojo, 2016). Ojo further noted that principals must be concerned not only with the quality of instruction, but also with the maintenance of safety and security in the school. Michele, Water, Sussan and Atartins (2007) asserted that the principal should endeavour to improve the school environment through the application of security management practices so that the teachers could feel confident, respected and safe. This proves that the school is well secured and well administered.

School administration, thus refers to the control and co-ordination of man and materials resources of the school in order to attain the stipulated objectives. According to Ojobor (2010), school administration is the application of administrative principles to the solution of school problems. Ogbonna (2008) further defined school administration as the utilization of human, financial and materials resources in the realization of the school objectives. Administration therefore refers to the utilization of all resources or the directing and controlling the affairs of the school to attain the stipulated objectives. In this regard, a well-administered or managed school begins with advanced planning by the head of the school and the teachers to ensure that teachers have adequate knowledge of their subjects and that security needs of students and staff are guaranteed. The principal is expected to treat school security as a priority to ensure its adequacy in the environment. Managing school security is achieved through policies and programmes that embrace all stakeholders and demands that principals should be up-to-date with the modern security management practices that will help in making their schools safe and secure for teaching and learning.

School security management practice is a combination of strategies and procedures required to co-ordinate the diverse activities of the institution in order to achieve safety (Van Jaarsveld, 2011). Hence, security management can be defined as the plan for the protection that is given to the stakeholders (learners, educators and managers) within the school from crime and accidents by means of well-drawn policies which should be well managed (Trump, 2010). In the context of this study, school security management involves measures and procedures put in place to ensure the safety of lives and facilities. One of the important duties of the school principal is to ensure that safety programmes are implemented and that necessary steps are taken to keep the school safe whenever a potentially dangerous situation arises in the school (Haruna, 2014). Furthermore, Van Jaarsveld (2011) highlighted four security management practices for ensuring school safety as follows: school security management procedures, physical security management practices, human security management practices and technological security management practices. It is based on these standards of security management practices that this assessment was carried out. The school security procedures is one of the important security management practices that help to ensure safety in schools.

Procedures are vital part of security system in any institution. It sets guidelines and provides direction as to how situations should be effectively managed and handled (Rogers & Schoeman, 2010). The policy clearly states what the authorities of the various members of the school community as well as their limitations or restrictions are. Policies are the goals and objectives the school is set to achieve and, therefore, assist with the decision-making. Procedures are the ‘guidelines’ that inform everybody how the objectives in the policy should be carried out and provide instructions on the conduct of security activities. Procedures also involve the development and implementation of efficient measures to deal with those security/risk problems. In support, Rogers and Schoeman (2010) stated that a security risk analysis is conducted to identify vulnerable assets and security weaknesses. It is a process used to calculate the probability (likelihood) of security risks actually occurring and the impact that these risks would have should they occur. When security procedures are in place, it then provides a platform on which physical security measures are put in place to curb security threats in these schools.

Physical security management practices are implemented in schools to ensure the safety of lives and property. When physical security practices are correctly and effectively implemented by a school principal, maximum protection will be guaranteed. Physical security measures can be divided into three categories consisting of the outside perimeter measures, inner middle perimeter measures and the internal measures (Kole & Lombaard, 2008). The outside perimeter measures are found outside of the school building normally the perimeter (first line of defence) of the premises such as signs, fences and other barriers (barricades), lighting, alarms and patrols. The inner middle ring (inside) are the security measures used within the boundaries of the facility and can include fences and other barriers (walls), alarms, lighting (often with motion detecting capabilities), Close Circuit Television (CCTV) cameras, warning signs, doors, locks, burglar proofing on windows, security staff and access control systems. Lastly, the internal physical security measures are found within buildings and include alarms, CCTV cameras, turnstiles, windows and door bars, locks, safes, vaults, protective lighting and other barriers (such as security gate across a passage (Lombaard & Kole). These physical security tools are very essential to maintaining security in the school; however they can not function without human beings. Hence, the need for human security management practices.

The human security management practices are aspects of security management that deals with the use of human beings in preventing and combating security threats (Van Jaarsveld, 2011). According to Bitzer and Hoffman (2007), using human beings in security systems is often either overlooked or neglected completely. Despite the facts that human’s play a vital role in security. It is usually the humans that make the decision to take action and decide on what action to take during a crisis or emergency (Bitzer & Hoffman, 2007). Most technological practices will not be able to function successfully without a human component. For example, if an alarm is triggered at a school, a policeman or security guard will have to respond to the alarm in order for the technological aid to work effectively and for the intruder to be apprehended. Some of the human components in security could include guards, community and/or parental participation, school personnel, security officers, private security company personnel on contract who might also offer a rapid armed response service or police officers. As much as the human components of security are important, it is believed that the application of technology will help to improve their ability to ensure adequate security in the school.

Technological security management practices are aspects of security management that deals with the application of technological tools and equipment in preventing and combating insecurity (Mastisa, 2011). Van Jaarsveld (2011) opined that technological security management practices, as adjunct to physical security management, can be excellent tools and make great contributions to the safety of scholars and staff as well as reducing violence in schools. They should, however, be correctly applied within the school environment and maintained after the installation, otherwise they will not be effective. Security technologies that can be implemented within a school include closed circuit television (CCTV) systems, including the videoing and storing of video surveillance footage whether analogue or digital; intruder alarms; metal detectors or hand- held detectors; x-ray machines and/or card reader systems (Lombaard & Kole, 2008). These technologies can assist a school by providing information that would not otherwise be available, can free-up manpower and can, in-the-long-run, be cost- effective for a school. Nevertheless, Green in Van Jaarsveld (2011) observed that all school security problems cannot be solved merely by implementing and making use of security technologies. Green noted that factors within and outside a school could influence the effective application of security management in the school.

In this vein, Haruna (2014) posited that where the school climate is not positive, there will be many threats which will adversely affect the academic work of the school. Amanchukwu (2012) opined that demographic factors such as locations of schools and gender of the principal can give rise to many threats to the school community. According to Nyakundi (2012), school location impinges on school safety; schools located at the heart of the cities are more prone to violence than schools in isolated areas. According to Nyakundi, the reason for this is that the endemic crimes and crises in the cities will always spill into the schools. In another vein, Mastisa (2011) suggested that principals in urban schools will be faced with greater security threats than those in the rural area. This agreed with Khoury, Astor and Zena (2005) who observed that the location of a school can give rise to many threats to the school community. According to Mastisa (2011), principals in urban schools will be faced with greater security threats than those in the rural area. The yardstick for classifying schools as urban and rural was based on the population density. Population density refers to the measurement of population per unit area or unit volume. Thus, it refers to the number of people in the area. Furthermore, gender has also been advanced as an important factor that could influence principals' application of security management practices.

Gender plays important role in the way principals administer and manage security in their schools (Mastisa, 2011). Gender analysis recognizes that the realities of men's and women's lives are different, and that equal opportunities do not necessarily mean equal results. Oyoyo (2014) opined that gender can influence principals' decision-making capacity with regards to school management. However, these views have not been empirically proven to be the case among secondary school principals in Anambra State and thus require to be investigated.

Statement of the Problem

Despite the importance of school safety, there seems to be an upsurge of violence arising quite rapidly in schools. It seems that a new wave of mayhem in society has not spared the secondary schools. It is expected that secondary school principals and members of the school management should be at alert all the time to prevent occurrence of acts of hooliganism to avoid blames for professional negligence. In some schools, students resort to senseless destruction, burning, maiming, raping or even killing those they think are harsh on them (Ojo, 2016 & Usman, 2016). Ojo reported that some students go to school with jack knifes, battle axes and even locally made guns to threaten and bully fellow students. These problems not only endanger students and teachers but they also prevent teachers from concentrating on teaching and students from concentrating on learning.

There has also been an increased influx of cult groups into secondary schools in Nigeria including Anambra State resulting to high security threats. This unfortunate situation has increased the call for adoption of security management measures which may curb the menace of insecurity and make secondary schools safe for teaching and learning. Security management practices like school security management procedures, physical security management practices, human security management practices, technological security management practices have been proffered as effective in curbing school security threats. However, the level of adoption of these security management practices by secondary school principals' in Anambra State is not clearly known. Thus, what are the practices applied by principals in Anambra State to protect members of the school community from security threats?

Purpose of the Study

The main purpose of this study was to determine the extent of principals' application of security management practices for effective administration of secondary schools in Anambra State. Specifically, the study determined the extent to which principals apply;

1. School security management procedures for effective administration of public secondary schools in Anambra State
2. Physical security management for effective administration of public secondary schools in Anambra State
3. Human security management for effective administration of public secondary schools in Anambra State
4. Technological security management for effective administration of public secondary schools in Anambra State.

Significance of the Study

The result of this study would be of benefit to principals, secondary school staff and students, parents and guardians, the Ministry of Education, future researchers, authors and publishers. The findings of the study would be of immense benefit to secondary school principals. Through the findings of this study, principals of secondary schools will be aware of their roles to ensure that the link between security and opportunity for academic success is known to the community through the Parent Teachers Association meetings, School Based Management Committee meetings and during graduation and price giving day celebrations among others. This is because the study would identify the security management practices needed for effective and stable academic environment.

The findings of this study would also be of immense benefits to teachers and other staff in the school as they would be aware of security management practices required for optimum school safety. The study would also help the school staff to develop safety plans, intervention and alternative strategies as well as codes of conduct for improving safety and security in schools through the recommendations of this study. They will also encourage the school staff to take a responsibility to protect learners in the school compound, de-escalate students' conflicts, create and sustain an atmosphere that promote mutual respect, provide support and comfort and engage students in positive co-curricular activities.

Secondary school students would benefit from the findings of this study because school security management practices are ultimately aimed at improving students' security. With the adoption of the security management practices, it is hoped that the students will stay in schools under safe and secured conditions which will not only increase their interest in attending school but would also help in improving their academic performance as they will be enabled to study in a peaceful environment.

Parents and guardians would also benefit from the findings of this study because security management practices are aimed at improving their children/ wards safety in the school environment. With the implementation of the security management practices, it is hoped that parents and guardians will be less worried about their children/wards safety in school and will go about their daily activities without distractions arising for such worries. This will no doubt have impact on their health and economic standard.

The findings of this study will significantly benefit the Federal and State Ministries of Education. Through this study, the ministry would be reminded on the need to ensure the application of security management procedures for improved school safety and security. These will serve as a guide to the Ministry of Education in providing professional development training for principals and school administrators on proper security management practices.

Finally, future researchers would find the result and report of the study useful for further academic activities. Authors and publishers would also use the results and the literature reviewed in the study in developing relevant text materials on school security management practices.

Scope of the Study

The study determined the extent of principals' application of security management practices for effective administration of secondary schools in Anambra State. The content scope is delimited to school security management procedures, physical security management practices, human security management practices and technological security management practices. The opinion of public secondary school principals were used as source for data collection. This is because the principals' are the chief executive officers in charge of the daily administration of secondary schools. Moderating variables are delimited to location and gender.

Research Questions

The following research questions guided the study:

1. To what extent do principals apply school security management procedures for effective administration of public secondary schools in Anambra State?
2. To what extent do principals apply physical security management practices for effective administration of public secondary schools in Anambra State?
3. To what extent do principals apply human security management practices for effective administration of public secondary schools in Anambra State?
4. To what extent do principals apply technological security management practices for effective administration of public secondary schools in Anambra State?

Hypotheses

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

1. There is no significant difference in the mean ratings of principals of rural and urban secondary schools in Anambra State on the extent they apply school security management procedures for effective school administration.
2. There is no significant difference in the mean ratings of male and female principals of secondary schools in Anambra State on the extent they apply school security management procedures for effective school administration.
3. There is no significant difference in the mean ratings of principals of rural and urban secondary schools in Anambra State on the extent they apply physical security management practices for effective school administration.
4. There is no significant difference in the mean ratings of male and female principals of secondary schools in Anambra State on the extent they apply physical security management practices for effective school administration.
5. There is no significant difference in the mean ratings of principals of rural and urban secondary schools in Anambra State on the extent they apply human security management practices for effective school administration.
6. There is no significant difference in the mean ratings male and female principals of secondary schools in Anambra State on the extent they

apply human security management practices for effective school administration.

7. There is no significant difference in the mean ratings of principals of rural and urban secondary schools in Anambra State on the extent they apply technological security management practices for effective school administration.
8. There is no significant difference in the mean ratings of male and female principals of secondary schools in Anambra State on the extent they apply technological security management practices for effective school administration.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviews related literature to the research topic. The related literature is organized under the following sub-headings:

Conceptual Framework

Principals’

Security

Management Practices

Effective

Administration

Theoretical Framework

Chaos Theory

Rational Choice Theory

Theoretical Studies

Characteristics of an Effective School Principal

Security Issues in Secondary Schools

School Security Management Procedures

Physical Security Management Practices

Human Security Management Practices

Technological Security Management Practices

Empirical Studies

Application of School Security Management Procedures

Application of Physical Security Management Practices

Application of Human Security Management Practices

Application of Technological Security Management Practices

Summary of Review of Related Literature

Conceptual Framework

Key concepts in the research title are reviewed in this section as follows:

Principals'

A principal can be defined as the head of an educational institution. According to Udalla (2012), a principal can be viewed as the chief executive officer of the school and the key person in ensuring that the students receive quality school experiences. In the same vein, Abdulrasheed and Bello (2015) defined a Principal as a leader is also the liaison officer that mediates between the school and the society. Obi in Udalla (2012) defined the principal as an administrator who is in charge of overseeing the affairs of the student, staff, community-school relationship, instructional practices, and school finance as well as school plant. Aghenta (2006) viewed school principal as a leader that provides direction and expert advice on development of teaching and learning in school. The principal has a duty to lead, guide, conduct, direct and motivate both the teaching and non-teaching staff toward achievement of the school goals and objectives. Abdulrasheed and Bello (2015) noted that the essential role of a principal is to mobilize the teaching and non-teaching staff towards the achievement of the school objectives.

Aina (2011) opined that a principal as a school leader must be in a position to guide and provide expertise guardian in regards to curriculum development, teaching methods, and evaluation as well as supervision of human and material resources. Thus in the context of this study, the principal is the school head who directs the affairs of the school so as to meet school objectives. A principal is the chief executive officer of the school, chief accounting officer of the school, head of the school in charge of daily administration of the school.

Security

Security is the state of being free from danger or threats; freedom from doubt, anxiety or fear. Security in the school system is the process used to attain tolerable levels of risk in the school environment and safety refers to a long-lasting security programme that is well administered. Ike (2015) viewed security as something that gives or assures safety. According to Rogers (2009), security can broadly be defined as a means of providing effective levels of protection against pure risk. It is a process used to create a relatively crime free area. The aim of security is to assess the vulnerability to risk and thereafter to employ techniques and measures in order to reduce that vulnerability to reasonable level. Security will therefore assist in creating a stable, fairly predictable environment in which individuals may move freely with reduced or without any disturbance or injury (Kole & Lambaard, 2008).

Ken (2008) defined security as a condition that result from the establishment and maintenance of protective measures that ensure a state of inviolability from hostile acts or influences. Security can also be explained as a state of care of mind, freedom from doubt and absence of worry. It can be likened to watching over an organization for anticipated event.

School security management practices can be defined as measures taken for the protection of the students, staff, property and other school valuable assets from attacks or dangers. According to Kurtus (2012), it is a plan by administrators or principals' to protect students and staff in the event of danger. It is a plan against the criminal and anti-social behaviour which can cause disruption to the work of the school, physical and mental damage to the people and damage to the school building (Ragozzino, Litne & Brien, 2009). School security can also be explained as those measures taken to protect and manage school violence, reduce safety risks and liability, and improve on school community relationship (Trump, 2010). It is the physical protection of school property, school personnel and students from hostile acts or influences. They are measures taken to maintain order, discipline and prevention of disruption to the entire school (Fukumi, 2008). In the context of this study, security is a means taken to ensure a stable and relatively predictable environment in which an individual or a group may pursue its end without disruption or harm and without fear of disturbance or injury.

Management Practices

Management is a vital function of school administration. The school principal has to plan, organize, direct, control and evaluate the staff and the material resources to achieve the objective of the school (Obegbulem, 2011). Ike (2015) defines management as the social or international process involving a sequence of coordinated events such as planning, organizing, coordinating and controlling in order to use available resources to achieve desired outcome in the fastest and most efficient way. School security management practices involves the mobilization and utilization of material resources to attain educational goals.

School management is the identification of the school objectives, mobilizing the teachers, or academic staff, students and material resources such as funds, equipment and facilities in the school to achieve the goal of teaching and learning (Ike, 2015). It is the process of creating a supportive environment by deciding in advance on how to secure the school, how to do it and who is to do it. This includes maintaining, comparing and correcting towards achieving the school goal (Odufowowu, 2011). Public secondary schools are managed by a principal and vice principal. The principal as the manager is responsible for the general oversight of hiring of staff, students and building. The school principal has various management functions. The first one is the management of instructional programme (Oboegbulem 2011). According to Akubue (2012), the staff should be handled with care and love for they possess the capability to make or mar the school and its programmes. The school principal has to be up and doing in staffing the school, orientating of the new teachers to the classes and their functional areas. Financial and physical resource management is that phase of school administration that is primarily concerned with procuring, exporting, accounting, organizing, and maintaining fiscal and material resources in effective manner in the achievement of educational goals.

