

**CONGREGANTS' PERCEPTION OF VULNERABILITY OF CHURCH BUILDINGS  
TO SECURITY THREATS IN NAIROBI COUNTY, KENYA**

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**A Thesis Submitted to the Graduate School in Partial Fulfillment of the  
Requirements for the Master of Arts in Security Management of Egerton University**

**EGERTON UNIVERSITY  
SEPTEMBER 2022**

**DECLARATION AND RECOMMENDATIONS**

**Declaration**

This thesis is my original work and to the best of my knowledge has not been presented for examination of any Degree or Diploma in any institution or university.



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## **DEDICATION**

To my wife Heather, loving children, Val, Linnet, Becky, Collins and Handsome JB, family members, friends, and colleagues. To my children, may this work be an inspiration for you to reach greater heights in your academics.

## **ACKNOWLEDGEMENTS**

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## **ABSTRACT**

This study sought to assess the nature of criminal attacks and perception of congregants on vulnerability of church buildings to security threats in Nairobi County, Kenya. The study was guided by the following objectives; To investigate the nature of perceived vulnerability against church buildings in Nairobi County Kenya, To explore congregants perceptions of what constitutes church buildings security and safety in Nairobi County Kenya, to establish congregants perceptions of their level of preparedness in case of a criminal attack while in church buildings service in Nairobi County Kenya and to determine the congregants perceptions of what they think should be done to secure church buildings in Nairobi County Kenya. This study will be grounded by two theories: Defensive Space Concept and Crime Prevention through Environmental Design (CPTED). This study adopted a cross-sectional survey design while stratified random sampling technique was used to pick all the main respondents. Questionnaires were used to collect data from 182 members of each church (main respondents). In addition, Key Informants (K.I) guide was used to collect qualitative data from 8 K.I who include 4 Priests (1 from each church), and 4 security guards (one from each church). Data was analyzed with the aid of Statistical Package for Social Sciences (SPSS) and results presented using tables, bar and pie charts. The study results revealed that violent attacks against the churches in Nairobi County are on the increase (72%) and that the violent attacks against the churches in Nairobi County have inspired fear among church attendants (68.1%). Further, results showed the gun attacks were the most prevalent in church buildings (29.7%) closely followed by knife attacks (29.1%), explosive attacks (20.3%), suicide bombs (13.2%). Further, the results have revealed that the churches had employed various measures to counter violent attacks where the church has proper guidelines to worshipers on what to do if they notice anything suspicious. The study concludes that perceptions on violent attacks against churches include violent attacks, there is fear during services, and this fear have negative effects on the members. The concluded that the main measure that ensures church security and safety of the congregants included the Perimeter Walls, the use of Metal Detectors in church entrances, and psychological deterrence or barriers that scare criminals away, e.g., dummy cameras. The study recommended the churches in Kenya and elsewhere in the world must always comply with the safety measures to ensure greater safety. The study also recommends the church buildings to have a uniform protection platform in accordance with the international security requirements.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>BCA:</b>	Building and Construction Authority
<b>CTPSA:</b>	Counter Terrorism Protective Security Advice
<b>CPTED:</b>	Crime Prevention through Environmental Design
<b>CCTV:</b>	Closed Circuit Television
<b>HOW:</b>	Houses of Worship
<b>INSS:</b>	Institute for National Strategic Studies
<b>IRA:</b>	Irish Republican Army
<b>KI:</b>	Key Informants
<b>NACOSTI:</b>	National Council for Science, Technology, and Innovation
<b>TGD:</b>	Technical Guidance Document

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

Houses of worship; churches in particular represent a unique crime prevention challenge for security practitioners because the worshipers consider the physical security of the churches as outside their faith, and that God should protect them regardless of the situation (Roberts, 2014). Sadly, this has not been the case. For example, in 2012, six people were killed and four injured in a shooting at a Sikh temple in Oak Creek, Wisconsin, and in 2008, two people were killed and seven wounded at a Unitarian Church in Knoxville, Tennessee. In addition, every day, across the United States, churches are victimized by criminal occurrences. Some incidents, such as last year's fatal shooting at the Tennessee Valley Unitarian Universalist Church in Knoxville, Tennessee, are so tragic event, though represented only a small percentage of church-related crime, but continue to spur debate among law enforcement officials, security practitioners and spiritual leaders concerning how best to protect a house of worship.

According to Boyle (2004), Freedom of faith in a secular, democratic and multi-cultural society is a basic right. All religious facilities must counter risks to extremism, crime, and abuse in workplaces at some stage in the current global climate. In major festivals – both for Christians Christmas and Easter, in the Jewish calendar, in Rosh Hashanah and Yom Kippur, and in other holy days for Islam and major denominations – hundreds or thousands of people in the same religious building engage in one day (Melton, 2011). Ellison and George (1994) stated that religious facilities and associated communities form fundamental bonds in the structure of society. Houses of cults are built as holy places for meeting, from communions, bar-mitzvahs and marriages to regular and weekly prayers that can accommodate conventional ceremonies and rituals (Magida, 2006). Furthermore, Atkin (2002), noted that religious organizations, which can allow members and non-members to participate, are increasingly providing full and post-church education, social services, and outreach initiatives.

The design of safe facilities must include their chosen users in an overall Protection Strategy, considering the transparency of the most religious institutions and a variety of constituents, staff and visitors using them (Molotch & McClain, 2003). Even the most sophisticated facility cannot

thwart and recover from a security violation without an integrated strategy. Preventive and constructive information would help both religious institutions and associated community centers (Kshetri, 2010). To cope with increased global security issues, the ADL was at the forefront of providing Jewish institutions with information. Feng et al. (2014) stated that any facility is the first step to developing an effective security program to recognize the risks and recognize vulnerable situations. Integrating the architecture, technology use and operations, as laid down by owner and facility manager policies and procedures, would provide much more security than prayer alone to safeguard the holy places (Susskind & Susskind, 2015).

According to Gordon (2004) the vast majority of churches lack sufficient security measures in case of an attack; this in effect has exposed them to risks and vulnerability of various types of soft targets and the increased attacks against them. Sadly, Terrorist incidents in the Haymarket, London on Friday 29th June 2007 and at Glasgow Airport on Saturday 30th June 2007 indicate that terrorists continue to target such soft and also crowded targets as they are usually locations with limited protective security measures and therefore afford the potential for mass fatalities and casualties. The reason soft targets are called soft is because they are difficult to defend against terror attacks, if not impossible, and are easy targets for terrorists. Homeland defense and security officials warn that soft targets are easily accessed by terrorists who blend in with the crowd and can cause maximum destruction.

Gordon (2004) further explains that Islamic State and Al Qaeda are increasingly mounting and advocating for attacks of soft targets as a means of deterring Western assaults on their strong holds, a strategy that is extending their reach of terrorism to hotels, cafes, supermarkets and malls where Europeans and Americans once felt were safe. As a result, about 70 tragedies between 1982 and 2015 were in soft target areas, mostly churches with crowds of people and victims not armed and not prepared to defend themselves.

According to Dana (2021), enhanced safety has influenced both religious traditions and the industry, government, and transport sectors. Churches and churches of worship were also open all night for those in distress or need, and for those who wanted to pray for convenience or for unplanned periods of troubling, to give a traditional sort of sanctuary (Rainer & Rainer, 2008).

But extra protection has obliged worship houses to stay open from sunrise to sunset for daily business hours and then locks the gate. Certain communities worldwide no longer see a religious structure as a safe place outside the boundaries of abuse, vandalism, and theft (Nolan & Nolan, 2018). Religious icons were made from the most precious materials for centuries and painted with respect and reverence with costly materials, fine metals, and jewels. Today, Paine (2012) stated that a congregation seldom views such items, normally locked behind thick protective glass cases or secured behind them as in a museum. The other few sections are normally cheap reproductions wherever possible.

Churches may also offer opportunities by considering possible easy money streams. "A small tin box that has been attached to the wall for years kept donations to the poor (Zelizer, 2017). This old practice is known as the 'bad box' has given way to build protected mini-safés, usually attached to the building and under permanent visual and video observation. They are also related to costly security devices that surpass the value of the funds normally generated in the poor box. Calder (2005) noted that elimination of potential risks, however, by moving and securing places where money and assets are kept, and increased monitoring can minimize robbery and vandalism opportunities in unsupervised spaces.

Hirschman (2004) states that religious institutions are no longer respected by society or by the communities around them, particularly as old ethnic zones emerge in American cities and become the home of new waves of immigrants with their own religious practices and cultures. As stated by Pena (2000), many religious organizations have removed, screened or sandwiched their valuable stained-glass windows between plastic protective sheets or created safety glass which have a permanent effect on the play of light inside and around the structures. The elegance and importance of glass are preserved and act as a protective feature. Moving fragments of glass constitute a significant threat that may lead to death in cases of an explosion or explosion that causes the glass to shake. By using laminated glass or effectively putting stained-glass elements between two protective layers, the risk that broken glass components will fly into a building or occupied room will be reduced (Bachman, 2004).

Some parishes and synagogues employ their own safety guards to secure attendees, including furs and jewels and the precious objects displayed on particular occasions (Newhauser, 2014). Big churches like St. Patrick's Cathedral in New York City are healthy enough to control crowds and bags and bags on high-attendance days (Burke, 2020). Even when more money is provided on services than on a regular Sunday, it is more secure during holidays. In cooperation with security and engineering experts, Kouzes (2010) stated that religious and lay leaders must establish adequate, measurable, and consistent security measures that can be easily extended when required in line with community concerns. Above all, it should remain important to preserve the powerful experience of worship in sacred spaces for everyone concerned and those who use them.