Effective

When something is effective it means it has the capability of producing a desired result or the ability to produce desired output (Douglas, 2011). According to Drucker (2006), when something is deemed effective, it means it has an intended or expected outcome, or produces a deep, vivid impression. Effectiveness is the output, the capacity to achieve the set objectives in terms of behavior, ability, habits as well as the observed behavior in teachers and subordinates (Nwafor, 2012).

For the purpose of this study, effectiveness will be considered as the ability of school principals to apply innovative, organizational and management strategies and make the most efficient use of resources – not only money but also time and expertise in their schools in order to accomplish school objectives.

Administration

Administration as defined by Ogbonnaya (2009), is a process which entails the utilization of human, financial, and material resources in maximizing the realization of goals or objectives. Administration can be seen as the coordination of human and material resources towards the attainment of some predetermined educational objectives (Oyoyo, 2014).

Administration as defined by Ojobor (2010), involves the provision and maintenance of the necessary manpower (personnel) and plant (facilities) in order to render useful services with a view to bringing about desired change in behaviour. Therefore administration is the coordination of resources to ensure effective and functional organizations. The central purpose of administration in any organization is that of coordinating the effort of people towards the achievement of it goals.

Ekundayo (2010) defined administration as the utilization of human, financial and materials resources in the realization of the organizational objectives. Administration therefore refers to the utilization of all resources or the directing and controlling the affairs of the organization to attain the stipulated objectives. Administration involves managing, administering the curriculum and teaching, pastoral care, discipline, assessment evaluation and examinations, resource allocation, costing and forward planning. Administration also involves staff appraisal, relationship with the community, use of the practical skills necessary for surviving the policies of organization such as decision making, and conflict handling among others (Duze, 2012). Administration in the context of this study is defined as the act of ensuring that the school is conducive for teaching and learning. School administration involves the provision and maintenance of the necessary manpower (personnel), plant (facilities) and ensuring the safety of students and staff with a view to bringing about desired change in behaviour.

Theoretical Framework

The theoretical framework of this study is based on the Chaos Theory and Rational Choice Theory. The two theories are reviewed as follows:

Chaos Theory

Chaos Theory was propounded by Douglas Kiel in 1993. According to the theory, chaos is one possible result of the dynamics of nonlinear systems. Kiel explained that there are three fundamental methods for controlling chaos.

One of the methods is to alter the parameters of the system. Altering the parameter means limiting the degrees of freedom on the extent of the behaviour available to a system. A second method involves perturbations or disturbances during chaotic episodes to change behaviour back to more predictable and smoother functioning. The third method aims at altering the orbit of a chaotic system to a more desirable orbit on its attractor. This approach uses continuous tracking and seeks to identify changes in the system behaviour that occur over time. Public managers (including principals) work within an environment of considerable constraints. Budget constraints dictate levels of agency services and response. Many school administrators, despite being aware of the need for safety equipment in their schools are not able to provide these requirements because of financial constraints.

In this study, the school is a nonlinear system where issues of safety are characterized by uncertainty, unpredictability and thus the need for safety measures and preparedness for such eventualities. Chaos widens the spectrum of opinion and forces the organization to seek new points of view. The many incidents of insecurity in schools have increased the need for the adoption of security management practices that should be implemented in schools to enhance safety. In relation to this study, certain measures need to be put in place, so as to alter the behavior of learners and limit their freedom thus enhance stability in the school. The measures that may be put in place include fencing of the school compound, inspection of students' lockers and wearing of school uniforms among others.

The relevance of this theory to the present study is that it emphasizes the need for workplace rules such as policies and work processes on safety. Safety policies are very important because they help to give direction on what should be done to mitigate and respond to a crisis in schools. Principals should know that any effective strategy must consider all relevant stakeholders impacted by the strategic plan. However, the chaos theory did not cover the influence of principals' personal characteristics and choice on their ability to adopt the security management practices in their schools. This necessitated the use of the rational choice theory as a theoretical support for the study.

Rational Choice Theory

The Rational Choice Theory (RCT) was propounded by Gary Becker in 1976. The theory states that individuals choose the best action based on personal functions and constraints facing them. The basic idea of rational choice theory is that patterns of behaviour in societies reflect the choice made by individuals as they try to maximize their benefits and minimize their costs. In other words, people make decisions about how they act by comparing the costs and benefits of different courses of action. As a result, patterns of behaviours will develop within the societies that result from choices. The idea of rationale choice, where people compare the costs and benefits of certain actions is easy to see in rational choice theory. The 'rationality' defined by the rational choice theory adopts a more specific and narrower definition, which simply means that "an individual acts as if balancing costs against benefits to arrive at action that maximizes personal advantage.

This standpoint, called methodological individualism, holds that: 'The elementary unit of social life is the individual human action. To explain social institutions and social change is to show how they arise as the result of the action and interaction of individuals. This theory hence shows the influence of principals' characteristics/preferences on their ability to manage security in their schools.

Rational choice theory emphasizes the motivation of personal choice in carrying out actions. This is a gap which this theory intends to fill by exposing the influence of personal characteristics like gender of the principals' ability to apply security management practices in schools. Therefore, the theory further serves as a framework for this study because it helps to provide a theoretical framework for understanding the influence of rational choice on principals' ability to apply the security management practices which will help promote school safety in Anambra State.

Theoretical Studies

Theoretical studies that are related to this study are reviewed in line with the purpose of the study as follows:

Characteristics of an Effective School Principal

A central part of being a great leader is cultivating leadership in others (Wallace Foundation, 2013). The principal is the leader and manager of school but this task needs experience and knowledge to differ from others (Farah, 2013). The following are characteristics of effective school principal according to Farah (2013; 54):

1. Plans School Activities and Provides Guidelines- Planning is defined as a process of setting objectives and determining what should be done to achieve them. It is a decision-making activity through which, managers act to ensure the future success and effectiveness of their institutions and departments as well as themselves. Planning helps educational managers to anticipate problems and opportunities, to think forward and to contribute efficacy of other managerial functions. Thus, planning is a role of effective principal to provide a basis for control in a school and set priorities to focus their emergencies on important things first. The effective principle also focuses the attention of the teachers on objectives that can give a performance oriented sense of direction to the school (Priadi, 2011). The

process of educational management consists of three basic functions, namely planning, implementing and controlling. A principal uses these functions to achieve educational organization goals and objectives.

2. Respect- This means that the effective principal responds the enquiries of the school populations (i.e. teachers, students, parents and other staff of the school) and listens to their complaints. This is the characteristics of Total Quality Management Organization and the relations of the school population will be positive when the customers are listened and provided their requirements. Similarly, Oyoyo (2014) opined that the power of knowledge management, particularly when compared to other changed efforts, is that it maintains focus on people-on faculty, staff and students- and their needs.
3. Indicates and Commands School Population and Never Dictates Orders- One of the leadership traits are to lead people in the organization through recommendations. The perfect leader does not impose hard orders to the staff but gives them mentoring and advice and staffs are delightful all the time. Thus, effective principal provides instructions and directions to the school populations and invites them to participate in developing education programs. Furthermore, the Wallace Foundation (2013) stated that principals play a major role in developing a professional community of teachers who guide one another in improving instruction.

4. Networks with the School Population and Makes Timely Contacts- The effective principal has networking skills and makes early contacts with the school population. She/he is not passive but is proactive and aware what is going internal and external of the schools. Co-ordination is the process whereby two or more people/organisations work together to deal collectively with a shared task. The responsibility for co-ordination may be assigned to a single individual or a team/group of individuals, in consultation with all the parties concerned. Co-ordination would the major responsibility of a project coordinator, heading a project team (Farah, 2013).
5. Consults with School Population and Conducts Constructive Changes- An effective principal consults with the people in the school and initiates constructive changes. He or She accepts the suggestions and good ideas from people, creates atmosphere that letting all participate in school development. In line with the preceding, Farah (2013) opined that paternalistic form is where the manager makes decisions in the best interests of the employees rather than the organization. The manager explains most decisions to the team members and ensures that their social and leisure needs are always met. This can help balance out the lack of staff motivation caused by an autocratic management style. Feedback is again generally downward; however feedback to the management will occur in order for the employees to be kept happy. This style can be highly

advantageous, and can endanger loyalty from the employees, leading to a lower staff turnover, thanks to the Management Structures emphasis on social needs (Habegger, 2008).

6. Instructs School Population and Accepts New Ideas-The effective principal instructs people and accepts their ideas. He or She makes appropriate transformations and information that enable school people to achieve assignments required.
7. Participates in School Activities and Encourages Teamwork- The effective principal participates in school activities and encourages team work. She or He does not make decisions alone but asks people what to do, how to do, when to do and approves their suggestions. One or more processes in which an individual or group takes part in specific decision- making and action, and over which they may exercise specific controls. It refers specifically to processes in which primary stakeholders take an active part in planning and decision-making, implementation, learning and evaluation. This often has the intention of sharing control over the resources generated and responsibility for their future use.
8. Attracts School Population and Motivates tem to Learn and Teach Hard- The effective principal attracts school population and motivates them to learn and teach hard. He or She motivates slow learners and rewards hard working and talented ones." A positive school culture is the underlying reason why the other components of successful schools were able to

flourish. For example, one principal seeking ways to increase reading comprehension asked for and valued teacher suggestions. As a result, suggestions were developed into action plans that were then implemented. The principal valued the expertise of the teachers and allowed the latitude to try new approaches, an unbroken cycle of continuous improvement was observed in the building. The culture was one where the teachers felt their opinions mattered and felt comfortable enough to take risks and try new methods. Therefore, the positive culture the principal created enabled continuous improvement to occur (Habegger, 2008).

9. Leads School Population to the Right Direction and Learns from Them- The effective principal leads school to the right direction and learns from other people. He or She follows planned steps and considers feedback from external and internal of the school to make supporting modifications and necessary changes. School principal is the manager of school programs, and interact directly with other stakeholders of school (Ingle, 2009). Communication between the school manager and other stakeholders must flow in both directions. The school manager should know, and be an active participant, wherever feasible, in establishing why the project is being undertaken (Farah, 2013).

Furthermore, Ajayi and Ayodele (2002) categorized principals’ role as: Planning: The principal works closely with the staff, students, parent and government in a wide range of plans relating to curricula and co-curricular activities. The principal and the staff members make decisions on relevant and scope of the curriculum for the school.

Organizing: Principal designs a framework of implementing plans in the organization to achieve predetermined objectives and goals.

Staffing: He/She assists in selection and recruiting qualified personnel and deploying them for effective execution of planned programmes of the school.

Directing and Co-ordinating: In the school organization, it is the duty of the principal to continuously channel all efforts to coordinate and direct the activities of the school in order to achieve the goals and objectives of the organisation.

Budgeting: Drawing a financial plan on activities in the system for a given period. Budgeting assists the administration in making decisions.

Evaluation: It involves assessing the performance of every aspect of the system and making necessary adjustment for effective recycling. The accomplishment of all these functions depends solely upon the principal’s administrative and management skills. It would be better therefore for them to be professionals because a professional person generally has a high need for achievement and self actualization; Professionals try to keep up with changing knowledge in their field.

Effective Principals and vice principals recognize the potential they have to create a school environment where teachers thrive and students achieve their greatest potential in a safe and nurturing school setting (Borum, Cornell, Modzeleski & Jimerson, 2010). According to Habegger (2008), as instructional leaders, principals should maintain a constant presence in the school and in classrooms, listening to and observing what is taking place, assessing needs, and getting to know teachers and students. Principals set high expectations and standards for the academic, social, emotional, and physical development of all students. They bring together a wide range of stakeholders within the school community, take into account the aspirations, and work to create a vision that reflects the full range and value of a school's mission. Principals encourage the development of the whole child by supporting the physical and mental health of children, as well as their social and emotional well-being, which is reinforced by a sense of safety and self-confidence (Farah, 2013). School leaders must mobilize the staff, students, parents, and community around the mission and shared values, as well as school improvement goals and set the parameters of high expectations for the school.

Security Issues in Secondary Schools

School security issues are those things that threaten the school community, or things they value and persons or ideas. They are those phenomenon that jeopardize the safety of students, staff and the school property. School threats can further be explained as problems that undermine the security of any school community (Redding, 2009). Peters and Skaba (2011) posited, school threats as the capacity of any human and non-human elements to destroy the vital interest of the school. This is to say that security threats cover all aspects of malicious intention, action or occurrence geared towards making the school vulnerable and exposed to security risk.

School security threats cover all aspects of malicious intention action, occurrence geared towards making students, teachers and the entire members of the school community vulnerable and exposed to security risks which in every way may disturb or lead to school closure for some time. According to Ike (2015), this should make the school and safety officials to treat school threats seriously and have protocols in place for assessing and managing the school safety. Security threats can be simply divided into two, namely natural and manmade threats.

Natural threats are those threats that are generated by nature, capable of posing a great danger to the wellbeing and survival of people or members of the school community. The natural threats are further divided into two namely: geological threats and climatic threats.

Geological Threats/Hazards: They are natural geological phenomenon which can pose a huge security risk to human lives. They are not only capable of causing various degrees of bodily harms to people but can also cause mass deaths (Chen & Wang, 2007). Examples of such threats are earthquakes, volcanic eruptions, flooding and mudflows. It is important to know that schools sited in areas prone to these geological threats can easily be affected. Lee and Talib (2010) opined that there should be hazard mapping and monitoring to determine the locations or areas that are susceptible to the various kinds of natural threats that exist in this class of threats. They suggested further that it is paramount for the people in charge of school sitting to erect school physical structures in a way that they can be resistant to the threats.

Climate Threats/Hazards: this is another type of natural threat and hazard. It involves a rapid change in climatic conditions, capable of posing a great danger to the wellbeing and survival of any group of people (Peterson & Skaba 2011). Some of these natural threats include heavy rainfall, drought, and wild fire among others. Fabbri, Chung, Cendro and Remondo, (2013) posited that this climatic hazards have destructive effects which may include storm, surge and in land flooding. Schools located in low lying coastal areas that are prone to this security threat will often experience school building collapse, breaking of tree branches and other forms of danger similar to these. On this issue, Gordon (2010) posited that there is no doubt that this type of threat exist in some school environments and constitute security risk to the students, staff and buildings. Thus, if these are not properly managed the schools affected become insecure and not supportive for effective academic activities.

Human threats according to Chen and Wang, (2007) are those cruel attacks arising from human actions and behaviours. They are those activities that also constitute risks to the entire school community. One of these human threats is school robbery. According to Dannreeuther, (2007), robbery involves the use of instruments of intimidation and coercion by a party against another with the aim of compelling the victim party to concede his/her property to the offender’s party. Armed robbery is a regular feature of every human society even among the students’ robbery also takes place. There are many instances where students and school staff were robbed either students or from external robbers who take advantage of the insecurity in the school to penetrate the compound.

Theft is another human threat that disturbs the peace of the school community. Theft involves the act of making unlawful claim to someone’s property or illegally taking another person’s property without the person’s freely given consent, (Dannreeuther, 2007). Theft in school may involve the unintentional stealing of another person’s property, beverages, text books and others from fellow students either in the classroom or hostel. School theft if not properly managed can scare many children away from school or normal lesson due to fear of insecurity of their lives and properties.

Arson constitutes a threat to the school community. Arson according to Katherine (2012) is a deliberate act of disruptively setting another person’s or school property on fire for selfish motives. Someone who may be a staff or student can decide to set his/her property on fire with criminal intention of illegally getting claims from the school education board. There is no doubt that in the school community, arson constitutes a great threat to the school due to losses that are usually incurred in each incidence.

Extortion is another form of man-made security threat which is found among secondary school students. Senior students extort the junior students of their provision and pocket money through coercing on. According to Adegoke (2014), it is a criminal offence, which occurs when a person obtains money or other goods from another by threatening him/her. Extortion in any school constitutes security risk to deny them of their right.

Strike actions among the school staff constitute threat in the school. A strike is often described as the refusal of employees to report at their work places or refusal to discharge their respective duties. Teachers going on strike can make the children less busy and give them chance to engage in indecent acts. The school governing board which has the responsibility to conduct the school may choose to shut down for a while thereby destabilizing the academic activities of the students (Monkwe, 2010).

Another thing that threatens students' security is students' demonstrations. This constitutes a great danger to the lives of students, teachers and property at large. Adegoke, (2014) explained that demonstrations may be regarded as civil disturbances or direct action. Violent students' demonstrations largely constitute huge security risk and lead to a breakdown of law and order. On this, Monkwe (2010) posits that this may lead to unwarranted destruction of lives and property thus making the entire school unsafe for living and learning.

Finally, drug abuse and alcoholism among students constitute one of the major security threats in Nigerian schools. Students have had their destinies misdirected and their academic fortunes frustrated due to their involvement in drug abuse and alcoholism. According to Bulus and Rimfat (2011), peace and tranquillity in schools have been adversely affected. Drug abuse consists of using drug to change feelings or in such a way as to endanger health. Drug abuse has consequences on students who take them. They suffer from brain damage, liver damage, excessive heart beat and chronic bleeding. These students stand the risk of going mental and being wayward in their behaviour. Ike (2015) opined that if students must pass their examinations in flying colours, if school should experience peace and tranquillity, all these security threats should be stamped out of the school environment. Then safety and security will be guaranteed to schools members and school property.

Security Management Practices

Security management can be defined as measures taken by an organization or government to prevent espionage, sabotage, or attack. Security management can also be defined as measures adopted by a business or home owner to prevent crime, assault, and to prevent an escape (Picarell, 2008). Van Jaarsveld (2011) defined security management are a fundamental element that should be implemented in all schools in order to prevent and reduce school violence as much as possible. According to Rogers (2009), security management can broadly be defined as a means of providing effective levels of protection against pure risks. Security management is a process used to create a relatively crime-free area (Rogers, 2009). Dimsey (2008) viewed school security management as the process of creating conducive and proper internal environment in the school. According to Trump (2010), security management practices are strategies and procedures required to co-ordinate the diverse activities of the institution in order to achieve safety. Security management practices are a valuable and helpful resource to be used in the school environment in order to achieve safety in school.

Thus, security management practices are those measures put in place by the school to ensure the safety of students, properties and facilities, staff and other stakeholders in the school system. According to Mentiki (2012), school security management practices are the steps taken to secure the learners both physically and psychologically by the use of variously assigned security awareness programmes and strategies. Laura (2014) averred that school security management are ways of providing security technologies and strategies which can be used to mitigate the formidable security threats in the school. It involve plans or measures to be taken to protect and manage school violence, reduce security risks, and ensure that the school environment is safe for learning. Van Jaarsveld (2011) stated five security management practices for ensuring school safety. They include school security risk assessment/analysis management practices, physical security management practices, human security management practices, technological security management practices and school policies and procedures on security.

School security management practices are made up of different components, namely security aids, security measures, policies and procedures, risks assessments, risks analysis and risk control measures. Security management practices comprises of both physical security and human element. These in turn are combined to develop and implement a security measure. In brief, security measures are those pieces of equipment or manpower used to improve or add to the overall security system which is made up of a number of security aids (Mentiki, 2012). Thus, security management practices are defined as measure put in place to forstall security threats inherent in a school environment. Security management practices involve the use of school security management procedures, physical, human and technological measure to ensure school safety.

School Security Management Procedures

In order to ensure a safe school, school security management procedures need to be in place at school. School security management procedures are a vital part of security system in any institution. It sets guidelines and provides direction as to how situations should be effectively managed and handled (Rogers & Schoeman, 2010). The policy clearly states what the authority of the various people are and what the limitations or restrictions of those individuals are at schools. Policies are the goals and objectives that the organization wants to achieve and therefore assist with the decision-making (Rogers & Schoeman, 2010). School safety policies and procedures are set in place to make schools safe and to have a course of action to take in the event of unsafe situations (Trump, 2010). Students, staff, as well as parents, should understand the policies and procedures that are meant to help schools maintain safety. Schools should therefore enact policies to ensure safe, protective and inclusive learning environments (Maritim, 2014).

Many schools use the principle of zero tolerance in their security safety disciplinary policies (Van Jaarsveld, 2011). These policies deals with problems relating to school safety and discipline and state that no violence, crime or any other unauthorized activities will be tolerated. Those who violate the policy will be punished. The importance of having zero-tolerance policies in place and for them to be effective is that they should be taken seriously by educators, scholars and parents alike and also if the consequences are consistently enforced (Rogers, 2009). This will go a long away to ensure safety and security in the school compound.

Procedures are the ‘guidelines’ that inform everybody how the objectives in the policy should be carried out and provide the instructions on how security activities must be conducted (Rogers & Schoeman, 2010). Both security policies and procedures are relatively inexpensive measures that can be used to assist with the solving and reducing of crime and violence on school premises. Safety procedures help to keep students safe in unpredictable circumstances (Trump, 2010). According to Maritim (2014), policies are set by school boards, principals and teachers in most schools.

However, Maritim (2014) further noted that other policies are formulated by the ministry and passed down to schools for implementation. The upshot is that ministerial guidelines are issued but are never implemented in many schools. The author also observed that despite the formulation of safety policies in some schools in Africa, it appears that the policies were not implemented by the administrators in those schools (Van Jaarsveld, 2011).

Rules are set to discourage inappropriate behavior in schools. Schools therefore should ensure that the set rules, adequately deal with safety issues such as preparedness, favorable environment for learning, drug abuse and violence in general. For rules to be effective, they should clearly indicate the kind of consequences to be meted upon those who break them. Safety policies and crisis prevention programs should be adopted in secondary schools so as to forestall any form of crisis (Maritim, 2014). It is the duty of every principal of a public school to formulate, promulgate, implement and monitor a school safety policy at his or her school. This policy must be based on the safety measures and regulations prescribed by the ministry and must aim to make practicable these measures in order to ensure the safety and security of the learners in their charge (Rogers & Schoeman, 2010).

According to the Federal Government of Nigeria Policy Guidance for Nigerian Schools (n.d.), positive steps should be taken to keep staff, students, visitors and other stakeholders safe from risks of fire and other health and safety hazards whilst in the (boarding) school. The policy further highlighted the steps that should be taken to ensure a safe school environment to include:

1. Risk Assessments (identifying hazards, estimating level of risk to health, safety or welfare from the hazards identified, and identifying action(s) to

be taken both to reduce risk to an acceptable level where practicable and to avoid unnecessary or unreasonable risks) should be carried out on the (boarding) school, recorded in writing, regularly reviewed and action plans strictly adhered to.

2. The (boarding) school's certified designated personnel (e.g. Health and Safety Officer) should regularly review the implementation and effectiveness of action identified as a result of risk assessments executed.
3. There should be outlaid, planned responses to the range of foreseeable crises such as fires, illness outbreaks, emotional trauma, significant accidents, staff shortages and control problems within or outside the (boarding) school, and any major incidents or crises since the last inspection have been carried out. Gas installations should be inspected periodically, at least annually. Electrical installations and fittings should also be checked regularly. Food should be stored and prepared according to the mandate and guidelines designed by the Federal Ministry of Health in the National Policy on Food Hygiene and Safety. Recommendations and laws must always be strictly adhered to.
4. Emergency evacuation procedures and drills should be familiar to all students and staff, including those for use at night, in case of fire etc.
5. The requirements of the local fire authority should be implemented to the timescale agreed depending on any local arrangements agreed:

a) Fire drills including evacuation of students and staff from the building to identified Assembly Points, and fire drills held at night, should take place periodically and are recorded (p. 10).

Furthermore, the Federal Government of Nigeria Policy Guidance for Nigerian Schools (n.d.) postulated that there should be a written record on the recruitment process of all staff in the school in line with appropriate policies and procedures (checking references, police records etc). some of the procedures postulated by the policy includes;

a. The certified person’s (e.g. Admin Manager/School Administrator/ Human Resources Manager) system for recruiting all staff, volunteers and others who work with students in the (boarding) school – or are likely to have contact with students – should be one that effectively captures any criminal convictions or other concerns. Specifically the system needs to effectively evaluate the person’s suitability to work in a school environment without being a threat of harm/abuse to the students.

b. In cases of expatriate staff, it is necessary to ensure such candidates can provide and submit valid evidence that they have passed relevant police checks, academic and personal references. These should be cross checked with the relevant police authority, individuals and organisations before offering any form of employment. Further, expatriate teachers must be registered with the Teachers Registration Council of Nigeria (TRCN) as per TRCN 2003 (3.1). All relevant documents should be filed accordingly.

c. No staff should be employed without conducting appropriate criminal checks or validating references submitted.
d. It is the responsibility of the (boarding) school to ensure that reasonable and practical steps are taken to safeguard students who are driven by taxis/commercial vehicles by assigning appropriate staff to accompany them on their journey.
e. Any visitor to the (boarding) school without prior satisfactory checks should not be given unrestricted access and should not be allowed unsupervised access to the school under any circumstances.

From the forgoing, conducting a risk assessment is an important school risk management procedure. Rogers and Schoeman (2010) opined that to successfully manage security it is vital to start by collecting as much information as possible regarding the risks facing a school, and then identifying, assessing and analysing those risks. It must also be kept in mind that risks are dynamic and are constantly changing, which implies the need for regular risk assessments to be undertaken. Risk analysis is performed in order to identify and analyse security risks. It will help to determine the likelihood of a security risk actually taking place as well as the impact that these risks will have on the assets of the organisation should they occur. Rogers and Schoeman (2010) opined that the information received from this analysis will assist in predicting future losses.

According to Rogers and Schoeman (2010; 28), the risk assessment exercise is carried out to achieve the following objectives:

1. Identify vulnerable assets (people, products, processes and information)
2. Identify security risks (e.g. classrooms left unlocked and theft)
3. Calculate the probability (likelihood) of a loss-incurring event actually taking place
4. Calculate the impact or amount of financial losses suffered because of the security risk
5. Calculate the risk factors (the probability multiplied by the impact)
6. Prioritize the risk factors in order of seriousness. A risk factor can be calculated by multiplying the probability factor by the impact factor (Risk = Probability X Impact)
7. Reporting the risks to your client in order for suitable decisions to be taken.

The authors also noted that the key objective of a security survey is to identify and assess any weaknesses in security practices. A security survey is conducted to achieve the following three important aims (Rogers & Schoeman, 2010; 48):

1. To examine the existing state of security measures at the premises. Keeping in mind to identify security weaknesses.

2. To ensure that the minimum security measures are required by the client. This is in order for the security risks to be managed cost-effectively.
3. To identify any new security risks that might have been missed during the preliminary security survey and the risk analysis exercise.

Hence, Security risk assessment practices refer to all the security measures that must be implemented to prevent, restrict and recover security related losses (Rogers, 2009). They are aimed to reduce both the probability and impact of a loss-incurring event. Security measures should only be implemented if they contribute to achieving specific security objectives. The following, as indicated by Rogers (2009; 13), are objectives of security risk management practices:

a. Deflection: This is when a security system has successfully prevented a crime from causing a loss to an organisation.
b. Deterrence: This is when a security measure causes a criminal to change his /her mind and they decide not to proceed with committing the crime. The potential criminal views the risk of gaining access to the premises too great as a result of the security measures.
c. Detection: The security system should be designed in such a way that crimes are detected as soon as they are attempted. For example, an alarm is activated as soon as there is an attempt to break through the security system.

d. Delay: The delay is achieved by placing a variety of security measures between the criminal and his/her intended target, such as physical barriers. Once a criminal has entered the premises and has been detected, he or she should be delayed from reaching the asset concerned.
e. Reaction: As soon as an attempt has been made to commit a crime, the security official or reaction team should react immediately and rush to the scene. A short reaction time is vital.
f. Detention: Criminals should be detained if the security policy allows it. However, always comply with all legal requirements.
g. Rectification of security weaknesses: The security system should be evaluated on a regular basis and not only when a loss has occurred. After an incident has taken place, the security system/programme should be reviewed and the weaknesses in the security system that led to the crime-related loss should be identified and rectified.
h. Recovery of losses: The losses that were sustained as a consequence of the crime should be recovered as soon as possible. Insurance is one way in which losses are recovered.

In the same vein, Cabral, Malone and Polanowicz (2014) opined that threat assessment needs to be done carefully by experts. They observed that when threat assessment is not done competently, it may cause more harm than good. In particular, a systematic effort to identify potentially violent students should not begin until a school has a robust system for referring students to appropriate professional help. Cabral et al. (2009; 63) further postulated components of an effective strategy to identify and help students who may pose a threat of harm to others or themselves:

a. A Threat Assessment Team is made up of trained school-based staff (including principals, guidance, mental health professionals and security), police, and fire personnel, as well as social service agencies, and, if appropriate, clergy.
b. Training specific to threat assessment for all Threat Assessment Team members. General mental health, law enforcement, or fire professionals are not necessarily trained in school-based threat assessment. In addition, the Threat Assessment Team would do well to have contact with a trauma expert who can conduct specialized clinical risk assessments when appropriate. Note that this risk assessment is not the same as an emergency psychiatric evaluation.
c. A specific process for screening and referring students reported for threatening or violent behavior, consistent with the school or district system for helping all struggling students.

d. Specific procedures to handle bomb threats, including procedures for deciding the appropriate level of response given the relatively common occurrence of bomb threats.
e. Protocols to encourage staff, students, and parents to report threatening or worrisome behavior. The school community can be made aware that school shooters have almost always told someone in the community of their plans. Reporting threatening or worrisome behavior allows for proper interventions to prevent school violence and help struggling students.
f. Providing an anonymous hotline to report threatening behavior. Reports from the hotline are treated with same care as any other report.
g. A procedure to track reports of threats and worrisome behaviors over time.

In another vein, Furthermore, Philpott and Kuenstle (2007) stated that schools need to be prepared to deal with all types of risks that a school might face. They need to be ready and able to handle all crises, large or small. Knowing how to deal with a crises situation and what to do when a crisis occurs is what is the difference between ‘calm and chaos, between courage and fear, between life and death’ (Philpott & Kuenstle, 2007). According to Philpott and Kuenstle, the intensity and scope of a crisis can range from incidents that directly or indirectly affect a single scholar, to ones that can impact the entire community. They can occur before, during or after schools and can be either on or off school campuses. According to Campbell (2007) fear of a school crisis occurring is best managed by education, communication and preparation, rather than through denial. Firstly, school community members need to be educated on the plans for a crisis. They are much more likely to accept a plan if they know and understand the rationale behind it. Secondly, communication with the school community members should occur, to converse about risk reduction and enhancing security and emergency preparedness plans. All the community members should be involved. Lastly, schools will need to prepare for both natural disasters as well as man-made acts of crime and violence. This is achieved by taking an ‘all-hazards’ approach to school emergency planning. This ‘all-hazards’ approach should incorporate emergency plans for all natural disasters (i.e. floods, fires, earthquakes) and man-made acts of crime and violence (i.e. shootings, stabbings, theft, robbery, rape). It is necessary to have a crises plan with specific procedures and strategies for each possible crisis that could occur.

According to Hill and Hill in Ike (2015), each school’s crises plan will be different and unique. Distinct features will determine the finer points of each plan. The schools will have to take into consideration the geographical area, problematic possibilities and other unique features such as the buildings’ designs, staff to student ratios, the school’s resources and the threats they face. In rural areas, schools might be isolated and be situated far away from police and medical services. In urban schools on the other hand, traffic congestions around the school may cause delays in critical medical services. Campbell (2007) opined that a Crisis Response Teams (CRTs) need to be established to effectively respond during and after a crisis and to minimise any injuries that might be sustained. The following are recommended guidelines for establishing crisis response procedures as indicated by Greene in Rogers and Schoeman (2010; 10):

a. all CRT members must be trained in the crisis response procedures, who can sequentially train the whole school community;
b. joint planning with local social services and law enforcement professionals;
c. a clear ranking structure that defines the duties and responsibilities of all members;
d. communication, transportation, and custody transfer protocols;
e. a multi-level organisational structure involving law enforcement, school authorities, local social service agencies and parents;
f. recommencement of routine activities as soon as possible after the crisis; and
g. procedures for identifying and addressing mental health needs.

Trump (2010) averred that principals are directed to plan and execute at least three emergency drills for the school year, covering fire, earthquake, and school invasion. As far as possible the fire services and the local police should be invited to assist in the drill (Trump, 2010). Additionally, schools that are owned by the Government form part of the national emergency response as shelters, storage and logistics centres and command and control headquarters. Schools must be supported to develop an active school safety team that focuses on overall school climate as well as crisis and emergency preparedness, response, and recovery. School safety and crisis response occur on a continuum, and crisis planning, response, and recovery should build upon ongoing school safety and mental health services. School crisis and emergency preparedness training should encompass prevention/mitigation, early intervention (which is part of ongoing school safety), immediate response/intervention, and long-term recovery (Cowan, Vaillancourt, Rossen & Pollitt, 2013). Sabir and Fozia (2016) posited that school safety and security plan include many things to consider when developing a plan at district level. There are four phases in any safety and security plan because the planning process takes time and is an ongoing emergency management; mitigation and prevention, preparedness, response, and recovery, help to establish a foundation for planning. All phases are interconnected and impact on the outcomes of each phase. Additionally, Sabir and Fozia (2016) opined that when formulating safety and security plans, the following five basic steps may be of assistance to school principals:

a. A district-wide planning**:** A district wide planning teams is assembled and the team should at least include administrators, parents, teachers, and maintenance, transportation, food service, and nursing personnel from within the district. Outside agencies that should be involved include law enforcement, fire, hospital, and emergency management personnel.

b. Analysis of site and surrounding area**:** Identify what hazards are likely to affect the area in and around your school. Determine the severity of impact of each identified hazard. Local emergency management personnel can assist with this assessment.
c. Eliminate hazards: this can be done by determing if you can eliminate or mitigate any of the hazards you identify in step and developing procedures to respond to hazards. It also involves developing written procedures on how to respond to the hazards identified that cannot be eliminated
d. Train students and staff: Students and staff must be trained how to use the plan and what their responsibilities will be in a given response.
e. Conduct drills and tabletop exercises: Drills and tabletop exercises should be conducted to test the plan. All participants should be debriefed at the conclusion of each drill. The feedback provided by participants is used to identify strengths and weaknesses in the plan. The plan is then modified to strengthen any weaknesses.