Hawkins (2010), a 2009 report published by the Christian Security Network outlines 1,237 crimes against Christian churches with 12 homicides, 38 other violent incidents including, 3 sexual assaults, 3 kidnappings, 98 arsons, and over 700 burglaries resulting in more than \$24 million in property. Despite all this, most faith leaders typically are not aware of vulnerabilities and the basic crime prevention methods. Consequently, many churches, temples, synagogues, and mosques are soft targets. Houses of worship have traditionally lacked security measures and emergency preparedness planning that businesses and other secular groups have put into place. Indeed, many of these organizations are reluctant to discuss whether or not they are aware of ever having been targeted and what, if any, active security preparations they have put in place (Hawkins, 2010).

Martin (2016) reported coordinated attacks on three Indonesian churches during worship services when a mother and two daughters blew themselves up at a church, while the father and two sons targeted two others in Indonesia's second city, Surabaya. National police Chief Tito Karnavian said they belonged to an IS-inspired network, Jemaah Ansharut Daulah (JAD). Police say the family were among hundreds of Indonesians who had returned from Syria, where IS has been fighting government forces. This criminal attack left more than a dozen people dead and at least 40 more injured in a series of bloody blasts that horrified the country's Christian minority and Muslim majority alike.



According to Roberts (2014) the spate of terror attacks on churches in the Northern parts of the Nigeria in the past, have shown that during religious riots the churches are always under attack. Earlier religious attacks on churches prior to 2010 occurred when the worshippers were not inside or within the premises of the church, however, between year 2010 and 2014 churches have been attacked while the worshippers were inside or within the premises of the church. These attacks had left many dead and others wounded. The foregoing necessitated many church administrators to start improvising their security measures around and within the church.

The US Institute for National strategic studies (INSS) (2014) Strategic Forum at the National Defense University reported coordinated attacks on churches in Eastern Africa notably in Tanzania and Kenya. According to the report, a grenade attack at Garissa's Pentecostal Church on November 5, 2011, left two people dead and five seriously injured. One person was killed and 11 other hospitalized when God's House of Miracles Church at Ngara Estate in Nairobi was attacked on 29th April 2012. A simultaneous attack on two churches in Garissa on 1 July 2012 left 17 people dead and 50 injured. Those dead included nine women and 2 children. On July 21, 2012, police in Kitale (town in Western Kenya) arrested two terror suspects, who were on a mission to allegedly bomb the Umoja Catholic Church, a busy parish in the Eastlands area of Nairobi. On 20 September, a 9-year-old boy was killed when a grenade was hurled to Sunday school children at St Polycarp Anglican Church along Juja road in Nairobi, Kenya.

Gordon (2004) argued that there is difficulty in determining the intention of the people who come into churches to worship, as separation of the good or bad intention acts are never displayed on the foreheads of the worshippers. Accordingly, Passive security in building designs should incorporate security considerations in design of buildings at the design stage as an aspect should be considered by architects and should focus on the nature of the security challenges being faced in the society with the constant attacks and threats to the church buildings.

### **1.1.1 Role of Church Leadership in Enhancing Security in Churches**

Many design and construction professionals often volunteer to work in their church or synagogue building committees (Gangel, 1997). According to Forman et al. (2007), the role of the lay leadership in building a safer atmosphere is an important but often overlooked security element

for religious institutions. Forman et al (2007) observes that integrated and participating management can explain to congregations why safety is important and how safety complies with an open institution that is welcoming, set an example of how all congregate and constituents are to comply with the safety procedures, develop critical links to local enforcement agencies, assign funds and resources to construct, maintain and upgrade safety.

In addition, security planners and management must recognize that a rainy-day strategy continues to be used by many religious organizations (Bryson, 2018). They allow systems and procedures to lapse when there is no immediate understanding of risks, including simple things like locking doors. The management of these institutions should help planners and managers recognize their need to ensure readiness for defense.

Clear security, using invisible methods to the public, is ideal for religious and civil and public institutions. As chair of the building committee for the reconstruction and expansion of Old Westbury, he has been aware of the balance between creating an open, welcoming, and spiritually uplifting atmosphere and the need for protection in a suburban environment. There are no obvious protection steps, and we prefer to consider the environmental impact on our congregators as a design priority (Bryson, 2018). Nevertheless, according to Dourish et al. (2004) noted, a sophisticated communication and camera system was built to secure our facilities and their users. In this way, we trust that these two sometimes contradictory needs have been well-balanced.

### **1.1.2 Challenges Experienced in Places of Worship**

In many parts of the world, Tibbalds (2012) stated the safety of places of worship, and religious centres, particularly as a number of these places are important historical buildings and attractions, have been a security issue for many years. "Most mosques, temples, synagogues, and churches are centuries-old, and alteration in their structures by adding physical security elements, even if the desire is to enhance protection for builders and their inhabitants, is often unacceptable or even illegal (Griera et al., 2019). The accessible and accommodating nature of these buildings and campuses is contrary to the levels of protection frequently needed to cope with the high threat that is normal in certain parts of the world around such facilities (Lewis, 2019).

In places of worship where physical protection is required, Coaffee (2010) noted that security plans are often met with challenges due to its architectural characteristics. "Often, the most common feature is the widespread use of stained glass, which is extremely fragmented but does not conform to traditional blast safety methods (Hall, 1999). According to Deutcher (2009), the 2003 Istanbul Synagogue Attack, which used a 500-pound explosive car bomb, showed how much damage this sort of window caused.

Churches and religious institutions are some of the biggest receivers of money and are increasingly redirecting huge sums into real estate developments and other forms of property, with the aim of remaining financially afloat. The religious institutions are redefining their objectives from just winning souls to investing in projects that are in turn making them more self reliant. For example,

in Kenya, one of the biggest land and property owners is the Catholic Church. The Church owns a number of properties in various parts of the country including the prestigious Cardinal Otunga Plaza, Pacis Centre along Waiyaki Way, Waumini House in Westlands, Pacis Insurance all aimed at diversifying the Church revenue streams. Heavy tithings, offerings, financial projects, expensive sound equipment and old ornaments, which apart from terrorism also attract vulnerability including competition, blackmail and armed robbery.

Many companies have played a significant role in securing places of worship and have conducted restoration programs and the entire safety design of new constructions worldwide (Schumacher et al., 2013). The study has shown that the expertise has shown that the perimeter line and entry system are the two most critical factors in these buildings' safety and security. "Nearly every assault against these objectives has taken place from or at the approaches to the perimeter line (shooting, hand grenades, car bomb or vandalism). Protection of these installations is extremely demanding because many people are expected to arrive in a very short period of time, and the community is not aware of many of them (Schumacher et al., 2013).

With the increasing spate and nature of criminality and terror attacks on churches, mass killings and miming this study assumes that very little has been done to protect the churches against such attacks. There is an increased public perception that most churches only provide perimeter security around their church premises albeit done with the use fence. This has been associated

with dwindling church attendance in some sections of Nairobi city. As attackers widen their target set, the churches must modify their operations to protect their congregants from both internal and external threats.

## **1.2 Statement of the Problem**

Scholarly research continues to expose evidence of increasing insecurity on churches, vast majority of churches lack sufficient security measures against criminal attacks which seemingly is exposing them to risks and vulnerability of various types of soft targets. In the recent past, churches in Kenya have experienced terrorist attacks targeting the clergy and congregants resulted to casualties, deaths, and damage to property. This vulnerability has been associated with increased public perceptions of insecurity in churches and presumably the dwindling number of church congregants attending church services. Sadly, some congregants still consider the physical security of the churches as outside their faith, and that God should protect them regardless of the situation. In an attempt to understand the problem, and elicit mitigating measures on the problem, this study sought to investigate the nature of such attacks, establish the congregants' perceptions of what constitutes church safety, congregants' perceptions of their preparedness in case of an attack while in church, and congregants' perceptions of what they think should be done to secure places of worship in Nairobi Kenya.

## **1.3 Objectives of the Study**

This study was guided by both broad and specific objectives as stated below.

### **1.3.1 Broad Objective**

The broad objective was to examine the perception of congregants on vulnerability of church buildings to security threats in Nairobi County, Kenya

### **1.3.2 Specific Objectives**

The study was guided by the following specific objectives.

- i. To investigate the nature of criminal attacks and perceived vulnerability against church buildings in Nairobi County, Kenya
- ii. To establish congregants Perceptions of what constitutes church buildings security and safety in Nairobi County, Kenya.

- iii. To determine the level of safety and security in case of attacks while in church buildings service in Nairobi County, Kenya.

#### **1.4 Research Questions**

The following was guided by the following research questions.

- i. What is the nature of perceived vulnerability against the church buildings in Nairobi County Kenya?
- ii. What are the congregants Perceptions of what constitutes church buildings security and safety in Nairobi County Kenya?
- iii. In which ways do the congregants perceive to be the level of preparedness appropriate to counter attacks while in church buildings in Nairobi County Kenya?

#### **1.5 Justification of the Study**

Given the increasing level and nature of criminal attacks on houses of worship especially the church, this study provides a solution that may reduce the number of deaths and injuries not only those targeted-on churches but also to other places of worship. Security threats to the church could have negative effect on the worshipers which could in turn affect the church attendance due to fear of criminal attacks and loss of property while in church and the peace of those who may wish to attend the church.

The study may be useful to security practitioners in policy development; concerning places of worship in planning, designing, and implementation in all architectural design of church buildings or places of worship as a whole to include improved technological security surveillance.

Finally, the findings from this study may add to the body of knowledge or compliment available scholarly knowledge in security and safety and security practice that can deny access, delay, detect and deter criminal attacks on houses of worship. The study findings may be used as a basis to carry out further research.

## **1.6 Scope and Limitations of the Study**

Although this study was set to be conducted in all churches in the Nairobi County, the study was limited to only four main churches: Holy Family Basilica and All Saints Cathedral church Nairobi, Mavuno Church, and Seventh Day Adventist church, Eastleigh. Secondly, this study was limited to congregant's perceptions of security measures only.