Physical Security Management Practices

Physical security management practices are that part of security that one is able to see. It is implemented as a security measure in order to ensure the safety of staff and property. When physical security measures are implemented in the correct and effective manner, it will ensure maximum protection. Van Jaarsveld (2011) stated that physical security only forms a part of a total integrated security system and should not be used on its own. According to Lombaard and Kole (2008), the purposes of physical security management practices are meant to:

a. Deter an intruder from entering the premises. In other words to discourage them from entering and cause them to abandon (discard) their efforts to enter;
b. Detect the attempted entry or presence if an intruder succeeds in penetrating (i.e. getting through) the physical security management barrier or measure in place;
c. Limit the harm that can be done if an intruder manages to gain entry without being detected; and
d. Detain the intruder by using silent alarm or alerting a security patrol (to respond).

There is a wide range of physical security practices that can be put into practice. They can be divided into three categories or so-called rings of security, consisting of the outside perimeter measures, inner middle perimeter measures and the internal measures (Lombaard & Kole, 2008).

The outside perimeter measures are those measures that can be found outside of the school building normally the perimeter (first line of defense) of the premises such as signs, fences and other barriers (barricades), lighting, alarms and patrols (both humans on their own or accompanied by dogs) (Kole & Lombaard, 2008). The inner middle ring (inside) measures are the security measures used within the boundaries of the facility and can include fences and other barriers (walls), alarms, lighting (often with motion detecting capabilities), CCTV external cameras, warning signs, doors, locks, burglar proofing on windows, security staff and access control systems (Kole & Lombaard, 2008). Lastly there are the internal physical security measures which are the ones that can be found within buildings such as alarms, CCTV cameras, turnstiles, windows and door bars, locks, safes, vaults, protective lighting and other barriers (e.g. security gate across a passage).

In another vein, Crime Prevention through Environmental Design (CPTED) is the process whereby security is designed into the buildings. CPTED focuses on the physical opportunity that an offender will have to victimize, damage and/or harm people, a building or its contents (Campbell, 2007). In this system, the safety and security of a built environment is improved by making use of natural methods, using the environment. When a building is being designed, the architect needs to identify what is being protected (people, information and/or property) and needs to also determine the types and levels of risks and threats. Only then will he/she be able to provide for safety, security and protection features in the design of a building or other built environment. According to Atlas (2008), CPTED can have a direct impact on reducing external (outside) threats by using natural access control, surveillance, territoriality boundary definition, management, and maintenance strategies. Natural access control can be achieved for instance by designing walkways, stairs or car park entrances to channel vehicles or people to one main entrance, or avoiding dark dead-end passages, or unlit areas in the design of a school complex, i.e. correct placement of overhead lighting. The internal threats on the other hand can be addressed through policies and procedures strategies and management methods rather than physical design (Atlas, 2008).

The physical environment of a school definitely has an effect on human behaviour. Certain elements in a physical environment assist with the safety of scholars, educators and objects at schools (Lee & Talib, 2010). CPTED focuses on behaviour that is desired, therefore, the aim of CPTED is to reduce that desire to commit an offence and to make use of natural environmental elements to reduce crime and improve safety (Lee & Talib, 2010). It is ideal for all new schools to be designed with CPTED in mind. However, many of the schools that were designed in the past were not designed with this in mind. Yet, CPTED can still aid as a guide to safety practices in schools. The key elements of CPTED include:

a. Natural surveillance: being able to keep an eye on the entire environment without taking special measures to do so;
b. Natural access control: has the purpose of denying access to crime targets as well as to create a perception of risks to possible offenders (Atlas, 2008); and
c. Territoriality: establish authority and control over the environment as well as creating a sense of belonging.

Furthermore, Lombaard and Kole (2008) stated that features within the school's physical environment can influence the chances of a crime(s) occurring. The physical environment may be used as a point of departure, aimed at encouraging school safety and security. If a school is well maintained and has a safe and secure physical environment, it would be more difficult for threatening incidents to occur. Offenders prefer to commit crimes that comprise of the lowest risks, require the least effort and offer the highest benefit (Campbell, 2007). Therefore, if the physical environment of a school is well secured and has the necessary security measures in place, crimes are less likely to occur. The security concept, 'target hardening' can be used to describe this. Target hardening considerably reduces, deters or prevents crime against individuals or institutions (Hill & Hill in Van Jaarsveld, 2011). Moreover, a 'hard target' is said to be a difficult target. Some target hardening strategies include the following:

a. A clean, attractive school

b. Analysis of crime patterns
c. Staff needs to feel safe and secure
d. Restricted access to the school
e. Restrictions on scholar attire and possessions (Hill & Hill in Van Jaarsveld, 2011).

Clean, attractive schools: Clean, attractive schools tend to create a sense of pride to the scholars, educators, parents and the community. This produces attitudes and behaviour that are beneficial to the school as a whole, thus discouraging undesirable behaviour (Fozia & Sabir, 2016). If a school has broken windows, litter and/or deteriorating buildings, then it creates the idea that, this kind of behaviour and image is acceptable. More individuals will then leave litter lying around and graffiti will also be more likely to occur unrestricted or unsanctioned (Van Jaarsveld, 2011). The school will also then be perceived as being vulnerable, making crime on its premises that more likely to occur. It is therefore crucial that schools pay attention to their physical environment, and that security measures should be put in place in the school environment and its surrounding environs as a point of departure for safety and security within the schools.

Analysis of crime patterns: It is important for school principals to continually gather, analyse and evaluate all kinds of information. Such information may include attendance rates, suspension and expulsion patterns, tardiness, graduation rates and crime patterns (includes incident management of acts not necessarily deemed ‘criminal’ but do involve elements of violence or conflict). Schools should have a security plan in place of which an important aspect should be the collection and recording in a register, which can take the form of database incident management programme software lending itself to trend, modus operandi and spatial analysis of violent incidents. The database records should include the following:

a. The date and time of the incident;
b. The type of incident;
c. Where (place) the incident took place (i.e. in the classroom or on the playground);
d. Who was involved (i.e. staff, scholars, parents);
e. A description of the incident (what happened and who witnessed it); and
f. Actions taken (what did the school do).

An analysis of when and where criminal behaviour takes place on school grounds can provide and shape the response, measure or preventative action taken in order to reduce and/or eliminate the crime or violent act (Kole & Lombaard, 2008). In order for a school to analyze information, data must first be collected. There are various software packages that are available for use as well as different technologies that can capture data.

Information regarding the entry and exit of vehicles should be recorded and filed. Staff and scholars should also be given parking stickers for their cars or parking cards on which all the necessary information and identification and contact details appear. All the information about the car and owner should be filed for possible use later on if an incident occurs (Van Jaarsveld, 2011). Photographs and video surveillance (CCTV) material can also assist in providing valuable information. These can serve as evidence if an incident is captured as and when it occurs. This information may also later be used in court proceedings or by the principal to take further action against the perpetrator of the incident or violence.

The location of where the violence occurred on the school grounds needs to be identified, and then attention can be focused on those areas (where repeat incidents occur, i.e. identification of problem areas (‘hot spots’) in order to reduce or put an end to the violence. This can be achieved with proper crime pattern analysis (Trump, 2010).

Safety and security needs of staff members: If staff members feel safe and secure in the school environment then they will be able to teach the scholars to the best of their ability. Educators need to be reminded regularly about the safety and security procedures applicable in their school and need to be trained on crime/violence prevention behaviour and self-defense strategies (Kole & Lombaard, 2008). It is important for educators to be trained in the identification of behaviour that can be indicators of potential trouble-causing scholars or recognize any antisocial behaviour within scholars. Some antisocial behaviour and risk factors may include aggression, hostility, lying, stealing, inability to listen to authoritative figures, refuses to follow rules and a lack of self-control. This might assist with curbing the incidence of crime and/or violence that may occur as a result of the antisocial behaviour, particularly if nothing was done to help that scholar to deal with or cope with their behaviour. If educators are able to observe minor problems within a scholar and deal with them immediately, this might prevent a more serious crime/incident from occurring at a later stage.

Restricted access to schools: Entrance-and-exit access points to a school need to be minimized to reduce the chances of strangers entering the school grounds freely. Ideally there should only be one entrance/exit point to a school or a maximum of two access points. Alternately access points are only opened and entry supervised for limited periods during a day, for the rest they remain locked. This will make it easier for security guards to keep watch over who enters the school premises. Once the school has started, the gate should be locked and all latecomers and strangers will need to sign in to enter and will then be escorted to the principal's office by the security guard (Cowan, Pollitt, Rossen &Vaillancourt, 2013).

It is essential that access points and the windows are clear of any obstructions such as big shrubs, trees or signs. This is to enable personnel and security officers to be able to observe and see the movement of any persons on the school grounds or around the access points. It will also prevent strangers hiding away in big shrubs. Increased lighting can be used to highlight those blind spots and deserted areas, thereby also enhancing safety and security

(Cowan, Pollitt, Rossen &Vaillancourt, 2013). All movement on the school premises needs to be controlled. At any time during the day the school needs to know who is on the school grounds (Rogers, 2009).

Restrictions on scholar attire and possessions: The restriction on clothing items may assist with identifying strangers on the premises. Expensive label clothing and jewellery have also been banned as it can increase theft (steal to have the same clothes as peers) and absenteeism as some scholars may feel they will not fit in if they do not own such expensive brand label items (Cowan, Pollitt, Rossen & Vaillancourt, 2013).

Human Security Management Practices

The human element in security systems is often either overlooked or neglected completely. However, they play a vital role in security management (Bitzer & Hoffman, 2007). Bitzer and Hoffman noted that it is usually the humans that make the decision to take action and decide on what action to take during a crisis or emergency. Most technological measures will not be able to function successfully without a human component. For example, if an alarm is triggered at a school, a policeman or security guard will have to respond to the alarm in order for the technological aid to work effectively and for the intruder to be apprehended. Some of the human components in security could include guards, community and/or parental participation, school personnel, security officers, private security company personnel on contract who might also offer a rapid armed response service or police officers (Van Jaarsveld, 2011).

Van Jaarsveld observed that one of the important security functions for humans is patrolling. This is when individuals (guards and security officers) move around the premises inspecting and observing the activities taking place and the locations where incidents occur on the premises in order to identify any risks. Part of patrolling duties also includes identifying shortcomings or damage to a security measure (e.g. hole in a fence) or whether a system is operational (working properly). Having these human security measures on the premises might decrease scholars, staff and parents' fear of crime, as well as assist with the prevention of crime. This would also allow for vulnerable areas to be inspected and security-related hazards to be detected (Kole & Lombaard, 2008). It is therefore vital that the human aspect of security is not overlooked or neglected, but that it is utilised to the best of its ability and integrated with the technology and security equipment available.

It may be necessary for schools (especially those in high risk areas) to appoint hired security to assist with the safety and security in schools. This can be done by either hiring directly or contracting a private security company to manage the provision of such security services. For those less fortunate schools that are not able to afford or hire security guards, a useful alternative would be to get volunteers from the community to take turns in monitoring the school premises during the day and at night. The school needs to ensure that these volunteers and the guards are well equipped and that they have the support from the police. They should always have access to a means of communication (with the police and school staff), for example either a cell phone, landline or a two-way radio. Such forms of communication will ensure that any incidents or criminal activities are speedily reported once they have taken place or to prevent an incident from occurring if suspicious activity is observed (Cowan, Rossen Pollitt, &Vaillancourt, 2013).

The school should invite security experts to visit the school to assess the risks and weaknesses at the school (Cowan, Pollitt, Rossen, & Vaillancourt, 2013). This will help the security guards to look out for specific risks and assist with preventing and/or reducing those risks. This can improve the overall physical security – but only if the problems and causes or repeat trends have been identified.

For those schools that cannot afford security experts to do risk assessments and come up with a security plan of security measures, there is recourse in some communities to the pro-deo services of members of the private security industry (local companies based in the community) and to organizations that might be willing and/or want to help. The only thing these schools have to do is to first get hold of a security expert that volunteers to do the security risk assessment as part of his/her or company community work or social responsibility activity. Many community organizations are expected to participate in community safety initiatives, which include safety and security at schools. The use of security guards and police officers has been cited as “among the most common physical surveillance measures currently used in schools in the United States (Rich, 2012). The responsibilities of school resource officers typically range from assisting administrators with student discipline issues to patrolling school grounds, and there have even been noted cases of campus officers successfully intervening in school shootings. The benefits of security guards, however, are widely contested in the literature. While some sources have argued that school officers serve as a deterrent to violence, others are far more skeptical and warn against potentially detrimental effects on students (Pfeiffer & Jolicoeur, 2012)

According to Pfeiffer and Jolicoeur, (2012), Paul Kelly, a retired Secret Service Agent who helped edit a 2002 US federal report on managing school threats, explained that while a uniformed presence is a very big psychological deterrent as an authority figure, this may not always be the case. Overall, it seems that there is no unanimous agreement regarding the effects of school officers, and it depends on the circumstances of a particular school or district: according to Kelly the key thing for any school is to examine their options based on the emotional climate and the culture of their individual school because different schools will have different threats and vulnerabilities.

Technological Security Management Practices

Over the past decade electronic security technology has evolved from an exotic possibility into an essential safety consideration. Technological improvements are coming onto the market almost daily, and keeping up with the latest innovation is a full time job. At a minimum, a basic understanding of these devices has become a prerequisite for well-informed school security planning (Schneider, 2010). Security technology, as an adjunct to physical security measures, can be excellent tools and a great contribution to the safety of scholars and staff in schools and in reducing the violence in schools. They have, however, to be applied correctly within the school environment and be maintained after the installment, otherwise they will not be effective. These various technologies can assist a school by providing information that would not otherwise be available, they can free-up manpower and they can, in-the-long-run, be cost- effective for a school. Nevertheless, not all school security problems can be solved merely by implementing and making use of security technologies (Green in Van Jaarsveld, 2011). The aim of using security technologies is to reduce the opportunities to commit crimes or violence, to increase the likelihood that someone will get caught and to be able to collect evidence of some of the acts of violence being committed, thus making it easier to prosecute (Van Jaarsveld, 2011).

There are various security technologies that can be implemented within a school. These could include closed circuit television (CCTV) systems, including the videoing and storing of video surveillance footage whether analogue or digital; intruder alarms; metal detectors or hand- held detectors; x-ray machines and/or card reader systems (Kole & Lombaard, 2008). This security management practice will assist in reducing the probability of occurrence and the impact that crime and violence has on the school environment. However, in the past security technologies were seldom implemented and used in schools as part of school security (Schneider, 2010).

Through technology, a school can introduce ways to collect information or enforce procedures and rules that it would not be able to afford or rely on security personnel to do (Schneider, 2010). Schneider categorized five areas in which technology can be used for school security. They are electronic access control, surveillance system, communication system, alarms and Emergency Notification Systems (ENS).

Electronic Access Control

Electronic controls can be integrated into almost any type of door, including hinged and sliding models, turnstiles, or revolving doors. If opting for this approach, it’s usually far more economical to build in the devices during initial construction. There are a few basic down sides to electronic controls: initial cost, technical difficulties, and power outages according to Schneider (2010; 2).

a. Initial cost. If installation is integrated into the initial construction, it’s likely to be more affordable than a retrofit, but in either case is considerably more than the cost of conventional lock hardware.
b. Technical difficulties. Someone has to install and run the software, updating information whenever a new card is issued or an old card is cancelled. At the front end, this includes creating cards for all users. Someone has to replace lost cards and issue new ones. If the

people who know how to operate or repair the equipment are unavailable, the system can be derailed, at least temporarily.

c. Power outages. All systems should have emergency back-up power. The alternative is complete systems failure during a power outage.
d. Location. Electronic controls are not needed at every door but can be used selectively (especially to keep costs down.) If a facility’s outer doors are secured electronically, internal areas might be adequately secured with conventional locks. Electronic locks may be worth considering for doors to higher security areas as well, or for areas that a school would prefer not to have to supervise.

. Cards can be issued to temporary workers or contractors, programmed to open only certain doors during specified days and hours. Schools have no need to worry about losing keys, since the cards expire when the job is completed. Cards can serve multiple functions, acting as debit, library, attendance, or identification cards as well (Kole & Lombaard, 2008).

Schneider (2010) observed that whether devices are free-standing or tied into a central processor, if they are too accessible they may be vulnerable to technologically savvy intruders. As a precaution, it may be wise to install lock activation devices or relays on the secured side of the installation, in line with the conventional security panel approach.

1. Biometrics: Fingerprint scanners, iris readers, hand vein readers, and facial recognition technology are options to consider for high-security locations, but their use in public schools is still rare, controversial, and not especially practical. There is considerable concern about the implications of entering such data into databases that could find their way into government files or the public domain. At the least, parental consent forms should be considered, and privacy provisions tightly worded. Which biometric feature is used as an identifier iris, fingerprint, etc. is not overly significant at this point. Decisions should be based on functionality, cost, and maintenance considerations (Schneider, 2010).
2. Piggy-backing/tail-gating: A glaring weakness in access control is the ease with which intruders can slip in close behind legitimate users. Often this is with a gesture of courtesy from the first student, who holds the door for someone behind him, or when the first student is too intimidated to confront the person who ―piggybacks on his or her entry. If this is commonplace at your school, access control measures may be illusory, providing a false, and counterproductive, sense of security, although they may at least reinforce territoriality. To address this problem, the issue is not primarily what type of access device is used, but what response measures are in place. Options might include: (1) video analytics or on-site security personnel that trigger alarms when piggy-backing occurs, (2) video recording of the incident to identify the intruder, and (3) an access

control response, such as the lockdown of a second door to prevent further entry, coupled with an immediate response from security guards to confront the intruder. Training for all legitimate users goes hand-in- hand with these tighter measures.