## **1.7 Definitions of Terms and Concepts**

**Church buildings:** This term has been used in this study to mean; Houses used for conducting church services only.

**Criminal Attack:** This term has been used in this study to mean; Terrorist attacks, Gun attacks, bomb attacks, knife attacks or any other violent attack by a criminal.

**Congregants:** This term has been used in this study to mean; an assembly of worshippers in church.

**Church:** This term has been used in this study as derived from the Greek word ekklesia, meaning called out people. It is a divinely constituted society consisting of members from every race and nation, all holding one faith.

**Threats:** This term has been used in this study to mean; fear of a criminal attack against worshippers, or against building used as a place of worship.

**Perception:** This term has been used in this study to mean congregants perceived; exposure or openness or weakness to insecurity threats.

**Unprecedented:** This term has been used in this study to refer to; something unexpected especially of a criminal nature or unpleasant that has never been imagined.

**Vulnerability:** This term has been used in this study to mean; exposure or openness or weakness to insecurity threats.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews some available literature from past studies on vulnerability of church buildings to security threats. The church first profile the nature of criminal attacks against church buildings, congregants' perceptions of what constitutes security of church buildings, congregants' perceptions of their preparedness in case of an attack while in church buildings and congregants' perceptions of what they think should be done to secure church buildings.

##### **2.1.1 Overview of the Church**

The Church has been subjected to many meanings and interpretations that are primarily dependent on the name or individual responsible for worship: the pastor, the bishop, or the reverend (Folaranmi et al., 2016). The fact that they need a place to meet and worship God based on their religion is one common to the Christian adores. In the central part of Kenya, church names had to rent buildings for their place of worship, typically in hotels, civic centers, and warehouses in large halls that they have rented (Fesenmyer, 2019). These structures are just remodeled or painted to serve the worship function during church service; the buildings cannot provide structural reassurance. With its purpose-designed Church, the Christian denomination typically has real influence over what happens in the buildings. The Church's designs are used to establish a certain sense of identification and act as the symbol of their faith. The Church should be about the people, according to Marsh and Walter (n.d), while the building impacts the adorer and the ministry owner. This may be seen as an explanation for the considerable attention paid in many churches on the inside or outside of the house. Many architects who participate in church design have the challenge of responding to the demand for space and identity development. The architects typically compete with other churches in developing an identity for a church to create an outstanding design (Verkaaik, 2012). According to Christ Church Central (2013), the construction of the Church has generally been considered an advantage to church members, so they believe that it should be gradual.



In the Church's architecture, the degree of safety is typically very low compared to other public buildings with large numbers of people meeting at sometimes. The common assumption is that there is no serious threat to safety in the context of terrorist attacks on the churches, and if such a risk arises, God will guard the building and its inhabitants. According to Moon (2004) and Roberts (2014), many worshipers regard the physical protection of churches as not trusting the God of their religion since they thought that God was supposed to protect them regardless of the situation. However, the form of terrorist attacks experienced in most parts of Kenya is generally insufficient. According to Lind et al. (2015), there is the spate of terrorist attacks in the northern parts of Kenya in the past has shown that churches are still being targeted during religious riots.

Prior religious violence against churches in Kenya prior to 2010, when worshippers were not within or within, the churches were targeted between 2010 and 2014 when worshipers were within or inside the church premises (Parsitau, 2014). These assaults have left many dead and injured, so many church managers improvise their safety procedures in and around the Church. Many churches in the north of Nigeria have concentrated on aggressive security initiatives in this regard. According to Dean (2010), the intention of the people entering the churches to worship is difficult to determine since there is never a separate positive or wrong intention to act on the brows of worshipers. It is also a normal and challenging situation based on the size of the population of these churches. Thus, several of these churches have actively implemented security measures that can distract worshippers. Most architects are focusing on passive protection in building designs that incorporate safety considerations into the design of buildings at the design stage because of the nature of the safety issues faced in society with constant attacks and threats on the church buildings. The problem with the protection of the Church is that safety risks could have an adverse impact on the worshipers, which in turn could influence the church participation and the rest of the participants (Abbott-Chapman & Denholm, 2001). Many churches typically have protection around their church grounds, usually by using the fence. The typical role of perimeter protection is to protect building users from external threats and ensure that users can only access one entry that can be monitored.

### **2.1.2 Church Building Designs Overview**

In the designs of cathedrals, the early church designs were used to show the power they possessed as symbols for the Church (Smith, 2006). Over time, this paramount necessity has changed, and the objective of the Church is based on the tasks to be performed indoors. The determination of its flexibility with a view to determining what kind of work it may be doing is an essential consideration in the evaluation of a church building, according to Marsh and Walter (n.d), since most of the churches are no longer predominantly for worship and priests like the early churches. The usual consideration for design is the cost of building the Church, which often affects the choice of building elements, and the specifications are given. The Congregation usually calculates the sum of money available for church buildings, according to Kroll (2011), because they contribute to the building with regard to donations and offerings. Therefore, when the budget is low, the choice of building materials usually consists of relatively cheap materials which take little or no account of the building's passive safety. According to Christ Church Central (2013), the church building was an identity and should reflect what the Church represented with regard to its convictions. The same tendency occurs in Kenya, though, that churches have an identity based on their denominations, but church administrators often leave the design of the Church at the architect's discretion (Adogame, 2013). This is evident in the nature of the church designs available in Kenya's cities. In many churches, security design is often regarded as a secondary concern. The minimum concern is to simply secure the properties inside the building by providing strong rooms and burglary evidence at the openings. Architects did not consider this in terms of the threat to life from outside sources. McKinnon (2001) said that in relation to what the Church stands for in the neighborhood it is located, the construction of church buildings should take place when reacting in turn to contemporary questions of such a setting, this justifies the need to preserve passive protection in churches and their surroundings in light of the contemporary issue of security.

According to Sewell (1992), the design criteria for public structures typically differ by purpose and the type of persons to use the structure. On the same note, Zhang et al. (2013) stated that the design of the operation in such buildings generally determines the degree of safety inside the building. The more sensitive the operation in the building is, the greater the safety standard. In certain situations, passive safety also becomes part of the design by the architect responsible for

designing the building; where appropriate, this is not expressed (Baker & Steemers, 2014). The idea of passive building safety is not to interfere with house security considerations' everyday operation (Dollan, 2004). The problem of protection is dealt with in some buildings by preventing external attacks and introducing such restrictions as wall clusters, barbed fences, and electrocuted walls. The Home Office (2014) noted that passive safety is better for physical steps to stop such vehicles from entering such buildings in order to effectively avoid unchecked vehicles. It also means that the preparation of the location for the building will provide passive safety. Another critical factor that may influence the building's overall protection is the choice of design for public buildings.

Konstant (2013) expressed his view that an open plan could contribute to the building's security risk. This explains why many building designers typically play down the transparency of their buildings to try to lower the security risk associated with their design. The advantage of passive safety architecture is that it eliminates the problems related to the building refurbishment by "ACS" controls that might disfigure the building's overall esthetic. Thus, it is safer to provide a building implementing passive protection, including hardship plant, increasing redundancy, the incorporation of risk resistance in the initial design of installations, the introduction of active or passive countermeasures, and the installation of security systems, according to Homeland Security (2011). The design consideration for the inclusion of these elements varies according to location and construction style. Passive security concerns help to reduce the risk of intrusions in a house. In buildings that have not been the priority, the question is how buildings can be upgraded to take passive security requirements into account.

### **2.1.3 Security in Church Buildings**

The Church is a public building since it is accessible to the public and the form of people making use of such a facility is very little or no restriction (Tibbalds, 2012). The architecture of the churches has changed over time, and many churches focused on the superiority of the house. The protection of the churches was not given much consideration until the churches began terrorist attacks, and the members feared their safety. The problem of church safety is a significant debate among Christians since many believe that adorers should trust in God to protect them. Benz (2008) felt that it was no longer the Church being a sanctuary because many of the crimes that

had until now been associated with the roads found their way into the Church, hence the need for safety measures within the Church.

Wood et al. (2010) said that building owners, who include churches, should decide the type of safety they would like in their buildings since there are usually no fixed standards for safety in a building. The best way to deal with security threats has been by aggressive security initiatives, which have been done in response to perceived security challenges. Protection perimeter architecture was another successful way to provide passive safety for buildings combined with landscape elements and standoff areas. Many churches in Kenya and elsewhere where there have been security problems are widely adopting this alternative of passive security (Meagher, 2012). Stollard (2003) specified that issues to be considered should refuse unauthorized access to the vehicle and make escape difficult for successful passive protection of buildings while delaying potential intrusion. The advantage of these factors is that the nature of the building makes it less clear to the users that the building looks regular and thus is limited or controlled.

## **2.2 Nature of Criminal Attacks against Church Buildings**

According to previous scholars Bulger (2009), Gorski (2007), Koe (2006), and Ex-Morninglanders (2010) nature of attacks against churches ranges from active gun shooter situation, use of car bombs and suicide bombers, use of explosives amongst others. For example, in 2007 a black-clad gunman walked into New Life Church, in Colorado Springs, CO on a typical Sunday and started shooting. Fortunately, he was met with the church's first line of defense: a congregant with a concealed-weapon and with a law enforcement background (Gorski, 2007). The armed volunteer shot the gunman. New Life's pastor credited the church attendee with saving dozens more lives due to quick action.