3. Visitor Screening and Badging: In most public schools, visitors don’t receive access control cards, but they do receive visitors’ badges to make them easily spotted while on campus, and, more to the point, to make people who are not wearing badges more noticeable(Schneider, 2010; Van Jaarsveld, 2011). Schools use widely varied levels of screening before issuing badges. In some cases visitors can walk in and pick up stickers without having to clear any kind of screening; a self-serve operation that has minimal value but is fairly commonplace.

Surveillance Equipment

On top of cost, maintenance and effectiveness issues, surveillance cameras raise some serious philosophical concerns. The mere presence of cameras can suggest that the environment is dangerous, reinforcing fear and undermining the school climate (Schneider, 2010). According to Lombaard and Kole (2008), surveillance technologies are appropriate when (1) offenders need to be identified and their actions documented; (2) hidden areas are attracting problem behaviors that have not been successfully deterred through other measures; (3) the location filmed is semi-public and there should be no reasonable expectation of privacy; (4) risks are higher than average, such as in an overseas embassy school that may be targeted for political reasons, or in a residential treatment program where there may be a heightened risk of abuse or false accusations; and (5) when vandalism, bullying, or other problems persist despite other interventions.

Cameras should be mounted well out of reach and secured in opaque domes or similar enclosures that protect against vandalism without compromising the camera's coverage area. Outdoor cameras may need heated or cooled housings for extreme weather. Cameras in corrosive, dirty, or extremely humid environments also can require protective housings. If components are going to fail, they are most likely to do so fairly quickly. Have spare components on hand for replacement purposes.

Communication System

Everyone on campus should be able to call for help, pass along a timely warning, or receive a warning anytime, anywhere. A teacher shouldn't have to choose between staying with students and calling for help (Cowan, Pollitt, Rossen & Vaillancourt 2013). Weaknesses in communication systems according to Schneider (2010) often include:

1. Unreachable areas, such as playgrounds, bathrooms, boiler rooms or basements, due to lack of radio reception, wiring, speakers, or phones.
2. Dysfunctional equipment that works inconsistently, due to bad weather, leaky roofs, or deferred maintenance.

3. Reliance on towers or systems that predictably overload in genuine emergencies.

Schneider (2010) noted that some of the communication system gadgets include:

Public address systems: These can be hardwired and installed in fixed locations or they can be portable. Portable systems may include wireless microphones that clip onto speakers' clothing, or they can use handheld microphones. Systems can be plugged into conventional outlets or can run on rechargeable batteries. Wheeled cases are useful for hauling systems across campus.

Incoming Message Options: Anyone with information about a potential threat should be able to reach school officials through multiple routes. They should be able to communicate anonymously or directly, by voice or text, by slipping a note into a tip box, or by slipping one under a door.

Intercoms: Intercoms can be integrated into school telephone systems or can be free-standing products. They should make it possible to make announcements school-wide as well as more selectively. Intercoms can be augmented with cameras and call-buttons at entries.

Digital displays: In addition to individual text messaging and email systems, text-based digital display devices are becoming commonplace educational and emergency message distribution tools.

Call boxes: Emergency call boxes can be installed throughout a campus to make it easy for students to call for help. They can be made more useful by adding other features, such as speakers that tie in to a public address system. Some now integrate LED signs, using customized visual messages to compensate for noise barriers to audio messages.

Megaphones: When all other technology fails, due to downed lines or cell towers, megaphones provide an easy alternative that can be used in directing mass evacuations or broadcasting messages.

Alarms

Fire alarms can be triggered by smoke or flame, or set off by manually operated pull stations. Extremely sensitive devices can be triggered by a lit match, similar to the alarms used in airplane lavatories. These can respond with audible alarms or recorded messages, or by triggering an alert at a monitoring station. Protective covers that must be lifted, or glass covers that must be broken, discourage false alarms by triggering a local noise alarm first, drawing attention to the person pulling the handle. ―Intelligent fire alarm systems can detect tampering with room detectors, sending an alert to a monitoring station that pinpoints the location of the activity. Hard-wired panic button alarms can be built into intercom, phone or burglary alarm systems, or can independently trigger buzzers or lights at monitoring stations. Burglary alarms can be triggered by door or window entry, acoustic or vibration-based glass breakage or passive infra-red (PIR) detection, which detects temperature changes if someone enters the room. These can be augmented with cameras or microphones that record and transmit images and sounds to hard drives, monitoring stations or web sites.

Annunciators, similar to burglar alarms triggered by door or window entry, these devices make noise at the point of intrusion and alert staff members at a monitoring station that an emergency door has been opened. If surveillance cameras are used, staff can instantly view the activity (Schneider, 2010).

Wireless alarms can be integrated into pendants, key fobs, radios, equipment, or vehicles. First generation devices (such as body alarms) merely make noise; second-generation devices send messages that identify the person assigned to the device and in some cases can pull up useful data, such as the person's photograph, stalking complaints, or medical concerns, but may not be able to pinpoint his or her immediate location (Schneider, 2010). Tracking devices are wireless alarms that can identify the location of a person or item carrying a device in real time, using GPS, radio frequencies, or similar technologies. They can be triggered manually, by pushing a panic button, or automatically, by being moved past a reader.

Emergency Notification Systems (ENS)

Emergency notification systems are quite rudimentary, using sirens or bells to convey pre-determined on-site messages, such as evacuate or shelter in place, with varying degrees of confusion or success. Taken up a notch, an emergency notification system will include a PA system, intercoms, telephones, or radios. Families and the general public rely on messages faxed to the media and subsequently broadcast on local radio and television stations in order to learn about events.

Empirical Studies

This section reviewed related empirical studies under headings in line with the specific purposes of the study as follows:

Application of School Security Management Procedures

Nyakundi (2012) assessed the implementation of safety standards and guidelines in public secondary schools in Marani District, Kisii County, Kenya. The objectives of the study were to establish the safety situation, outline the main causes of disasters, examine the constraints in the implementation of safety measures and explore major strategies put in place to prevent occurrence of disasters in public secondary schools in Marani District, Kenya. Five research questions guided the study. The study adopted a descriptive survey design. The population was 28 public secondary schools in Marani District. Stratified, purposive and simple random sampling techniques were used to compose the sample of 49 teachers used for the study. Data was collected using questionnaire. Validity of the instrument was determined by conducting pilot study before the actual study. Reliability of the instrument was determined by use of test-retest method. Data was analyzed using descriptive statistics like frequencies and percentages and the findings presented in charts, tables and graphs. Thematic analysis was used to analyse qualitative data. The major findings of the study were that the Ministry of Education (MOE) safety standards and guidelines had not been fully implemented majorly due to inadequate funds and supervision.

The relationship between this study and the present study is that they both determined security practices in secondary schools with respect to school safety policies and procedures using the same design. However, both studies differ in certain aspects, while the reviewed study used teachers as the population of the study, the present study used principals who are more conversant with security issues as population of the study. Furthermore, while Nyakundi (2012) ascertained the validity of the instrument for data collection through pilot testing, the present study ascertained the validity of the instrument for data collection through experts. The reviewed study also used test-retest to determine the reliability of the instrument while the present study utilized Cronbach Alpha. In the analysis, Nyakundi used percentages to analyze data while the present study used mean and standard deviation. Also, the reviewed study did not use hypotheses while the present study formulated and tested hypotheses. The use of pilot testing in the reviewed study is abnormal and can not be a source of instrument validity, also teachers are not more disposed to respond to questions on implementation of safety standards to guide lives than principals; the use of test-retest in determining the reliability of the instrument can only give internal stability to the instrument and not internal consistency.

Matstisa (2011) carried out a study on the exploration of safety in township secondary schools in Free Town, Senegal. The purpose of the study was to examine the safety and security of teachers and learners in township secondary schools. Four research questions guided the study and two hypotheses were tested. The design of the study was exploratory in nature. The respondents were 44 principals' and 352 teachers which totaled 396 respondents from 44 secondary schools. The instruments for data collection were questionnaires and the data were analyzed using mean and standard deviation to answer the research questions while t-test was used to test the hypotheses. The findings revealed that despite numerous laws made to protect the rights of the teachers and learners in schools, teachers and learners were still not protected. This is because the laws were written without proper implementation.

The study is related to the present study as they both focused on security practices of secondary schools. However, they differ in the sense that, while Mastisa (2011) was exporatory in nature, the present study utilized descriptive survey design. The reviewed study explored safety in township secondary schools in Free Town, Senegal the present study determined the extent of principals' application of security management practices for effective administration of secondary schools in Anambra State, Nigeria.

Dewey, Peter, Anne and Xiao (2009) carried out a study on safety condition in high schools in Virginia, United States using Virginia Threats Assessment Guidelines. The purpose of the study was to examine the safety and security conditions in the schools studied. Four research questions guided the study and three hypotheses were tested. The researchers adopted the descriptive survey design. The population of the study comprised 960 respondents which were made up of students, teachers and principals. The instrument for data collection was questionnaire. Mean was used to analyze the four research question while Multivariate Analysis of Covariance (MANCOVA) was used to analyze the three hypotheses. Findings of the study revealed that most of the schools have no planned security policies, have no planned way of resolving student's conflicts and have no safety plans on ground to check emergency occurrences.

The study is related to the present study as both studies sought to find out the safety and security conditions in secondary schools. Both studies also adopted the descriptive survey design. However, while the reviewed study used MANCOVA to test the hypotheses, the present study utilized t-test. Dewey, Peter, Anne and Xiao (2009) study was based on assessment of safety conditions in high schools in Virginia, United States of America using the Virginia Threats Assessment Guidelines, the present study determined the extent of principals' application of security management practices for effective administration of secondary schools in Anambra State, Nigeria.

Application of Physical Security Management Practices

Fozia and Sabir (2016) carried out a study to analyse different safety and security measures in both public and private schools at secondary level in Islamabad, Pakistan. Four research objectives guided the study. The study adopted the descriptive survey design. The population of the study comprised all the 100 heads of schools (50 from private and 50 from public schools) with 56 males and 44 females. Checklist for Comparative Analysis of Safety and

Security Measures at Secondary level was used to collect the data. Data were analysed with means, percentage and independent sample t-test. The findings revealed that safety and security measures such as flooring and lighting, number of furniture according to the number of users and stable portable equipment i.e. Television and Computers, and good practice of computers among students were used as security measures in both private and public school. Findings also revealed that both male and female heads as well as public and private schools heads had no significant mean differences regarding safety and security measures in use at secondary schools in Islamabad, Pakistan.

The study is related to the present study because they both determined security management practices of principals of secondary schools. However, the reviewed study utilized Checklist for Comparative Analysis of Safety and Security Measures at Secondary level to collect the data, while the present study used structured questionnaire as instrument for data collection. The reviewed study comparatively analyzed different safety and security measures in both public and private schools at secondary level in Islamabad, while the present study determined the extent of principals' application of security management practices for effective administration of secondary schools in Anambra State, Nigeria.

Xaba (2006) conducted a study on the basic safety and security of school physical environment in the United States of America. The purpose of the study was to find out how the basic safety of the school environment affects the learners and the educators in the schools. Three research questions guided the study and two hypotheses were tested. The design of the study was descriptive survey. Simple random sampling technique was used to sample 69 teachers from secondary schools and 69 teachers from primary schools. The instruments for data collection were questionnaires. Mean and Standard deviation were used to answer the research questions while ANOVA was used to test the hypotheses at 0.05 level of significance. The findings of the study revealed that most of the schools were collapsed and have cracked walls which form death traps to students and educators. It was also revealed that most schools have no safety policy plan and no internal services of the school facilities.

The study is related to the present study because they both studied security practices in school. However, they differ in some areas, while the reviewed study determined basic safety and security of school physical environment in both primary and secondary schools; the present study determined the extent of principals' application of security management practices for effective administration of secondary schools. The reviewed study was carried out in the United States of America, while the present study was carried out in Anambra State, Nigeria.

Application of Human Security Management Practices

Amanchukwu (2012) conducted a study on application of intelligence indicators on secondary school safety and security as a measure of learning enhancement in North East Zone of Nigeria. The purpose of the study was to examine the perception or relationship between staff and students in the application of security measures in secondary schools and the setbacks between teachers and students in the enforcement of educational policies in the schools. Two research questions guided the study and two hypotheses were tested. The design of the study was descriptive survey and simple random sampling was used to sample 280 students and 80 teachers. The instrument for data collection was questionnaire. The method of data analysis was mean and standard deviation for the research questions while t-test was used to test the hypotheses. The study found fear among students and staff, anxiety, uncertainty, low morale and absenteeism as factors against safety and security.

This study is related to the present study because both studies aimed at determining the application of school safety and security practices in secondary schools. However, while the reviewed study determined the application of intelligence indicators on secondary school safety and security as a measure of learning enhancement in North East Zone of Nigeria, the present study determined the extent of principals’ application of security management practices for effective administration of secondary schools in Anambra State.

Kirui, Mbugua and Sang (2011) determined challenges facing head teachers in security management in secondary schools in Kisii County in Kenya. Four research questions guided the study. The study employed descriptive survey research design. Purposive sampling technique were used to obtain the sample of 27 head teachers, 35 prefects, 14 members of the Board of Governors and 20 security guards. Data collected was analyzed using descriptive statistics; frequency and percentage. The study established that schools in Kisii County face security challenges such as strikes, arson, theft and fighting among students. The study further revealed that majority of Head teachers, BOG members and security personnel are not versed with strategies useful in handling security issues. Most schools are not prepared for disasters management. The study also established that head teachers are highly aware of measures required in improving secondary school security. The study concluded that schools in general need to implement in full the "Safety Standard Manual for Schools in Kenya" guidelines recommended by the Ministry of Education.

This study is related to the present study because they both focused on security management issues in secondary schools and they both adopted the descriptive research design as the design of the study. However, they differed in some aspects, The reviewed study utilized purposive sampling in selecting respondents for the study, while the present study used the entire population because it was manageable. Also, the reviewed study determined the challenges facing head teachers in security management in public secondary schools in Kisii County in Kenya, the present study determined the extent of principals' application of security management practices for effective administration of secondary schools in Anambra State. The frequency and percentages were used for data anaylysis while the present study used mean and standard deviation to answer the research questions. The reviewed study did not formulate any hypotheses, while the present study formulated and tested hypotheses at 0.05 level of significance.

Ibrahim (2010) conducted a study on the manager's view about school safety and security from invitational theory perspective. The purpose of the study was to determine the views of school managers on the preventive measures of keeping schools safe and secure. Two research questions guided the study and two hypotheses were tested. The design of the study was descriptive survey. Simple random sampling was used to sample 35 managers out of 107 in the centre of Elazy city. The instrument for data collection was questionnaire. Mean and Standard deviation were used for answering the research questions and ANOVA was used to test the hypotheses. It was found that most of the schools are not well equipped in the area of human resources. Findings also revealed that the school does not carry out maintenance and repairs of damage facilities.

The study is related to the present study in that they both ascertained school safety and security in schools with respect to the human security management practices. Both studies also adopt the descriptive research design. However they differed in terms of the scope of the study. While Ibrahim (2010) conducted a study on the manager's view about school safety and security from invitational theory perspective, the present study determined the extent of principals' application of security management practices for effective administration of secondary schools in Anambra State. ANOVA was used to test hypotheses in the reviewed study, while t-test was used to test hypotheses in the present study.

Application of Technological Security Management Practices

Ike (2015) carried out a study to investigate security management situations in public secondary schools in North Central Zone of Nigeria. Five research questions guided the study and four null hypotheses were tested. The study was a descriptive survey study involving 1,188 respondents made up of 176 principals and 1012 teachers from 352 public secondary schools in North Central Zone. Two instruments were used to collect data for the study, namely: Check list on available devices for improving security situation in public secondary schools and a four point scale Questionnaire on improving Security Situation in Public Secondary Schools (QSSMPSS). A descriptive analysis of mean and standard deviation were used to answer the six research questions while t-test was used to test the hypotheses at 0.05 level of significance. Also to draw conclusion on whether there is a significant difference between the response of principals and teachers, ANOVA sum of square (which measure the variation around mean) was used focusing on difference between. The result showed among others that some security devices for the improvement of security situations as well as the emergency response plans for managing security in public secondary schools were not available in most schools. The findings of the study also indicated that it is acceptable to have staff and student identity cards, staff code of conduct and conflict resolution management programmes to help the staff as well as the students know how to resolve their disputes. The respondents agreed too that there is need to have constant searches of student's lockers and boxes to seize weapons and dangerous objects from the students.

This study is related to the present study because they both focused on security management in secondary schools. Both studies also adopt descriptive survey design. However, they differ in some areas, while the reviewed study investigated security management situations, the present study determined the extent of principals application of security management practices for effective administration of secondary schools. Also, while the reviewed study was carried out in the Federal Capital Territory of Nigeria, the present study was carried out in Anambra State, Nigeria. ANOVA was used to test hypotheses in the reviewed study, while t-test was used to test hypotheses in the present study.