Until today, there is no universally accepted definition of Terrorism, one man's terrorist is another man's freedom fighter. Preplanned violence, homicide, mass shooting that connotes a greater degree of threat, fear, and anxiety. to influence and inspire fear into the public, it is more of a strategy than just a random act of violence. The terrorism of yesterday is not the terrorism of today and might not be the terrorism of tomorrow. The use of violence, mayhem, and destruction to coerce people or countries into taking a certain action. Terrorism may be also motivated by religious extremism, radicalization, politics, or just plain old-fashioned greed. An increasing

number of terrorist attacks in Kenya have been carried out by local Kenyans, (Homegrown) many of whom are recent converts to Islam

Gafow (2021) carried out an assessment into the level of preparedness for worship institutions to respond to terror attacks within Nairobi central business district. He dwelt on worship institutions in general and assessed the level of preparedness, training, activities undertaken, the quality of equipment and effectiveness targeting security agents. level of preparedness.

Muriira (2017) carried a study on socio-economic determinants of perceptions about security, a case study of Eastleigh area, Nairobi County. He addressed the interaction of social behaviour and economics, the interplay between social processes and economic activities. He pointed out the fear of terror attacks and police harassment as major findings.

A Brief history of Terrorism filed under investigation authored by then-CDI Research Analyst Burgess (2015) While it is impossible to definitively ascertain when it was first used, that which we today call terrorism traces its roots back at least some 2,000 years. Moreover, today's terrorism has, in some respects come full circle, with many of its contemporary practitioners motivated by religious convictions, something which drove many of their earliest predecessors. It has also, in the generally accepted usage of the word, often possessed a political or religious dimension. Religious roots indicate that such killings usually took place in daylight and in front of witnesses, with the perpetrators using such acts to send a message to the Roman authorities and those Jews who collaborated with them – a tactic that would also be used by subsequent generations.

On Sunday, May 21, 2006, a gunman walked into a church in Baton Rouge, Louisiana, near the end of Sunday morning services. He proceeded to shoot five people at the church before abducting his estranged wife and three children. While the children were eventually released, the woman (wife) was later found dead at another location. The church's pastor was shot during the incident. Shocking as it may seem, violent incidents of this nature happen several times each year at churches across the country. Because places of worship are open to the public and often times inviting, churches have become more vulnerable to these senseless acts of violence. American houses of worship are rarely the focus of security or crime prevention efforts.

Gated residences in a society of danger and instability are seen as safe havens. New research contradicts this view, however, and indicates the likelihood of more crime may be increased while opportunistic burglaries may be minimized. Taylor (2013) claims that in gated quarters, homes are less burglary exposed than non-gated homes. It is also clear that these communities and homes not only shift crime into other areas that are less safe but also present an increased risk of other crimes, such as intimate abuse by spouses.

In his study, Lynn (2013) noted the possibility of a residential burglary in the gated Church. Even when we consider housing units such as tenure, revenue and location, the characteristics of persons, such as age and race, come to be recognized as being one of the key factors that worry about safety and crime as well as fear of crime. Lynn (2013) emphasized that statistically, burglary is a rare incident. Crucially, he emphasizes that people living in gated neighbourliness may be more at risk from other crimes such as intimate partner abuse, intimidation, and aggressive assaults in or around the home because the victim is 'locked in' with the perpetrator. Furthermore, gated communities and residents of households may be at greater risk from minor crimes such as bored and over-controlled ad vandalism. Surprisingly, little empirical analysis on the efficacy of gated households for preventing crime or crime can be found in a curved review of the literature. However, most of the media analysts and researchers agree that gating affects crime rates very little (Blakely & Synder, 1997).

Most previous research on how gating communities have an effect on the prevention of crime has been focused on burglary as well as on the form of crime to investigate since it is an intrusive act that makes people more feel comfortable and secure. Moreover, Blandy and Parsons (2002) stated that burglary safety is often seen as one of the main motivating factors in a gated church. Lynn (2013) highly proposed that more studies be carried out on the role of gated churches for other crimes beyond burglary in his findings on what he called a 'bottom-up' report. Therefore, the question still remains whether living in private residences effectively decreases crime or the likelihood of crime. The researcher, therefore, found the call to explain Lynn (2013) imperative and undertake this study in order to provide the requisite information to future generations of researchers.

The use of explosive devices is not just a foreign phenomenon anymore, harkening back to the Irish Republican Army (IRA) bombing incidents in Great Britain. In Louisiana, four men allegedly broke the windows of Cypress Creek Baptist Church in Vernon Parish in July 2009 to steal electronic equipment. After that, the men are reported to have robbed a firework stand. Using the stolen explosive materials, they made three bombs. One was set off on a roadway in Vernon Parish, one was set off outside of the Champions Center at Grace Church, and one was left, but not detonated, in Three Pines Apostolic Church (Bulger, 2009).

In October 2006, a man sloshed fuel on pews and parishioners during a church service and started a fire intended to kill everyone in the building. Two women were burned when their clothing caught fire. Fortunately for church members, staff was able to subdue the suspect while law enforcement responded. The police report later stated that the suspect admitted that he took gas cans and a knife to the Peoples Church in Salem Oregon with the intent of killing all the people in the church. Trial testimony indicated he thought he was acting on God's orders. Mental health experts testified he had paranoid schizophrenia (Koe, 2006).

In December of 1986 in Long Beach, CA the Morningland Church was the victim of a strategic bomb attack. A lone suspect was disturbed at the church's teachings and the "harassment" of a sister. The suspect smartly placed the concealed bomb within the church structure and subsequently, part of a 10-stick dynamite bomb went off. Thomas T. McCoy, 26 was arrested on suspicion of ignition of a destructive device, possession of a destructive device, and carrying a concealed weapon (Ex-Morninglanders, 2010).

### **2.3 Congregants Perceptions of What Constitutes Church Buildings Security**

Gordon (2004) argued that the church is a public building because it is open to members of the public and there is little or no restriction to the type of people who make use of such facility. The nature of the design of churches has evolved over time and many churches have focused on outshining the other based on the grandeur of the building. Little attention has been geared towards security of the churches until when churches started coming under terror attacks and members feared for their safety. The issue of church security is a major debate amongst the Christian faith because many believe that the worshipers should trust God to protect them.

Robert (2014) opined that the idea that a church was a sanctuary was no longer the case; hence, many crimes that were hitherto synonymous with the streets were finding their way into the church, hence, the need for security measures within the church. The Building and Construction Authority (BCA) (2005) stated that building owners which include churches should determine the type of security they would want in their buildings, since there was usually no established standard for the security to be provided in a building. The safest way many church administrators chose to respond to security threats was through the use of active security measures and this was done in response to the perceived security challenges they faced. Perimeter security design was another good way of providing passive security for buildings with the combination of landscape elements and standoff areas. This choice of passive security is widely adopted by many churches in Nigeria and other places where there have been security challenges. Technical Guidance Document (TGD) (2007) stated that for effective passive security of a building, issues to be considered must deny unauthorized vehicular access and make escape difficult while delaying possible intrusion. The benefit of such considerations is that the design of the building makes it less obvious to the users that they are being restricted or monitored hence the building appears normal.

A vital feature of human quality has been the understanding of the defence of criminal threats. This is in line with the hierarchy of needs of Maslow, which notes that people need to meet certain levels of needs to achieve fulfilment (Suk, 2006). The protection aspects are the second most important following the needs for love, respect, and self-development, based upon Maslows' hierarchy of needs (Suk, 2006). This hierarchy reveals that life satisfaction is not accomplished until safety risks are safeguarded. Cozen and Gwyn (2011) explain further that ideas and expectations about the group shape the need to feel healthy.

The perception of safety levels is one of the factors for assessing fear of crime. The protection of residents is seen as a critical need to tackle the problem of crime in communities. This has, of course, led several scientists to perform similar experiments in communities on crime prevention. Weidman and Anderson (1982) researched the vision of happiness and protection of residents in multi-family housing. Research has shown that safety is a crucial indicator for the assessment of residential satisfaction at residences. In the meantime, Blakely and Synder (1997) have built



more realistic strategies in urban environments for crime reduction. Blakely and Synder (1997) proposed physical designs such as increasing outdoor lighting to minimize shadows, installation of guard booths and surveillance cameras, territorial space formation, street closing or gating, building clouds and walls, enhancement of looks and atmosphere, etc. However, it is not clear in the literature whether the proposed designs decrease the level of crime after implementation or have a true effect on crime.

Previous research showed that gating components had a profound impact on safety and crime fear (Siti Rasidah & Aldin, 2011). Most of the research concentrated on gated areas with regard to their relationship between the expectations of security and gate components, and not the interactions and actions of residents in a space centred on a certain time, whether during the day or at night. The calculation of the need to feel safe is, therefore also connected to the issue of the individual sensations and views of their world.

The social and economic factors European Communities (2004), lifestyles and the environment European Communities (2004) are seen and considered to affect security perception. Demographical factors such as the age groups Bell (2009), educational levels (Austin et al., 2002). According to Hipp (2010), the belief that the risk of one becoming a victim of crime has regular activity and environmental factors affecting the Church. Therefore, the researcher would look for and evaluate data to show whether the perception and criminality level is actual.

The design considerations for public buildings usually vary depending on the function and the category of people expected to make use of the building. The nature of activity to be undertaken within such buildings usually determine the level of security put in place within the building. The higher the sensitivity of the activity within the building, the higher the level of security put in place. In many cases, the architect responsible for the design of the building usually makes passive security a part of the design; where this is applicable, it is not pronounced. The idea of passive security in buildings is to ensure that security considerations do not interfere with the day to day functioning of the building (Dolan, 2004). In some buildings, the issue of security is addressed within the site through the prevention of external attack and with the introduction of certain restrictions like wall fence, barbed fence, and electrified walls. The Home Office

(2014) stated that passive security in order to have effective prevention of unscreened vehicles, it was best to introduce physical measures to halt such vehicles from accessing such buildings. It implies therefore, that the passive security could be achieved in the planning of site where the building is located.

The choice of design for public building is another critical factor that could affect the overall security of the building. Konstant (2013) opined that an open design of a building could lead to security risk with the building. This explains why many building designers in attempting to reduce the security risk associated to their design, usually, play down the openness of their buildings. The benefit of passive security design consideration is that it reduces the problems associated with retrofitting of building with “Active Security” control measures which could disfigure the overall aesthetic of the building. It is therefore better to have a building that incorporates passive security which according to Homeland Security (2011), document includes: hardening facilities, increasing redundancy, incorporating hazard resistance into initial facility design, initiating active or passive countermeasures, installing security systems. The design consideration for including these elements vary based on location and type of building. Passive security considerations assist in make a building less vulnerable to intrusions. In buildings where this has not been the focus, the challenge is how to retrofit the buildings to accommodate passive security considerations.

While the growth of private homes and churches worldwide is discussed in a large number of literatures, only a few studies explore the actual incidence of victimization and crime at these places. Much emphasis was on the demographic features and spatial distribution of the Church, but little attention was paid to other dimensions, such as why people migrate to these districts. Nevertheless, Wilson-Doenges (2000) notes that crime and constant fear of crime are the most prevalent global reason for the development of these enclaves, while Atkinson et al. (2004) postulate that crime is a constant fear. The force behind developments in barren areas and the "consolidation" of households that are recorded worldwide, therefore probably motivates the security situation. Walls and gates shield and protect the residential space from and thus provide social and economic security.

A precise picture of who lives and why they choose these places is important for public discussion. For reasons still completely unexplained, but most common, many households of moderate incomes choose gated residential homes which include, among other things, fear of crimes, privacy, prestige, leisure, and exclusivity. Rader et al. (2007) postulated that those with a higher fear of crime and victimization experiences are much more likely to engage in protective behaviour in an attempt by building gated communities and establishment of other security measures, such as alarms and security guards, to deter potential victimization. This makes, however, gated residences actively visible and, therefore, readily noticed by criminals, thereby highlighting their primary aim to distract or discourage criminals. Others show that living in gated environments does not decrease crime fear substantially as opposed to living in non-gated environments Vilalta (2011) and can even be related to greater levels of anxiety (Abdullah et al., 2012). As Blakely and Synder (1997) put it, many people want a feeling that they are free of violence. As a result, they will move to private homes to get further away from potential risks and threats.

Many individuals, by comparison, often opt not to move into private residences. Their decisions to look for the ungated church can be partly interpreted as a lack of respect for a gated community and household elements and advertising. For example, the idea for restrictive or beaming community governance could dissolve a potential residence Chen and Webster (2005) a further opportunity is to avoid a fear of crime for potential residents. As a result, the containers of a group or the doors and walls of a household may be stiffer rather than motivating. The choice to move into a gated or non-gated residence may be based on differences: for others, it might be more important to choose a resident on the basis of factors such as proximity to work than whether or not he or she is gated (Grant & Mittelsfeedt, 2004). Conversely, people in these churches may be symbolic obstacles to future criminals by depending upon gates and walls. Dupuis and Thorns (2008) suggests that putting too much faith in protective gates could lead to a false sense of security that would not otherwise exist in ungated communities.

While it is clear that home gating is intended, the literature makes it less clear how effective these protections are in reducing crime. The reasons for people moving to these gated homes are mixed. Gates, walls, and houses may be regarded as an assignment to economic development by

Blakely and Synder (1997). The wider the doors, the wealthier and strong you should be, the more local economies can be impacted, and apart from the perception that safety is more successful at maintaining their values during market changes, homes can also promote fair economics by establishing an economic barrier between the high- and low-income communities. Most people would quickly add that protection includes certain gates and walls, but it raises a question, "Is anyone getting evidence?". Our national psyche and fear and our ability to keep "other" out can be expressed in the gates and walls. It is also against conventional cultures, where less class was shortened, but unity and harmony were plentiful.

Diversity, however, is a national asset, generating competition, promoting creativity and industry. Some see gates as indicative of our willingness to impress, display it since it means that the interior is better, but it may not always be different; we wear suits, but many may be shocked by the suits, and it may also be that gates cover our shortcomings and have a greater psychological than a physical impact. According to the reviewed studies, the link between the reasons for gated households and that for gated households in reducing crime has not been clearly identified by the researchers. The aim of this research was thus to go beyond the efforts of previous researchers to determine, assess and examine the efficiency of private gated households in crime reduction. Most of the literature has shown that fear of crime is the prime cause of private households.

According to Van Gelder (2009), the involvement of church leaders in security is a first step to normalize their position in the priorities list of a church. It is optimal to talk about creating a culture of security instead of fear; it is even more important to decide how and when to speak of it. The church newsletter may be a good first step. Following meetings with church members and leaders, it may be time to share updates and announcements in church services. The objective is to create a safe environment and to give your members and guests a sense of security.

In addition, according to Achumba et al. (2013), if Church security is a priority, a plan for establishing, managing, and/or sustaining security activities can then be developed. This plan can be simplified or elaborated to satisfy the unique requirements of every Church and building. The aim is to integrate the security of the Church into the normal Church's "business." Every security

plan will benefit from collaborating with pastors, church communicators, leaders and local security professionals. Or maybe your church has a security system in place and simply needs to ensure that the system is updated, and your security team is aware of the latest advances in technology and tools. This safety plan may also match other emergency and/or evacuation plans.

Furthermore, Forman et al. (2007) stated that Creating a church security team and ministry could be a great way to offer church leaders and members a way to engage in church affairs. Certainly, a dedicated ministry can raise security and security schemes up to new levels by opening volunteer opportunities. The opportunity to participate offers members an excellent way to build and connect and to contribute to the wellbeing of the Church. Many churches in their communities have active or retired law enforcement, military personnel, firemen, emergency responders or medical professionals who would like to provide the Church security ministry with their expertise. As planning begins, ensure that everyone who is interested can receive help from a professional background or connection.

#### **2.4 Congregants' Perceptions of Preparedness and What Should Be Done to Prevent Attacks**

According to American Crime Prevention Institute (2011) and Houses of Worship Security Practices Guide (2013) enhancement of church security include the following areas of security; financial security, children and youth security, property inventory, keys management control, interior building areas, video surveillance, electronic access control, electronic intrusion detection system, building perimeter, external grounds, property perimeter and neighborhood security.

According to Counter Terrorism Protective Security Advice (CTPSA) (2009) perceptions of preparedness to counter criminal attacks include screening and patrolling as a significant deterrent suitable protective security consideration for your place of worship. The routine searching and patrolling of your premises represents another level of vigilance covering both internal and external areas. Additionally, patrols should be regular, but not predictable. With regard to vehicle bomb, the basic principle is to keep all vehicles at a safe distance. Those requiring essential access should be identified in advance and checked before being allowed

through in addition to robust, well-lit barriers or bollards. According to the report, nonessential vehicles should be least 30 meters from your building.

With regard to Doors and windows should be locked during the hours of darkness other than for services or unless someone is present. Good quality doors and windows are essential to ensure building security. External doors should be strong, well-lit, and fitted with good quality locks. It should also be remembered that glazed doors are only as strong as their weakest point—which may be the glass itself. Doors that are not often used should be internally secured ensuring compliance with relevant fire safety regulations and their security monitored with an alarm system. With regard to search regimes, extensive searches should be conducted on people and vehicles.

The idea of the gated districts is particularly important to the city and suburban areas in the hearts of property buyers. Many want to be situated not only inside their houses but also behind safe walls to protect their recreational areas and playgrounds. Security staff must also monitor the entrances and exits of the housing area. Lynch (1960) acknowledges that the picture that projects in environmental design affect the development of a sense of belonging. This is because such a photo encapsulates the living world that people encounter. The connection between community members, according to Wilson, is key to cultivating the spirit of Church. Via territoriality, inhabitants of the Church consider themselves owners and create their own sense of duty to take over and control the residential area spontaneously. The Urban Design Crime Prevention Enlarged by Jeffrey (1972), implemented six elements, including surveillance by patrol, closed-loop TV and lighting, visitor screening and passing control, intercom systems that enable every home to communicate and verify its guests, as measures to tackle crime in built-up environments.

According to Coiacetto (2007), the role of construction and policy, making people in the new development region follows: they have the capacity to build new environments by organizing social activities. In this regard, the urban and suburban development industry is playing a major role in developing new cities, shaping land prices as well as creating a social and spatial city structure. This means that the role of developers is to create an urban environment that deals with

advances in technology, rising insecurities, social fragmentation, the creative economy and real or neo-liberal market globalization.

Further, according to Garcia (2007), physical security measures are primarily helpful in order to minimize the risk of direct interaction and physical assaults on a building. These can be passive or aggressive. Integrating security measures into architecture minimizes the tremendous effect of average attacks on a structure. The passive measures for a functioning safety system according to Adedayo et al. (2017) are a permanent safeguard measure given by site and structure that enhance safety by removing the possible threat to security in public buildings by allowing the effective use of engineering and architecture.

Passive security measures in public buildings are important to remove possible risks posed by man-made improvised explosive apparatus (MPIEDs) and improvised car explosive apparatuses (VBIEDs). Passive measures are static elements such as static bollards, raised cement planters, clasps and trees of ample space, standoff area distant, incorporated in design from the early stages according to the physical protection design manual for VA installations (Adedayo et al., 2017). These are obstacles which provide a significant advantage to physical safety.

They establish a psychological dissuasion first and foremost for those with an illegal entry. The soft landscape can be used to make perimeter fences and other protection elements soft and improve their appearance (Coaffee et al., 2009). They may also be used in the form of thorny hedges, and thick hedges as a perimeter fence. However, it is important to remember that plantings do not obstruct important sightlines or establish hiding-places when applying and selecting the soft landscape as a protection measure. Plants close buildings should be large to preserve open view lines in other words. Small planting next to buildings may be permissible, but its height and density should not provide easy to observe hiding places for individuals or packages or isolated areas.