Maritim (2014) assessed the state of safety in secondary schools in Nandi North district, Kenya. The main objective of the study was to establish the safety measures available and determine the level of safety preparedness of public boarding secondary schools in Nandi North District, while the specific objectives were: To establish the safety measures available in schools; to assess the level of awareness and the skills-levels of staff and students; to identify the challenges faced in the implementation of safety measures in schools and to identify the strategies devised for future enhancement of school safety.

Descriptive survey design was employed. Stratified and purposive sampling techniques were used to determine the sample size. Respondents included head teachers, teachers, students and security officers. The research instruments used were questionnaire, interview schedule and observation checklist. A pilot study was administered to verify the validity and reliability of the instruments. Data obtained was analyzed both quantitatively and qualitatively. Presentation of data is in form of tables, charts, graphs, frequencies, and percentages. Microsoft Excel and the Statistical Package for Social Sciences (SPSS) program aided in data analysis. The findings revealed that most schools were not adequately prepared for emergencies both in terms of planning and equipment. For instance only 33.3% of teachers had been trained on firefighting while 33.8% had a safety policy in their schools. The study confirmed that safety policy and training predicted school safety since the R2 and adjusted R2 value of 0.769 and 0.787 respectively both indicated that over 70% of the variance in the dependent variable can be explained by the regression model. The t test results for the individual regression coefficient were as follows: Safety policies ($t = 11.52$, $p < .05$) and training ($t = 2.25$, $p < .05$) indicating that the variables were statistically significant at 0.05 levels. Inadequate finance was cited as the main challenge that hindered the implementation of the safety policy.

The relationship between the reviewed study and the present study is that they both determined security practices in secondary schools with respect to school safety policies and procedures. They also adopted the descriptive survey design as the design of the study. However, they differ in some aspects, the reviewed study did not formulate hypotheses, the present study formulated hypotheses. The reviewed study focused on the safety measures available and determined the level of safety preparedness of public boarding secondary schools, the present study determined the extent of principals' application of security management practices for effective administration of secondary schools. The reviewed study conducted pilot study to verify the validity while the present study ascertained the validity of the instrument through experts. Also, while the reviewed study was carried out in the Nandi North district, Kenya, the present study was carried out in Anambra State, Nigeria.

Summary of Review of Related Literature

The review of related literature was conducted under conceptual framework, theoretical framework, theoretical studies and empirical studies. The conceptual framework reviewed the concepts like principals, security, effective, management practices and administration. A working definition of each concept was given to create a clear understanding of same in the context of the study.

The Chaos Theory and Rational Choice Theory served as the theoretical foundations for this study. Chaos theory is relevant to the present study because it exposes the principals to the techniques of managing security threats that are inherent within the school system. The theory helps to give direction on what should be done to mitigate and respond to crisis in schools. Rational choice theory serves as a framework for this study because it helps provide secondary school principals with a framework for choosing the adequate security management practices which will help promote school safety in Anambra State. The review of theoretical studies revealed that gains from the application of security management practices are enormous in fostering school safety and security.

The review of related empirical studies showed that most studies focused on issues concerning safety and implementation of safety policies. Studies like that of Nyakundi (2012) assessed the implementation of safety standards and guidelines in public secondary schools while Amanchukwu (2012) conducted a study on application of intelligence indicators on secondary school safety and security as a measure of learning enhancement. However, none of these studies determined the extent of principals' application of security management practices in secondary schools in Anambra State. This study intends to fill the gap because the determination of principals' application of security management practices is crucial to optimum school safety in Anambra state, Nigeria.

CHAPTER THREE

METHOD

In this chapter, procedures for carrying out this study was discussed under the following sub-headings: research design, area of the study, population of the study, sample and sampling technique, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

Research Design

The research design for this study was descriptive survey. A descriptive survey is a method of obtaining information from various groups or persons mainly through questionnaire or personal interviews in order to provide a relative complete understanding of what is happening at a given period and time (Stangor, 2007). According to de Smith (2015), descriptive survey is a research design where a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. The design was considered suitable for this study since it collected data from a specified sample of public secondary school principals in Anambra State through a questionnaire determined the security management practices they apply in their schools.

Area of the Study

The study was carried out in Anambra State which is made up of 21 local government areas with 258 public and 444 private secondary schools. These schools are distributed in six education zones, namely Aguata, Awka, Nnewi, Ogidi, Onitsha and Otuocha education zones. Anambra State shares boundaries with Delta State to the west, Imo State and Rivers State to the south, Enugu State to the east and Kogi State to the north. The major language of the people is Igbo. Due to the presence of educational, financial and other institutions in the area, there is a large number of people from other nations, ethnic groups and languages operating in the state. In addition, the people are predominantly Christians and their major occupations include civil service, workers in financial and commercial establishments, entrepreneurs and large scale farmers.

The choice of Anambra State as the area for the study was informed by the fact that there have been increased cases of cult related violence among students in secondary schools in Anambra State. This ugly situation has led to the death, injury and arrest of secondary school students and has heightened tension in some secondary schools in the State. This has become a source of worry among students, parents, teachers and non-academic staff in the schools. This has increased the need to carry out this study in the State.

Population of the Study

The population of the study comprised 258 principals of public secondary schools in the six education zones of the State based on information from the

Statistics Department, Post-Primary Secondary Schools Services Commission (PPSSC), Awka, Anambra State, January 2017. The population distribution by education zones is shown as Appendix A in page 135. The rationale for using the principals in this study is because they are officials in charge of the daily administration of secondary schools whose duties include planning and managing personnel, facilities, school environment and finances as well as ensuring safety of students and staff in the school.

Sample and Sampling Technique

According to Nworgu (2015), if the population is small and manageable, the entire population can be studied. Thus, the researcher used the entire population without sampling because the number was small and manageable.

Instrument for Data Collection

The instrument used for data collection was a questionnaire developed by the researcher from the reviewed literature, consultation with experts all based on the research questions guiding the study. The instrument was titled “Questionnaire on Principals Security Management Practices (QPSMP)” and has two sections- A and B. Section A contains two items on respondents’ background information covering location of school and gender. Section B contains 53 items in four clusters of B1, B2, B3 and B4 according to the four research questions guiding the study. The four clusters contain 17, 15, 10 and 11 items respectively. All the items are structured on a 5-point rating scale of Very High Extent (VHE), High Extent (HE), Moderate Extent (ME), Low Extent

(LE) and Very Low Extent (VLE) weighted 5, 4, 3, 2 and 1 respectively. The instrument is attached as Appendix C at page 137.

Validation of the Instrument

The face validation of the instrument was determined. To do this, the research questions, purpose of the study, hypotheses and the questionnaire were given to three experts; who are lecturers; two in the Department of Educational Management and Policy and one in Measurement and Evaluation Unit of the Department of Educational Foundations, all in the Faculty of Education, Nnamdi Azikiwe University, Awka. These experts were requested to validate the instrument relative to the appropriateness and coverage of the items, wordings and clarity of the instructions. The corrections made by these experts which include reducing the questionnaire items in section B from 54 to 53 were incorporated in producing the final version of the instrument.

Reliability of the Instrument

A trial test was conducted to establish the instrument's reliability whereby the questionnaire was administered on 10 principals of secondary schools in Enugu State who were not included in the population of the study. The researcher ascertained the reliability of the four clusters of the instrument using Cronbach Alpha reliability method, which yielded coefficient values of 0.75, 0.70, 0.73 and 0.72 for clusters B1 to B4 respectively. The Cronbach Alpha reliability analysis on the obtained data yielded a score of 0.73 for internal consistency, which was deemed high for the study. This coefficient value indicate that the instrument is reliable because they are in line with Nworgu (2015) who suggested that a reliability co-efficient of 0.70 is adequate for a research instrument. The computation is attached as Appendix D at p 143.

Method of Data Collection

Data were collected by the researcher with the help of six research assistants who are teachers in secondary schools and they were assigned to each of the education zones in Anambra State. The research assistants were briefed by the researcher on the content and mode of the instruments administration. The questionnaire were administered by the research assistants on the spot in one of the zonal principals' management meetings in their respective education zones. Furthermore, those principals the researcher or the research assistants were not able to trackdown for the administration of the item and for immediate retrieval during this period, visit was made to their schools. Yet those principals who were not disposed to fill the item for immediate retrieval, an appointment of revisit was booked with the researcher and this exercise lasted for two weeks. The reason was to ensure and facilitate high return rate of the item for analysis.

Out of the 258 copies of the questionnaire administered, 238 copies were returned. These 238 copies representing 92% return rate of the questionnaire distributed was used for data analysis.

Method of Data Analysis

The data collected were analyzed using mean, standard deviation and t-test. The mean value was used to answer the research questions while the standard deviation was used to ascertain the homogeneity or otherwise of respondents' ratings. The decision rule was done using the item by item and cluster mean both relative to real limits of the 5-point rating scale as shown below:

Response option	Values	Real Limit
Very High Extent	5	4.50-5.00
High Extent	4	3.50-4.49
Moderately Extent	3	2.50-3.49
Low Extent	2	1.50-2.49
Very Low Extent	1	0.50- 1.49

The null hypotheses were tested with t-test at 0.05 level of significance. Where the calculated t-value is less than the critical value of t, it means that there was no significant difference in respondents' mean ratings and the hypothesis was accepted. Conversely, where the calculated t-value is equal to or greater than the critical t-value, it means that there was significant difference in the respondents' mean ratings and the hypothesis was not accepted.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the analysis of data collected for the study. The data analyzed are according to the research questions and hypotheses and presented in Tables accordingly.

Research Question 1

To what extent do principals apply security management procedures for effective administration of public secondary schools in Anambra State?

Table 1

Respondents mean ratings on their extent of application of school security management procedures for effective administration of public secondary schools

S/NO	Security management procedures:	Rural			Urban			Male			Female		
		$\bar{X}$	SD	D	$\bar{X}$	SD	D	$\bar{X}$	SD	D	$\bar{X}$	SD	D
1.	Carrying out constant risk/threat assessment in and around the school premises for effective administration of public secondary schools.	2.22	0.41	LE	2.40	0.50	LE	2.40	0.50	LE	2.33	0.47	LE
2.	Instituting a threat assessment team which comprises of principals, guidance counsellors, mental health professionals and security, police, and fire personnel, as well as social service agencies for effective administration of public secondary schools.	2.22	0.41	LE	2.06	0.24	LE	2.25	0.44	LE	2.06	0.23	LE
3.	Having a specific process for screening students reported for threatening or violent behaviour for effective administration of public secondary schools.	2.14	0.35	LE	2.13	0.33	LE	2.25	0.44	LE	2.06	0.23	LE
4.	Having a code of conduct for all students in the school for effective administration of public secondary schools	2.22	0.41	LE	2.38	0.49	LE	2.48	0.50	LE	2.11	0.32	LE
5.	Having a clearly defined code of ethics for school staff for effective administration of public secondary schools	2.14	0.35	LE	2.00	0.50	LE	2.08	0.28	LE	2.06	0.53	LE
6.	Instituting a clear security plan that is known by school staff for effective administration of public secondary schools	2.14	0.52	LE	2.19	0.39	LE	2.25	0.60	LE	2.11	0.32	LE
7.	Organizing constant training	2.14	0.65	LE	1.87	0.49	LE	1.83	0.69	LE	2.11	0.46	LE

	programmes for the school threat assessment team for effective administration of public secondary schools												
8.	Providing procedures for identifying and addressing mental health needs for effective administration of public secondary schools.	2.22	0.56	LE	2.07	0.66	LE	2.08	0.28	LE	2.18	0.77	LE
9.	Having a laid down procedure to track reports of worrisome behaviours over time in the school for effective administration of public secondary schools	2.14	0.35	LE	2.13	0.33	LE	2.25	0.44	LE	2.06	0.23	LE
10.	Providing an anonymous hotline to report threatening behaviour from students for effective administration of public secondary schools.	2.14	0.35	LE	1.88	0.60	LE	2.08	0.28	LE	1.95	0.62	LE
11.	Providing an anonymous hotline to report threatening behaviour from teachers for effective administration of public secondary schools	2.00	0.54	LE	2.06	0.24	LE	1.92	0.50	LE	2.11	0.32	LE
12.	Developing an “all hazards” emergency preparedness plan that covers natural disaster for effective administration of public secondary schools.	2.07	0.46	LE	2.00	0.42	LE	2.17	0.37	LE	1.94	0.23	LE
13.	Developing an “all hazards” emergency preparedness plan that covers man-made threats for effective administration of public secondary schools.	2.21	0.41	LE	2.13	0.33	LE	2.17	0.37	LE	2.16	0.37	LE
14.	Developing a clear ranking structure that defines the duties and responsibilities of all school members during crisis for effective administration of public secondary schools	2.42	0.50	LE	2.06	0.24	LE	2.17	0.37	LE	2.27	0.45	LE
15.	Having a clearly specified procedures for checking and admitting visitors into the school premises for effective administration of public secondary schools	2.29	0.46	LE	2.00	0.24	LE	2.25	0.44	LE	2.06	0.23	LE
16.	Instituting a crisis response team for school emergencies for effective administration of public secondary schools.	2.14	0.35	LE	2.44	0.50	LE	2.48	0.50	LE	2.11	0.32	LE
17.	Ensuring that students and staff are familiar with emergency evacuation drills including those for use at night, in case of fire for effective administration of public secondary schools.	2.07	0.60	LE	2.06	0.24	LE	2.17	0.69	LE	2.00	0.24	LE
	Grand Mean	**2.17**	**0.45**	**LE**	**2.11**	**0.40**	**LE**	**2.32**	**0.45**	**LE**	**2.34**	**0.39**	**LE**

Data in Table 1 reveal that the 17 listed security management procedures had mean ratings ranging between 1.83 to 2.48 according to gender and location of principals in secondary schools. This means that principals apply them for effective administration of public secondary schools at a low extent. The grand mean scores of 2.17 for principals in the rural area and 2.11 for principals in urbans areas shows that public secondary school principals in Anambra State apply security procedures for effective administration of public secondary schools at a low extent. This is also consistent with the grand mean scores of 2.32 for male principals and 2.34 for female principals which show a low extent of application security management procedures for effective secondary school administration in Anambra State. Standard deviation scores for all the items are within the same range which shows that the respondents are not wide apart in their rating.

Research Question 2

To what extent do principals apply physical security management practices for effective administration of public secondary schools in Anambra State?

Table 2

Respondents mean rating on their extent of application of physical security management practices for effective administration of public secondary schools

S/NO	Physical security management practices:	Rural			Urban			Male			Female		
		$\bar{X}$	SD	D	$\bar{X}$	SD	D	$\bar{X}$	SD	D	$\bar{X}$	SD	D
1.	Building fence round the school premises for effective administration of public secondary schools	3.42	0.83	ME	3.75	0.67	HE	3.50	0.77	HE	3.66	0.76	HE
2.	Installing burglary bars on all windows in the school premises for effective administration of public secondary schools.	2.44	0.61	ME	2.44	0.61	LE	2.25	0.44	LE	2.43	0.41	LE
3.	Installing iron doors in the classrooms for effective administration of public secondary schools	2.29	0.59	LE	2.25	0.67	LE	2.25	0.44	LE	2.39	0.59	LE
4.	Providing for appropriate security lighting system in and around the school premises for effective administration of public secondary schools	2.19	0.39	LE	2.40	0.53	LE	2.47	0.56	LE	2.00	0.48	LE
5.	Ensuring that access points in the school are clear of any obstructions such as big shrubs, trees or signs for effective administration of public secondary schools.	2.07	0.42	LE	2.18	0.53	LE	2.32	0.63	LE	2.41	0.68	LE
6.	Providing a secure parking spot for visitors and staff for effective administration of public secondary schools	2.31	0.52	LE	2.76	0.54	ME	2.00	0.41	LE	2.06	0.41	LE
7.	Limiting the entrance-and-exit access points to the school to one or at the most two for effective administration of public secondary schools.	2.07	0.26	LE	2.13	0.33	LE	2.08	0.28	LE	2.11	0.32	LE
8.	Ensuring that the school has a functional security gate for effective administration of public secondary schools.	2.95	0.62	ME	3.56	0.74	HE	3.65	0.69	HE	3.59	0.77	HE
9.	Ensuring that all areas and blocks in the school are adequately labeled with signs and instructions for effective administration of public secondary schools	2.38	0.35	LE	2.24	0.51	LE	2.42	0.57	LE	2.18	0.37	LE
10	Installing fire detection	2.11	0.42	LE	2.08	0.43	LE	2.08	0.46	LE	2.40	0.62	LE

.	system in the school administrative block for effective administration of public secondary schools.												
11.	Installing fire detection system in the classrooms for effective administration of public secondary schools	2.27	0.54	LE	2.33	0.56	LE	2.10	0.50	LE	2.19	0.48	LE
12.	Installing of vaults and safe in the school administrative blocks for effective administration of public secondary schools	1.58	0.34	LE	2.12	0.48	LE	2.19	0.43	LE	2.32	0.51	LE
13.	Ensuring that the school's main office have a direct view of the front entrance and clearly marked as the main office for effective administration of public secondary schools.	2.31	0.41	LE	2.21	0.31	LE	2.20	0.58	LE	2.47	0.54	LE
14.	Ensuring that parking lots, playgrounds, and fields near school building are easily observed and closely monitored for effective administration of public secondary schools.	2.17	0.67	LE	2.18	0.55	LE	2.21	0.49	LE	2.21	0.48	LE
15.	Establishing safe areas in different sections of the school for effective administration of public secondary schools	2.33	0.39	LE	2.43	0.44	LE	2.25	0.56	LE	2.10	0.63	LE
	Grand Mean	**2.33**	**0.49**	**LE**	**2.47**	**0.53**	**LE**	**2.40**	**0.52**	**LE**	**2.43**	**0.54**	**LE**

Data in Table 2 revealed that the respondents apply item 1 for effective administration of public secondary schools at a high extent with mean ratings of 3.75, 3.50 and 3.66 for principals in urban areas, male principals and female principals respectively. However, principals at the rural areas applied item 1 at a moderate extent with mean rating of 3.42. Principals in the urban area also applied item 6 at a moderate extent with mean rating of 2.76. They also applied item 8 to a high extent with mean ratings of 3.56, 3.65 and 3.59 for principals in urban areas, male principals and female principals respectively while principals at the rural areas applied item 8 at a moderate extent with mean rating of 2.75. They also apply 13 items with mean ratings ranging between 1.58 to 2.47. The grand mean scores of 2.33 for principals in the rural area and 2.47 for principals in urbans areas shows that public secondary school principals in Anambra State apply physical security management practices for effective administration of public secondary schools at a low extent. Similarly, the grand mean scores of 2.40 for male principals and 2.43 for female principals also indicate that the extent of application physical security management practices for effective secondary school administration in Anambra State at a low extent. Standard deviation scores for all the items are within the same range which shows that the respondents are not wide apart in their rating.