Natural control may be considered a different physical protection technique, according to (Maier et al. 2002). This is a significant type of dissuasion that can be used in the design so that the buildings are more accessible and visible for safety staff and licensed users. This could be done by minimizing or completely avoiding thick, high vegetation. Furthermore, Halibozek et al.

(2007) stated that lighting should be considered another effective deterrent. In addition, it is necessary to position them in such a way that they cannot be manipulated nor supplied with backups during the installation of this security lighting system. A certain number of basic protective measures must be introduced inside and outside the facility to minimize the threat (Gupta & Winstead, 2007). These prevention measures may involve dense planting, trees, heavy items such as large sculptural objects, huge rocks, concrete shapes with unassailable slopes, etc. can be used to avoid the movement of vehicles while allowing for the passage of cyclists and pedestrians. Engineering design and/or assessment are important to ensure that such barriers effectively reduce the degree of threat.

People are moving to private homes, and they feel that enclosed and secured households are secure, and they have a fear of crime, linked either to violence or property. This fear is rising all the time, making gated and private homes common in countries that have high levels of crime like South Africa, and are the most vulnerable citizens in Africa (Landman, 2004). There are, however, countries where crime rates are higher, but where gated communities and homes have low occurrences. However, few researchers have noted that developers Low (2003) are able to drive private households. Developers can, therefore, play a major role in the origin of private households and therefore are an important theme for a more in-depth study and understanding of their influence. They dictate the security measures available on their premises. The investigator then investigated the efficiency of gateways, contrasting the expected crime level results with other indicators in closed churches in the Kenya watch.

#### **2.4.1 Exterior Security Controls**

The main purpose of gates, on a small crime property, is not to deter or prevent crime, but to give the perception of security and exclusivity, and other people add gate systems, to keep criminals out of the property and away from renting residents. The efficiency of doorways and closed areas can depend on the nature of the property and on the management controls in place, doors and clasps work best with non-criminals in a stable property, mature residents achieve high safety standards on closed premises through a combination of security actions, the manner in which the gates are manned, inspected, closed and opened at a given point. There are no general rules and procedures that cover all gates in the past, but each home can set up its own rules according to



the kind of gate and safety systems that have been set up. The various houses prefer different approaches to do the same. Some doors are opened and closed automatically; some doors require private security personnel. At the same time, certain gates with CCTV cameras can be installed to keep an eye on who is entering and leaving.

These thorough reviews have identified existing research literature to understand the effectiveness of private gated households at the level of crime. The scope of changes in results and knowledge concerning private households was also expanded. The paper aims to report on the efficiency of closed households at the level of crime. The study focused on research literature produced for understanding backgrounds in 1972. However, as a new phenomenon, the period 1997-2015 is more literature. African literature, particularly South Africa, and American literature are widely distributed. The relevant question arising from the reviewed literature is that they agree that the perception of crime is what causes people to be moved into private homes. However, literature did not clearly indicate the effectiveness of such gates at the crime level, and therefore the need for this study area study.

#### **2.4.2. Interior Security Controls**

Controlling and limiting access is amongst the most critical measures to enhance security and should be taken whenever possible (Upadhyay & Sampalli, 2020). However, somehow personnel and worshippers are not comfortable with restricted access. If this is the case, then access to these and others outside the premises must be monitored. The following are access control functions that enhances the interior security. According to ASIS International Cultural Properties Council (2020), when the building is empty, doors and windows should be locked. It is important to consider the case, the number of people, and the venue of the event when opening the facility as well as limiting access by opening only doors near the area used. There is also need to create need-based checkpoints and staff accordingly. A control point is an entrance that screens all people and objects on the basis of the protection plan for the current environment of the threat.

#### **Exterior Security Controls**

External safety checks enable us to think about how best to protect the Church's perimeter, car parks, play areas, and mass drop-off areas (Frazee, 2013). Think of the weakness of crowds and

how they can be attacked, both indoors and outdoors. More than 70 percent of the acts took place outside the premises on ministry grounds or parking lots in a 15-year report on the most violent crimes committed in religious organizations (Barbare, 2012). According to this report, several external security controls reduce the vulnerability of church attacks. First is the border controls which improve perimeter protection by environmental design (CPTED) principles through fencing or crime prevention. There is need to increase the security of the perimeter by installing a decorative fence – whether aluminum, sheet, stone, brick, or several combinations. The aim is to clearly define the boundary and limit of the Church and/or reduce the possibility for people to cross the grounds. There is need to cut shrubs, bushes, and trees close to the house to minimize hiding spaces, eliminate possible fire hazards, such as waste and waste and keeping dumpsters in a dumpster locked pad.

Second external control is the exterior lighting. All doors and windows should have light. Motion detector lights for doors and windows should be considered and all lights should be functional. It is also crucial to ensure that the Dust-to-dawn lights remain on. Third external control focuses on parking lots. Larger facilities need a direct traffic officer. This ensures timely entry and parking. During the operation, the officer(s) can patrol the car parks. Members of the security team may also complete this mission. It is important to create a traffic pattern for a facility that makes speedy parking and preserves the entry and staging area. The parking lots should be kept illuminated at night. Close them if the Church is closed.

The final external control is the CCTV System. Camera coverage for the outside of the facility is recommended. An area should be shielded from the entrances to the parking lots. Some cameras record only when movement is observed, while others record 24-7. The security team members and remotely handled devices can track cameras from the inside as required or based on analytics, as described above.

## **2.5 Theoretical Framework**

This study was guided by two theories namely, Defensive Space Concept and Crime Prevention through Environmental Design (CPTED). These theories are explained below.

### **2.5.1 Defensive Space Concept Theory**

The first Ecological theory regarding crime and built environment was defensive space theory. The theory was coined in 1972 by Oscar Newman a renowned architect and urban sociologist. In his book “Creating Defensible Space”. Newman found a direct correlation between high crime areas and the physical layout of a building. The more complex and anonymous the housing environment, the more hardened it becomes for bad behaviors to penetrate. The theory contends that private buildings with large public areas that are accessible from many different paths increase the risk of criminal activity. In addition, large environmental residential and layout breaks down the community sense of control and personal responsibility over their surroundings making it less likely that they will question intruders or intervene in criminal activity. As solution the theory, suggest the need to create or reconstruct safe environments with physical characteristics that promote a sense of ownership and responsibility for their community, hence safer church environment. It is based on what Newman calls (1) Reinforcement of targets (2) territoriality, which is the promotion of a sense of ownership, which can be created through buffer zones; the buffer zones can be physical or psychological.

Defensible space concept has been used as an argument to create target hardened buildings in United States of America, South Africa, and some far eastern countries. Defensible space is therefore a principle of crime prevention that has become embodied in current public policy through “secured design” and gating premises the main aim is exclusion of strangers and restricting access. The concept of target hardening is key to this research in understanding the reason behind the perimeter walls and gates around gated compound. It should be noted that the effectiveness of a defensible space depends largely on the willingness and particularly the ability of the people in control of it.

Although the theory is important in understanding the background of this study it does not capture the whole content of this research as it fails to explain the use of other security measures as private security guards, lighting both in and out of the building, CCTV cameras therefore the need for integration with another model theory as below.

### **2.5.2 Crime Prevention through Environmental Design (CPTED)**

Crime prevention through environmental design is a multidisciplinary approach to deterring criminal behavior that focuses at changing how places are laid out, how they look and, how people feel. Jeffrey (1971) coined the theory model, fundamentally crime prevention through environmental design suggest that you can change how people act in a place by altering its design the reason of why we have a central business district, the reason for recreational parks and pitches, the need for office building layouts and residential places. The goal of altering the design is to make it be suitable for a specific occasion and more importantly, to reduce crime and fear thereby improving the quality of life its basic principle includes (1) Natural surveillance (2) Access control (3) image and maintenance (4) Target hardening (5) Territoriality. Jeffrey expounds on the theory that developments and modifications carried out in the physical the access controls like screening, activity support and reinforcement of selected areas. Surrounding to strengthen security would render it easy to control, the thought centered on the environment surrounding a crime rather than the criminal.

Crime prevention through environmental design retains the functional aspects of Territoriality in the theory of defensible space concept. Nevertheless, the components of security proposed by Jeffrey are not limited to natural surveillance but also to formal surveillance which refers to appointment and assignment of private security officers, the implementation of security patrols around and within the gated premises and mechanical surveillance which involves security equipment such as closed circuit television (CCTV) and lighting amongst other methods that strengthens the access controls like screening, activity support and reinforcement of selected areas.