Research Question 3

To what extent do principals apply human security management practices for effective administration of public secondary schools in Anambra State?

Table 3

Respondents mean ratings on their extent of application of human security management practices for effective administration of public secondary schools

S/NO	Human security management practices:	Rural			Urban			Male			Female		
		X	SD	D	X	SD	D	X	SD	D	X	SD	D
1.	Employing security guards for the school for effective administration of public secondary schools	3.12	0.67	ME	3.23	0.70	ME	2.90	0.65	ME	3.10	0.64	ME
2.	Contracting private security company to provide school security for effective administration of public secondary schools	2.13	0.41	LE	2.32	0.43	LE	2.34	0.51	LE	2.43	0.41	LE
3.	Collaborating with local vigilante groups to provide for school security for effective administration of public secondary schools	2.32	0.64	LE	2.34	0.54	LE	2.42	0.56	LE	2.41	0.59	LE
4.	Employing a security consultant for issues concerning the security of your school for effective administration of public secondary schools.	2.12	0.52	LE	2.39	0.42	LE	2.45	0.63	LE	2.34	0.46	LE
5.	Collaborating with the police to ensure security in the school for effective administration of public secondary schools	2.28	0.71	LE	2.20	0.42	LE	2.31	0.63	LE	2.35	0.53	LE
6.	Training school resource staff for security checks in the school for effective administration of public secondary schools	2.20	0.44	LE	2.12	0.60	LE	2.29	0.65	LE	2.18	0.56	LE
7.	Reaching out to the community for volunteers that will help in providing security in and around the school premises for effective administration of public secondary schools	2.13	0.46	LE	2.20	0.59	LE	2.19	0.55	LE	2.23	0.44	LE
8.	Equipping the school security personnel with adequate tools that are needed for conducting security check and controlling threats for	2.05	0.47	LE	2.30	0.49	LE	1.87	0.69	LE	2.43	0.56	LE

	effective administration of public secondary schools.												
9.	Ensuring that visitors to the school are escorted to the appropriate location of their visit for effective administration of public secondary schools.	2.41	0.39	LE	2.41	0.44	LE	2.23	0.43	LE	2.21	0.40	LE
10.	Taking practical steps to safeguard students who are driven by taxis/commercial vehicles by assigning appropriate staff to accompany them on their journey for effective administration of public secondary schools.	2.43	0.65	LE	2.08	0.43	LE	2.11	0.51	LE	2.22	0.62	LE
	Grand Mean	**2.32**	**0.54**	**LE**	**2.36**	**0.51**	**LE**	**2.31**	**0.58**	**LE**	**2.39**	**0.62**	**LE**

Data in Table 3 reveal that the respondents apply 1 item for effective administration of public secondary schools at a moderate extent with mean ratings of 3.12 for principals in rural areas and 3.23 for principals in urban areas. Male and female principals also apply item 1 to a moderate extent with mean ratings of 2.90 and 3.10 respectively. They apply 9 items for effective administration of public secondary schools with mean ratings ranging between 2.05 and 2.45 at a low extent. The grand mean scores of 2.34 for principals in the rural area and 2.36 for principals in urbans areas shows that public secondary school principals in Anambra State apply human security management practices for effective administration of public secondary schools at a low extent. Similarly, the grand mean scores of 2.31 for male principals and 2.39 for female principals also indicate that the extent of application human security management practices for effective secondary school administration in Anambra State at a low extent. Standard deviation scores for all the items are within the same range which shows that the respondents are not wide apart in their rating.

Research Question 4

To what extent do principals apply technological security management practices for effective administration of public secondary schools in Anambra State?

Table 4

Respondents mean rating on their extent of application of technological security management practices for effective administration of public secondary schools

S/NO	Physical security management practices:	Rural			Urban			Male			Female		
		$\bar{X}$	SD	D	$\bar{X}$	SD	D	$\bar{X}$	SD	D	$\bar{X}$	SD	D
1.	Issuing electronic key cards to specific staff members so to restrict access to outsiders for effective administration of public secondary schools	1.23	0.42	VLE	1.45	0.35	VLE	1.29	0.54	VLE	1.35	0.38	VLE
2.	Using the metal detectors to check students bags at the school point of entry for effective administration of public secondary schools	1.09	0.28	VLE	1.18	0.38	VLE	1.21	0.44	VLE	1.22	0.29	VLE
3.	Installing close circuit cameras at strategic points in the school premises for effective administration of public secondary schools	1.50	0.57	LE	1.59	0.23	LE	1.61	0.57	LE	1.52	0.38	LE
4.	Using biometrics technologies (like finger prints scanners, iris readers, hand vein readers and facial recognition technology) to clear admit students into the school premises for effective administration of public secondary schools	1.09	0.27	VLE	1.40	0.42	VLE	1.47	0.34	VLE	1.30	0.32	VLE
5.	Installing remote lockdown systems in the school for effective administration of public secondary schools.	1.10	0.32	VLE	1.13	0.47	VLE	1.32	0.28	LE	1.41	0.38	VLE
6.	Implementing an electronically controlled	2.31	0.52	LE	2.42	0.41	LE	2.10	0.38	LE	2.12	0.41	LE

	access system for effective administration of public secondary schools.												
7.	Implementing a computerized bio-metric staff database system for effective administration of public secondary schools.	2.07	0.26	LE	2.13	0.33	LE	2.08	0.28	LE	2.11	0.32	LE
8.	Implementing a computerized bio-metric student database system for effective administration of public secondary schools.	2.45	0.62	LE	2.10	0.34	LE	2.15	0.41	LE	1.59	0.61	LE
9.	Installing of panic and burglar alarms for effective administration of public secondary schools.	2.08	0.46	LE	2.40	0.62	LE	2.38	0.35	LE	2.24	0.51	LE
10.	Implementing an electronic mass notification system for parents and staff (cell phones, e-mail, pagers etc.) for effective administration of public secondary schools.	2.19	0.56	LE	2.32	0.46	LE	2.33	0.46	LE	2.12	0.34	LE
11.	Utilizing electronically powered visitors' badges to make them easily spotted while in the school premises for effective administration of public secondary schools.	2.20	0.38	LE	2.11	0.42	LE	2.18	0.30	LE	2.15	0.48	LE
	Grand Mean	**1.75**	**0.42**	**LE**	**1.84**	**0.40**	**LE**	**1.83**	**0.40**	**LE**	**1.74**	**0.50**	**LE**

Data in Table 4 reveal that the respondents apply 7 items for effective administration of public secondary schools with mean ratings ranging between 1.50 to 2.38 at a low extent. They also rated 4 items for effective administration of public secondary schools with mean ratings ranging between 1.09 to 1.47 at a very low extent. The grand mean scores of 1.75 for principals in the rural area and 1.84 for principals in urbans areas shows that public secondary school principals in Anambra State apply technological security management practices for effective administration of public secondary schools at a low extent.

Similarly, the grand mean scores of 1.83 for male principals and 1.74 for female principals also indicate that the extent of application technological security management practices for effective secondary school administration in Anambra State at a low extent. Standard deviation scores for all the items are within the same range which shows that the respondents are not wide apart in their rating.

Testing the Null Hypotheses

Null Hypothesis 1

There is no significant difference in the mean ratings of principals in rural and urban secondary schools in Anambra state on the extent they apply school security management procedures for effective school administration.

Table 5

t-test analysis on the Mean Ratings of Principals in Rural and Urban Secondary Schools on the extent they Apply School Security Management Procedures

Variable	N	Mean	SD	df	ά	t-cal.	t-crit.	Decision
Rural Principals	122	2.17	0.45	236	0.05	0.67	1.96	Not Significant
Urban Principals	116	2.11	0.40					

Data in Table 5 show that the calculated t-value of 0.0.67 at 236 degree of freedom and at 0.05 level of significance is less than the critical value of 1.96. This shows that the location of the respondents did not significantly affect their application of school security management procedures for effective administration of secondary schools in Anambra State. Therefore, the hypothesis is accepted.

Null Hypothesis 2

There is no significant difference in the mean ratings of principals in secondary schools in Anambra state on the extent they apply school security management procedures for effective school administration based on gender.

Table 6

t-test analysis on the Mean Ratings of Male and Female Principals in Secondary Schools on the Extent they Apply School Security Management Procedures

Variable	N	Mean	SD	df	ά	t-cal.	t-crit.	Decision
Male Principals	86	2.32	0.45	236	0.05	0.54	1.96	Not Significant
Female Principals	152	2.34	0.39					

Data in Table 6 show that the calculated t-value of 0.54 at 236 degree of freedom and at 0.05 level of significance is less than the critical t-value of 1.96. This shows that the gender of the respondents did not significantly affect their application of school security management procedures for effective administration of secondary schools in Anambra State. Therefore, the hypothesis is accepted.

Null Hypothesis 3

There is no significant difference in the mean ratings of principals in rural and urban secondary schools in Anambra state on the extent they apply physical security management practices for effective school administration.

Table 7

t-test analysis on the Mean Ratings of Principals in Rural and Urban Secondary Schools on the extent they Apply Physical Security Management Practices

Variable	N	Mean	SD	df	ά	t-cal.	t-crit.	Decision
Rural Principals	122	2.33	0.49	236	0.05	0.72	1.96	Not Significant
Urban Principals	116	2.47	0.53					

Data in Table 7 show that the calculated t-value of 0.72 at 236 degree of freedom and at 0.05 level of significance is less than the critical t-value of 1.96. This shows that the location of the respondents did not significantly affect their application of physical security management practices for effective administration of secondary schools in Anambra State. Therefore, the hypothesis is accepted.

Null Hypothesis 4

There is no significant difference in the mean ratings of principals in secondary schools in Anambra state on the extent they apply physical security management practices for effective school administration based on gender.

Table 8

t-test analysis on the Mean Ratings of Male and Female Principals in Secondary Schools on the extent they Apply Physical Security Management Practices

Variable	N	Mean	SD	df	ά	t-cal.	t-crit.	Decision
Male Principals	86	2.40	0.52	236	0.05	0.37	1.96	Not Significant
Female Principals	152	2.43	0.54					

Data in Table 8 show that the calculated t-value of 0.37 at 236 degree of freedom and at 0.05 level of significance is less than the critical value of 1.96. This shows that the gender of the respondents did not significantly affect their application of physical security management practices for effective administration of secondary schools in Anambra State. Therefore, the hypothesis is accepted.

Null Hypothesis 5

There is no significant difference in the mean ratings of principals in rural and urban secondary schools in Anambra state on the extent they apply human security management practices for effective school administration.

Table 9

t-test analysis on the Mean Ratings of Principals in Rural and Urban Secondary Schools in on the extent they Apply Human Security Management Practices

Variable	N	Mean	SD	df	ά	t-cal.	t-crit.	Decision
Rural Principals	122	2.32	0.54	236	0.05	0.22	1.96	Not Significant
Urban Principals	116	2.36	0.51					

Data in Table 9 show that the calculated t-value of 0.22 at 236 degree of freedom and at 0.05 level of significance is less than the critical value of 1.96. This shows that the location of the respondents did not significantly affect their application of human security management practices for effective administration of secondary schools in Anambra State. Therefore, the hypothesis is accepted.

Null Hypothesis 6

There is no significant difference in the mean ratings of principals in secondary schools in Anambra state on the extent they apply human security management practices for effective school administration based on gender.

Table 10

t-test Analysis on the Mean Ratings of Male and Female Principals in Secondary Schools in on the extent they Apply Human Security Management Practices

Variable	N	Mean	SD	df	ά	t-cal.	t-crit.	Decision
Male Principals	86	2.31	0.58	236	0.05	0.44	1.96	Not Significant
Female Principals	152	2.39	0.62					

Data in Table 10 show that the calculated t-value of 0.44 at 236 degree of freedom and at 0.05 level of significance is less than the critical value of 1.96. This shows that the gender of the respondents did not significantly affect their application of human security management practices for effective administration of secondary schools in Anambra State. Therefore, the hypothesis is accepted.

Null Hypothesis 7

There is no significant difference in the mean ratings of principals in rural and urban secondary schools in Anambra state on the extent they apply technological security management practices for effective school administration.

Table 11

t-test Analysis on the Mean Ratings of Principals in Rural and Urban Secondary Schools in on the extent they Apply Technological Security Management Practices

Variable	N	Mean	SD	df	ά	t-cal.	t-crit.	Decision
Rural Principals	122	1.75	0.42	236	0.05	0.18	1.96	Not Significant
Urban Principals	116	1.84	0.40					

Data in Table 11 show that the calculated t-value of 0.18 at 236 degree of freedom and at 0.05 level of significance is less than the critical value of 1.96. This shows that the location of the respondents did not significantly affect their application of technological security management practices for effective administration of secondary schools in Anambra State. Therefore, the hypothesis is accepted.

Null Hypothesis 8

There is no significant difference in the mean ratings of principals in secondary schools in Anambra state on the extent they apply technological security management practices for effective school administration based on gender.

Table 12

t-test Analysis on the Mean Ratings of Male and Female Principals in Secondary Schools in on the extent they Apply Technological Security Management Practices

Variable	N	Mean	SD	df	ά	t-cal.	t-crit.	Decision
Male Principals	86	1.83	0.40	236	0.05	-1.33	1.96	Not Significant
Female Principals	152	1.74	0.50					

Data in Table 12 show that the calculated t-value of -1.33 at 236 degree of freedom and at 0.05 level of significance is less than the critical value of 1.96. This shows that the gender of the respondents did not significantly affect their application of technological security management practices for effective administration of secondary schools in Anambra State. Therefore, the hypothesis is accepted.

Summary of Findings

Findings of the study are summarized as follows:

1. Principals of public secondary schools in Anambra State apply school security management procedures for effective administration of public secondary schools to a low extent.
2. Principals of public secondary schools in Anambra State apply physical security management practices for effective administration of public secondary schools to a low extent.
3. Principals of public secondary schools in Anambra State apply human security management practices for effective administration of public secondary schools to a low extent.

4. Principals of public secondary schools in Anambra State apply technological security management practices for effective administration of public secondary schools to a low extent.
5. The principals of public secondary schools in Anambra State do not differ significantly in their mean ratings on their application of security management procedures for effective administration of public secondary schools based on location.
6. Male and female principals of public secondary schools in Anambra State do not differ significantly in their mean ratings on their application of security management procedures for effective administration of public secondary schools.
7. The principals of public secondary schools in Anambra State do not differ significantly in their mean ratings on their application of physical security management practices for effective administration of public secondary schools based on location.
8. Male and female principals of public secondary schools in Anambra State do not differ significantly in their mean ratings on their application of physical security management practices for effective administration of public secondary schools.
9. The principals of public secondary schools in Anambra State do not differ significantly in their mean ratings on their application of human

security management practices for effective administration of public secondary schools based on location.

10. Male and female principals of public secondary schools in Anambra State do not differ significantly in their mean ratings on their application of human security management practices for effective administration of public secondary schools.
11. The principals of public secondary schools in Anambra State do not differ significantly in their mean ratings on their application of technological security management practices for effective administration of public secondary schools based on location.
12. Male and female principals of public secondary schools in Anambra State do not differ significantly in their mean ratings on their application of technological security management practices for effective administration of public secondary schools.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter dealt with the discussion of findings, conclusion, implications of the study, recommendations, limitations of the study and suggestions for further studies.

Discussion of the Findings

The findings were discussed according to the different aspects covered in the research questions and hypotheses as follows.