### **2.5.3 Synthesis of Two Theories**

Both the Defensible Space Principal Theory and Environmental Engineered Crime Prevention (CPTED) analyze and focuses on community organization's impact on illegal activity. They are two evolutionary theories that describe human behavioural changes as dictated by the environment. While defensible theory problems are supported by the problem of the interaction between human activity and the environment, called "territory," crime prevention by environmental design incorporate surveillance, access controls, the photograph of the

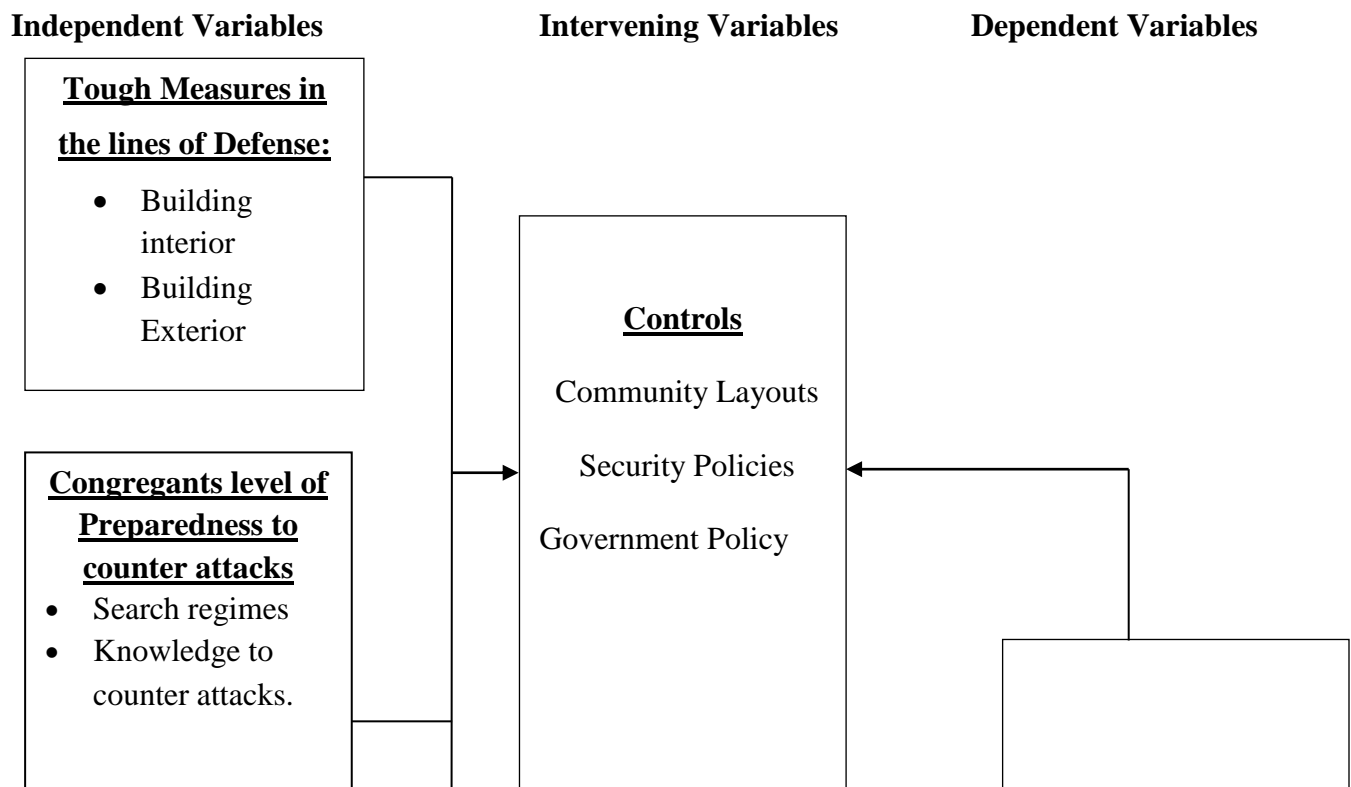
environment which includes all other safeguards that can be implemented besides the fencing. Both terms are key to the study not only in terms of understandings of the backgrounds of the gatehouses but also in making it possible for society to differ between public spheres, private premises. CPTED and Defensible Space Concept provide strong arguments for the need for urban and sub-urban planners to understand how urban and suburban design affects communities and citizens.

## 2.6 Conceptual Framework

The conceptual framework below describes the relationship between vulnerability of Church buildings and criminal attacks. If there are proper social controls, then vulnerability of church building is minimized. Conversely in the event of weak social controls the vulnerability of church building is increased.

The conceptual framework is presented in Figure 1 below

*Figure 1 Conceptual Framework*



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter describes the methods used to meet the objectives of the study. The chapter describes, site of study, target population, research design, sample and sampling procedure, methods and tools of data collection, and methods of data analysis.

#### **3.2 The Study Design**

This study used a mixed methods design cross-sectional survey design, quantitative and qualitative approaches due to the need to have a comprehensive coverage of the phenomenon under study; to examine perception of the congregants on vulnerability of church buildings to security threats in Nairobi County, Kenya.

#### **3.3 Study Area**

This study was conducted in Nairobi County, Kenya. According to the National Population Census (2009) Nairobi city has a population of 4,000,000 out of 40 million people in the whole country. Nairobi was chosen for this research due to the following reasons,

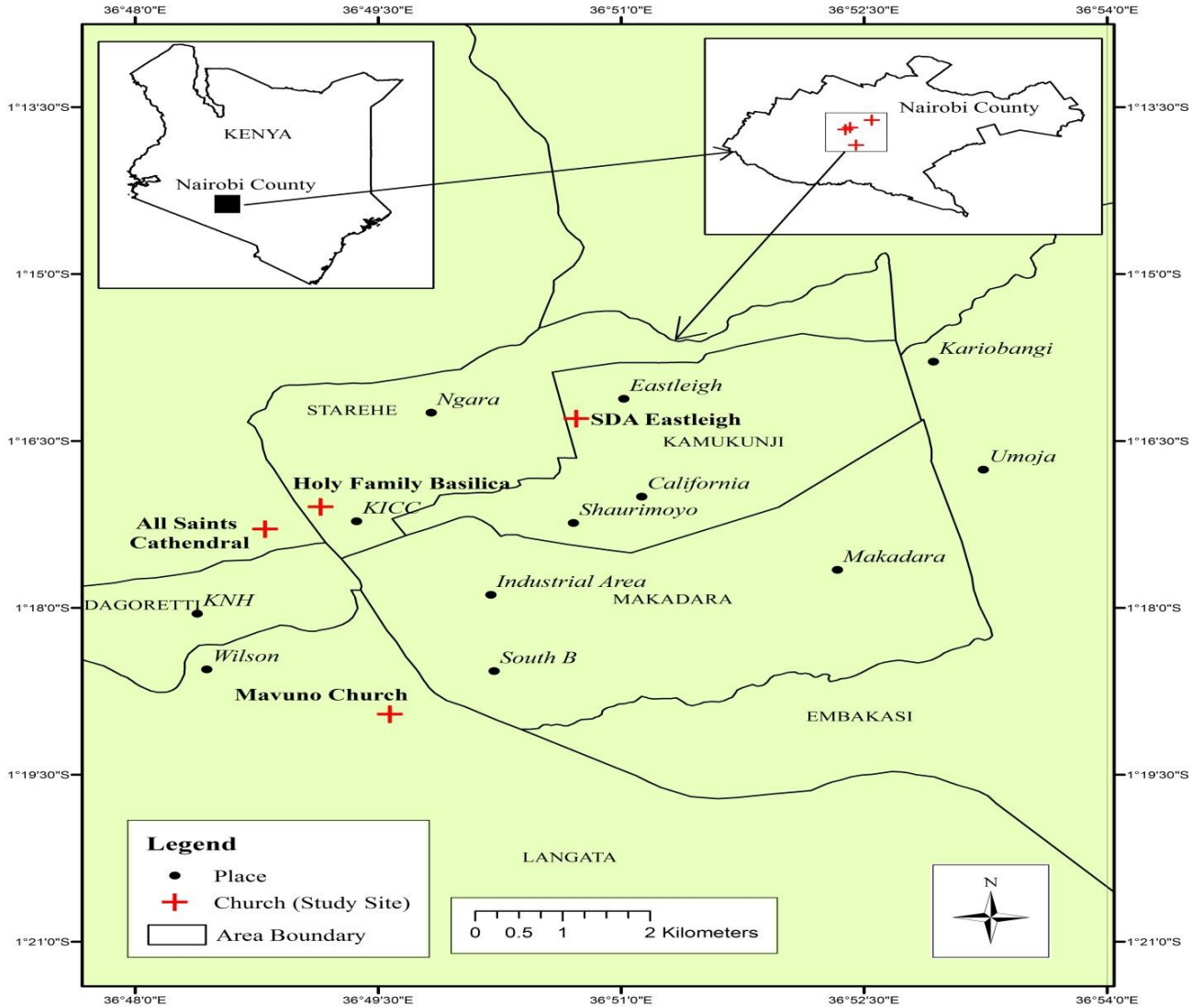
- i. Being the capital city of Kenya, Nairobi comprises of both the affluent and the less affluent population.
- ii. Nairobi has the most populous churches located at the centre of the city.

- iii. Being a cosmopolitan city Nairobi has the highest number of crimes (Kenya Police Service Annual Report, 2016).

This study assumes that the study area provides a better coverage of phenomenon under study. Figure 2 shows the study site representing Christian Houses of Worship in the CBD in Nairobi County Kenya.

Statista (2019) Distribution of the population in Kenya by religion placed Christianity as the predominant religion adopted in Kenya. As of 2019, over 85 percent of the population identified as Christians, among which 33.4 percent were Protestants, 20.6 percent Catholics, 20.4 percent Evangelicals, and seven percent from African Instituted Churches. Furthermore, nearly 11 percent of Kenyans were Muslim. Other faiths practiced in Kenya are Baha'i, Buddhism, Hinduism, and traditional religions.

Figure 2 Map of Nairobi Showing Selected Churches in Nairobi County



### 3.4 Unit of Analyses

The unit of analysis was the church members who usually attend Sunday services based in Nairobi.



### **3.5 Population and Sampling Procedure**

Holy family basilica hosts five Parish mass services on Sunday at 7.00am, 8.30am, 10.00am, 11.30am & 6.00pm, Weekday Parish mass services, Vigil services and confession services. All Saints Cathedral holds five adult English services every Sunday at: 7am, 8am, 9:30am, 11:30am & 6pm, they also have Swahili, deaf, young adults, youth, teens and Sunday school services. Mavuno have one main adult service and Sunday school and Seventh-day Adventist Church SDA a Protestant Christian denomination distinguished by its observance of Saturday is home to one main service on Sundays.