Application of School Security Management Procedures

Findings of the study indicated that principals of public secondary schools in Anambra State apply school security management procedures to a low extent. This might have resulted because there are no laid down security procedures for secondary schools in Anambra State. This impedes on the ability of the principal to make and apply security management procedures in their schools for effective administration. In another vein, some principals appear to be unaware of the need for having school security managemnt procedures in their schools. Thus there lack of interest in applying security management procedures in their schools. Furthermore, the finding is in line with Nyakundi (2012) who found that public secondary schools do not adopt proper security procedures. According to Maritim (2014), safety procedures are formulated by the ministry and passed down to schools for application. However, Maritim noted that the ministerial guidelines are issued but are never implemented in many schools. Similarly, Ike (2015) also observed that despite the formulation of safety policies in some schools in Nigeria, it appears that the policies were not applied by the administrators in those schools. This situations result because funds might not have been made readily available for school principals to implement the security management procedures in their schools.

The findings also revealed that the principals do not differ significantly in their mean ratings on their application of school security management procedures based on location. This shows that the location of the respondents did not significantly influence the extent of their application of school security management policies and procedures. This is also in line with the findings of Maritim (2014) who reported that principals of public secondary schools do not apply the safety guidelines and policies in their schools.

Furthermore, it was also revealed that male and female principals do not differ significantly in their mean ratings on the other six school security management procedures. This is also in agreement with Xaba (2006) who noted that school administrators irrespective of gender seldomly apply security management policies and procedures in secondary schools in Africa. This might be because of lack of awareness of laid down school security procedures among the principals. It, therefore, becomes pertinent that a unified school security procedure should be mapped out by the state ministry of education or the post primary school service commission in collaboration with the school principals, parents, community vigilante groups and other stakeholders in education so as to ensure optimum safety in schools.

Application of Physical Security Management Practices in Secondary Schools

Findings of the study indicated that principals of public secondary schools in Anambra State apply physical security management practices to a low extent. This is in line with Van Jaarsveld (2011) who noted that public schools administrators have problems with maintaining adequate physical security in their schools. This findings in the reseacher's view may have resulted as a resulted as a result of poor support in the areas of funding and infratructure provision by the government for secondary schools. In some of the secondary schools, the only form of physical security measure is fence which is in most cases dilapedated. According to Lombaard and Kole (2008), features within the school's physical environment can influence the chances of a crime(s) occurring. The physical environment may be used as a point of departure, aimed at encouraging school safety and security. If a school is well maintained and has a safe and secure physical security measures, it would be more difficult for threatening incidents to occur. Campbell (2007) further noted that offenders prefer to commit crimes that comprise of the lowest risks, require the least effort and offer the highest benefit. Therefore, if the physical environment of a school is well secured and has the necessary physical security measures in place, crimes are less likely to occur.

Furthermore, the findings also showed that principals do not differ significantly in their mean ratings on their application of physical security management practices based on location. This in agreement with Lombaard and Kole (2008) who decried the low adoption of physical security management practices in schools. In another vein, principals do not differ significantly in their mean ratings on physical security management practices based on gender. This is in line with Sabir and Fozia (2016) who revealed that both male and female heads as well as public and private schools heads had no significant mean differences regarding physical safety and security measures at secondary level schools.

Application of Human Security Management Practices in Secondary Schools

Findings on human security management practices indicated that principals of public secondary schools in Anambra State apply human security management practices to a low extent. This might be as a result of the failure of the principals to adequately intereact with leaders in their host community in other to provide the adequate human security needs of the school. This impedes on their ability to adequately apply human security management practics. Furthermore, the finding is in line Amanchukwu (2012) who reported low morale and absenteeism as factors against safety and security. Lombaard and Kole (2008) stated that having human security measures on the premises might decrease scholars, staff and parents' fear of crime, as well as assist with the prevention of crime. Lombaard and Kole further noted that this would also allow for vulnerable areas to be inspected and security-related hazards to be detected. It is therefore vital that the human aspect of security is not overlooked or neglected, but that it is utilised to the best of its ability and integrated with the technology and security equipment available. According to Rich (2012), the use of security guards and police officers has been cited as among the most common physical surveillance measures currently used in schools.

Furthermore, findings also showed that principals do not differ significantly in their mean ratings on their application of human security management practices based on location. This in agreement with Kole and Lombaard (2008) who decried the low adoption of human security management practices in schools. In another vein, male and female principals do not differ significantly in their mean ratings on their application of human security management practices. This is in line with Ike (2015) who revealed that both male and female heads as well as public and private schools heads had no significant mean differences regarding human security measures at secondary level schools.

Application of Technological Security Management Practices in Secondary Schools

Findings on technological security management practices indicated that principals of public secondary schools in Anambra State apply technological security management practices to a low extent. This finding may have resulted because of lack of institutional support from the government or her agencies in providing echnological security gadget for school safety. Also the task for ensuring the application of technological security management practices is beyond the administrative capacity of secondary school principals thus the reseaon for the low extent of application. This is in agreement with Ike (2015) who reported that secondary school administrators do not apply technologies in management of school security in Nigeria. Schneider (2010) technological security tools can be excellent tools and a great contribution to the safety of scholars and staff in schools and in reducing the violence in schools. They have, however, to be applied correctly within the school environment and be maintained after the installment, otherwise they will not be effective. Rich (2012) noted that technologies can assist a school by providing information that would not otherwise be available, they can free-up manpower and they can, in-the-long-run, be cost- effective for a school.

Furthermore, findings also showed that principals do not differ significantly in their mean ratings on their application of technological security management practices based on location. It was also revealed that principals do not differ significantly in their mean ratings on their application of technological security management practices based on gender. This is in line with Ike (2015) who revealed that both male and female heads as well as public and private schools heads had no significant mean differences regarding technological security measures at secondary level schools. Ike further noted that secondary school principal’s seldomly applied technology as tools for maintaining school security because of lack of funds and lack of technical know-how.

Conclusion

Based on the findings of this study, it was concluded that the extent of public secondary schools principals’ application of security management practices in secondary schools in Anambra State is low. The issue of low application of the four components of security management practices is evident in both rural and urban public secondary schools irrespective of the gender of the principals’ in-charge. Issue of low extent of principals’ application of security management practices in Anambra State secondary schools, could be as a result of inadequate funding and poor attitude of principals towards ensuring safety in their schools. Security is a serious issue in terms of funding and application in order to ensure safety of life and property in the school.

Implications of the Study

Findings of the study have implications for secondary school principals in Anambra State that the low application of security management procedures would result in poor security plan in the schools. This would expose the school to security threats that would increase fear and anxiety among teachers and students in the school.

The findings of this study also have implication that low application of physical security in the school will result in high rate of security breach in the school. The schools are exposed to security threats within and outside the school. The implication is the high rate of cult threats from students within and outside the schools. The implication is that government should be prepared to allocate money for purchasing the relevant security prevention devices in order to respond quickly and effectively to potential crises.

The findings of the study have implications that the low application of human security management practices in secondary schools will lead to fear among teachers and students. This will affect their learning ability and result in poor academic performance among students.

The findings of the study also have implications that the low application of security technological management practices will increase the state of insecurity in the school. Thus, resulting in security breaches within the school. This calls for efforts to be made by principals in applying security management practices that would expose them to the need for security consciousness in an around their schools. This will lead to a safer learning environment for teaching and learning.

Recommendations

Based on the findings of this study, the researcher proffers the following recommendations:

1. Secondary school principals should be encouraged to maintain the application of security management procedures in their schools so as to curb cult and criminal activities. This can be done by organizing security workshops for school principals where they will be trained on current security management procedures for schools.
2. The State government through the State Ministry of Education should ensure the provision of physical security management infrastuctures and tools for secondary school safety. This can be done by funding the building of fences around schools, provision of burglary proofs and provision of metal proofed gates at the entry and exit points in each school.
3. School principals should collaborate with community leaders in their host communities in order to provide human security measures for their school safety. The communities can enlist the services of their vigilantees in the school as well as other security agencies present in the area.
4. Government should provide funds for the installation of technological security tools for secondary schools. This can be done through the provision of security grants and aids to secondary

Limitations of the Study

The generalization made with respect to this study is subject to the following limitation:

1. The study only covered state owned public secondary schools in Anambra State. Thus, federal government owned and privately owned secondary schools were not part of the study this could affect the generalization of the study.
2. The use of only the opinion of principals for data collection could affect the generalization of the findings of the study because the opinion of teachers and even students could also have been used.

Suggestions for Further Studies

The study has helped to open up some areas for further research which include:

1. This study can be replicated in other south east states secondary schools for the purpose of comparison.
2. Assessment of private secondary schools principals' application of security management practices in Anambra State.
3. Investigation of factors inhibiting principals' application of security management practices in public secondary schools in Anambra State.
4. Extent of Application of security management practices in tertiary institutions in Anambra State.

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APPENDIX A

Population Distributions of Principals in Anambra State According to Education Zones

No.	Zones	Gender of Principals		Population of principals according to location		Total
		Male	Female	Rural	Urban	
1.	Aguata	21	28	31	17	49
2.	Awka	24	37	22	39	61
3.	Nnewi	12	38	27	23	50
4.	Ogidi	14	26	21	19	40
5.	Onitsha	18	14	7	25	32
6.	Otoucha	11	15	20	6	26
	Total	**100**	**158**	**128**	**129**	**258**

Source: Post-Primary Secondary Schools Services Commission (PPSSC), Awka, Anambra State, January 2017.

APPENDIX B

LETTER OF TRANSMITTAL

Department of Educational
Management and Policy,
Faculty of Education,
Nnamdi Azikiwe University,
Awka.
8th May, 2017.

Dear Sir/Madam,

REQUEST TO COMPLETE A QUESTIONNAIRE

I am a post graduate student of the Department of Educational Management and Policy, Nnamdi Azikiwe University. I am conducting a research to determine Principals Application of Security Management Practices for Effective Administration of Secondary Schools in Anambra State. The attached questionnaire is designed for use in collecting data for the study.

As a principal, your input is considered very essential in this dissertation. Consequently, l humbly request you to assist me in completing the questionnaire. I assure you that your response will be treated with strict confidence and used solely for the stated research purpose.

Thank you immensely for your anticipated assistance.

Yours sincerely,

Signed

Onuorah, Helen C.
(Researcher)

APPENDIX C

QUESTIONNAIRE ON PRINCIPALS SECURITY MANAGEMENT PRACTICES (QPSMP)

SECTION A: Respondents Bio-Data

Please indicate by ticking (√) any of the options for items 1 and 2 as it relates to you

1. Gender: Male ☐ Female ☐
2. Location of school: Rural ☐ Urban ☐

SECTION B: Application of security management practices by secondary school principals in Anambra State

Instruction: As a secondary school principal in Anambra State, please tick (√) in the column for all items in section B1 to B4 to indicate the extent to which you apply them in your school. Keys to the codes are:

Very High Extent	VHE
High Extent	HE
Moderate extent	ME
Low Extent	LE
Very low Extent	VLE

B1: Application of school security management procedures for effective administration of public secondary schools

S/NO	School security management procedures	VHE	HE	ME	LE	VLE
1.	Carrying out constant risk/threat assessment in and around the school premises for effective administration of public secondary schools.					
2.	Instituting a threat assessment team which comprises of principals, guidance counsellors, mental health professionals and security, police, and fire personnel, as well as social service agencies for effective administration of public secondary schools.					
3.	Having a specific process for screening students reported for threatening or violent behaviour for effective administration of public secondary schools.					
4.	Having a code of conduct for all students in the school for effective administration of public secondary schools					
5.	Having a clearly defined code of ethics for school staff for effective administration of public secondary schools					
6.	Instituting a clear security plan that is known by school staff for effective administration of public secondary schools					
7.	Organizing constant training programmes for the school threat assessment team for effective administration of public secondary schools					
8.	Providing procedures for identifying and addressing mental health needs for effective administration of public secondary schools.					`
9.	Having a laid down procedure to track reports of worrisome behaviours over time in the school for effective administration of public secondary schools					
10.	Providing an anonymous hotline to report threatening behaviour from students for effective administration of public secondary schools.					
11.	Providing an anonymous hotline to report threatening behaviour from teachers for effective administration of public secondary schools					
12.	Developing an “all hazards” emergency preparedness plan that covers natural disaster for effective administration of public secondary schools for effective administration of public secondary schools.					
13.	Developing an “all hazards” emergency preparedness plan that covers man-made threats					

	for effective administration of public secondary schools.					
14.	Developing a clear ranking structure that defines the duties and responsibilities of all school members during crisis for effective administration of public secondary schools					
15.	Having a clearly specified procedures for checking and admitting visitors into the school premises for effective administration of public secondary schools					
16.	Instituting a crisis response team for school emergencies for effective administration of public secondary schools.					
17.	Ensuring that students and staff are familiar with emergency evacuation drills including those for use at night, in case of fire for effective administration of public secondary schools.					

B2: Application of physical security management practices

S/NO	**Physical security management practices**	VHE	HE	ME	LE	VLE
18.	Building fences round the school premises for effective administration of public secondary schools					
19.	Installing burglary bars on all windows in the school premises for effective administration of public secondary schools					
20.	Installing iron doors in the school doors for effective administration of public secondary schools					
21.	Providing for appropriate security lighting system in and around the school premises for effective administration of public secondary schools					
22.	Ensuring that access points and the windows in the school are clear of any obstructions such as big shrubs, trees or signs for effective administration of public secondary schools.					
23.	Providing a secure parking spot for visitors and staff for effective administration of public secondary schools					
24.	Limiting the entrance-and-exit access points to the school to one or at the most two for effective administration of public secondary schools.					`
25.	Ensuring that the school has a functional security gate for effective administration of public secondary schools					
26.	Ensuring that all areas and blocks in the school are adequately labeled with signs and instructions for					

	effective administration of public secondary schools					
27	Installing fire detection system in the school administrative block for effective administration of public secondary schools.					
28.	Installing fire detection system in the classrooms for effective administration of public secondary schools					
29.	Installing of vaults and safe in the school administrative blocks for effective administration of public secondary schools					
30.	Ensuring that the school's main office have a direct view of the front entrance and clearly marked as the main office for effective administration of public secondary schools.					
31.	Ensuring that parking lots, playgrounds, and fields near school building should be easily observed and closely monitored for effective administration of public secondary schools.					
32.	Establishing safe areas in different sections of the school for effective administration of public secondary schools					

B3: Application of human security management practices

S/NO	Human security management practices	VHE	HE	ME	LE	VLE
33.	Employing security guards for the school for effective administration of public secondary schools					
34.	Contracting private security company to provide school security for effective administration of public secondary schools					
35.	Collaborating with local vigilante groups to provide for school security for effective administration of public secondary schools					
36.	Employing a security consultant for issues concerning the security of your school for effective administration of public secondary schools.					
37.	Collaborating with the police to ensure security in the school for effective administration of public secondary schools					
38.	Training school resource staff for security checks in the school for effective administration of public secondary schools					
39.	Reaching out to the community for volunteers that will help in providing security in and around the school premises for effective administration of					

	public secondary schools					
40.	Equipping the school security personnel with adequate tools that are needed for conducting security check and controlling threats for effective administration of public secondary schools.					`
41.	Ensuring that visitors to the school are escorted to the appropriate location of their visit for effective administration of public secondary schools.					
42.	Taking practical steps to safeguard students who are driven by taxis/commercial vehicles by assigning appropriate staff to accompany them on their journey for effective administration of public secondary schools.					

B4: Application of technological security management practices

S/NO	Technological security management practices	VHE	HE	ME	LE	VLE
43.	Issuing electronic key cards to specific staff members so to restrict access to outsiders for effective administration of public secondary schools					
44.	Using the metal detectors to check students bags at the school point of entry for effective administration of public secondary schools					
45.	Installing close circuit cameras at strategic points in the school premises for effective administration of public secondary schools					
46.	Using biometrics technologies (like finger prints scanners, iris readers, hand vein readers and facial recognition technology) to clear admit students into the school premises for effective administration of public secondary schools					
47.	Installing remote lockdown systems in the school for effective administration of public secondary schools.					
48.	Implementing an electronically controlled access system for effective administration of public secondary schools.					
49.	Implementing a computerized bio-metric staff database system for effective administration of public secondary schools.					
50.	Implementing a computerized bio-metric student database system for effective administration of public secondary schools.					`
51.	Installing of panic and burglar alarms for effective administration of public secondary schools.					
52.	Implementing an electronic mass notification system for parents and staff (cell phones, e-mail,					

	pagers etc.) for effective administration of public secondary schools.					
53.	Utilizing electronically powered visitors’ badges to make them easily spotted while in the school premises for effective administration of public secondary schools.					

APPENDIX D

Computation of Reliability of Instrument using Cronbach Alpha

Scale: School security procedures

Case Processing Summary

		N	%
Cases	Valid	10	100.0
	Excluded[a]	0	.0
	Total	10	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.752	17

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
34.2000	50.844	7.13053	17

Reliability

Scale: Physical security management practices

Case Processing Summary

		N	%
Cases	Valid	10	100.0
	Excluded[a]	0	.0
	Total	10	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.703	15

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
30.1000	26.100	5.10882	15

Reliability

Scale: Human security managemet practices

Case Processing Summary

		N	%
Cases	Valid	10	100.0
	Excluded[a]	0	.0
	Total	10	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.728	10

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
23.6000	30.489	5.52167	10

Reliability

Scale: Techological security management Practices

Case Processing Summary

		N	%
Cases	Valid	10	100.0
	Excluded[a]	0	.0
	Total	10	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.720	11

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
24.0000	26.444	5.14242	11

SUMMARY OF ALL CLUSTERS:

$0.75 + 0.70 + 0.73 + 0.72/4 = 0.725$