This study targets a population of 9,000 members in All Saints Cathedral Church Nairobi, 11,000 in Holy Family Basilica, 3000 members in Mavuno Church and 4000 in Seventh Day Adventist Church in Eastleigh Area. The study adopted the use of random sampling method to select a sample for the study. The procedure involved the development of the strata based on the existing mutually exclusive subgroups that comprise the study. Each church for example represented its own stratum. In each, there are church registers for every service. These church attendance registers were used as sample frames for selecting study respondents. Random sampling was then used select respondents for the study.

The target population for all selected churches was 27000 registered members (9,000 members in All Saints Cathedral Church Nairobi, 11,000 in Holy Family Basilica, 3000 members in Mavuno Church and 4000 in Seventh Day Adventist Church in Eastleigh Area).

Church attendance registers from the four selected churches were used as sample frames for each church service attended. Random sampling was then used to select respondents for the study. The appropriate sample size for a population-based survey was determined largely by three factors (Kate, 2006): (i) the estimated percentage prevalence of the population of interest – 10% in this instance based on the above prevalence by Stanley and Gregory (2001), (ii) the desired level of confidence and (iii) the acceptable margin of error.

For a survey design based on a simple random sample, the sample size required can be calculated according to the following formula (Kate, 2006).

$$n = \frac{z^2 \times p(1-p)}{m^2}$$

Where:

n = required sample size

z = confidence level at 95% (standard value of 1.96)

p = estimated percentage prevalence of the population of interest – 15%

m = margin of error at 5% (standard value of 0.05)

Therefore, the sample size (n) for this study was computed as follows:

$$n = \frac{1.96^2 \times 0.15(1-0.15)}{0.05^2}$$

Thus,

$$n = \frac{1.96^2 \times 0.15(0.85)}{0.05^2}$$

$$=196$$

Since the sample size drawn from all churches selected, each church, contribute respondents proportionately based on their populations as shown in Table 1.

*Table 1 Sample Distribution from All the Four Churches*

	N	Proportionate Sampling Pn=N/Total Population *Sample
All Saints Cathedral	9000	65
Holy Family Basilica	11000	80

Mavuno Church	3000	22
SDA Eastleigh	4000	29
<b>Total</b>	<b>27000</b>	<b>196</b>

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### 3.6 Methods and Tools of Data Collection

The study used questionnaire to collect primary data from the main respondents. The advantage of using the questionnaire is that it saves time; it is economical and is easier to administer (Kothari, 2003). Both structured and unstructured questions were used to solicit information from the main respondents. Unstructured questions were used because of their probing nature and propensity to elicit more information about the problem under inquiry. Key Informants (K.I) interviews and K.I guides were used to collect qualitative data from 12 K.I who include 4 Priests (1 from each church), and 4 Security officers (one from each church) and 4 security guards (one from each church). Given the current medical health requirements of safety due to the COVID-19 Pandemic the researcher administered the questionnaire; where he orally asked the questions and filled in the questionnaire on behalf of the respondents maintaining the guidelines of social distancing and masking.

### 3.7 Data Analysis

Data analysis refers to the process of inspecting, cleaning, transforming as well as modelling the collected information with the primary objective of identifying the useful data that can inform the conclusion while at the same time supporting the making of decision regarding the problem under investigation (Agresti, 2018). In other words, data analysis denotes the process of bringing into order the mass of information collected, structuring it and at the same time give it the meaning. This study employed both qualitative and quantitative data analysis techniques. Quantitative data from the field was subjected to scrutiny and cleaning to ensure consistency. It was then coded, entered into analysis software (SPSS) version 20 and analyzed. Descriptive statistics that is frequency distribution tables, graphs and pie were used to provide general guidelines for calculating and displaying basic descriptive statistics from the collected survey data. This analysis consisted of the presentation of relatively simple tables and graphs easily understood by a wide audience. This put the tables and graphs into a general report intended for widespread dissemination.

On the other hand, qualitative data from the key informants was collated, organized, summarized, and interpreted systematically and thematically. The interpretation was made along key issues of the study. The findings were presented in verbatim quotes and selected comments.

### **3.8 Ethical Considerations**

Research was carried out with strict regard to ethical considerations. Respondents gave consent before the research exercise began. This made it easier to interact appropriately with informants and reduce chances of crossing legal boundaries. Approval to carry out research was sought from Egerton University Board of Postgraduate Studies, Nairobi County Government and from the National Commission for Science, Technology, and Innovation (NACOSTI) for issuance of a research clearance permit. Since the research was conducted with human participants that focus on religion or spirituality, confidentiality was paramount as there would have been a possibility of raising significant ethical issues such as identification of communities that may be vulnerable and the development of special protections, the maintenance of confidentiality and privacy in relatively close-knit communities, the avoidance of stigmatization which calls for appropriate mechanisms for the dissemination of research findings.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the results of the study based on research objectives. Primary data was collected through researcher administered questionnaires and interview schedules for the key informants. Qualitative data collected from respondents for the three study objectives was analyzed using descriptive statistics of frequencies and percentages. The data was further thematically organized based and presented in graphically to show the relationships amongst study variables.

#### 4.2 Response Rate

A total of 182 dully filled and usable questionnaires out of 196 were obtained from respondents for the study. This represented 92.9% response rate and a non-response rate of 7.1%. According to Mugenda and Mugenda (2003), this was sufficient for doing the analysis. Table 2 below shows the response rate. Therefore, all the tables and graphs presented in this chapter have a sample size of 182 unless stated otherwise.

*Table 2 Response Rate*

	Frequency	Percentage %
Responded	182	92.9
Did not respond	14	7.1
<b>Total</b>	<b>196</b>	<b>100</b>

#### 4.3 Demographic Information

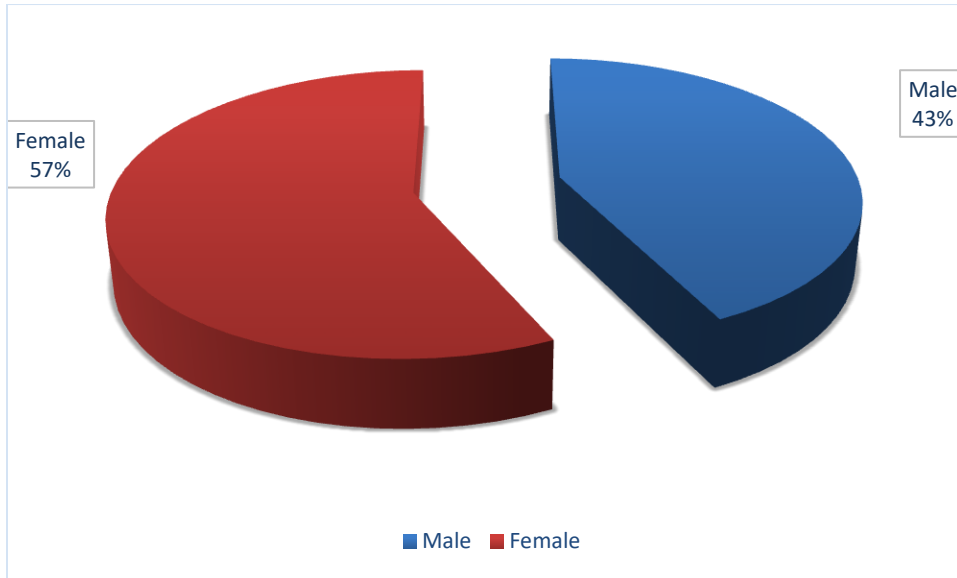
This section presents demographic information of respondents which include their gender, level of education and period the respondents have been attending the church.

##### 4.3.1 Gender

The study sought to get information from both men and women who attend church services in the four sampled churches in Nairobi namely All Saints Cathedral, Holy Family Minor Basilica,

Mavuno Church as well as Seventh Day Adventist Church in Eastleigh Area. The results as shown in Figure 3.

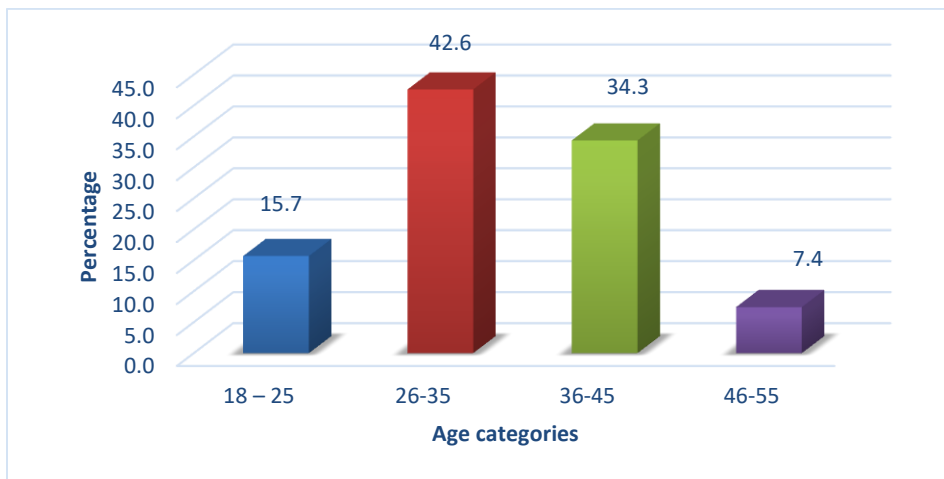
Figure 3 *Distribution of Respondents by Gender*



#### 4.3.2 Age

Most of the respondents were young people less than 35 years of age. For instance, 42.6% of the respondents were aged between 26 – 35 years. In addition, 34.3% reported ages of between 36 – 45 years as shown in Figure 4.

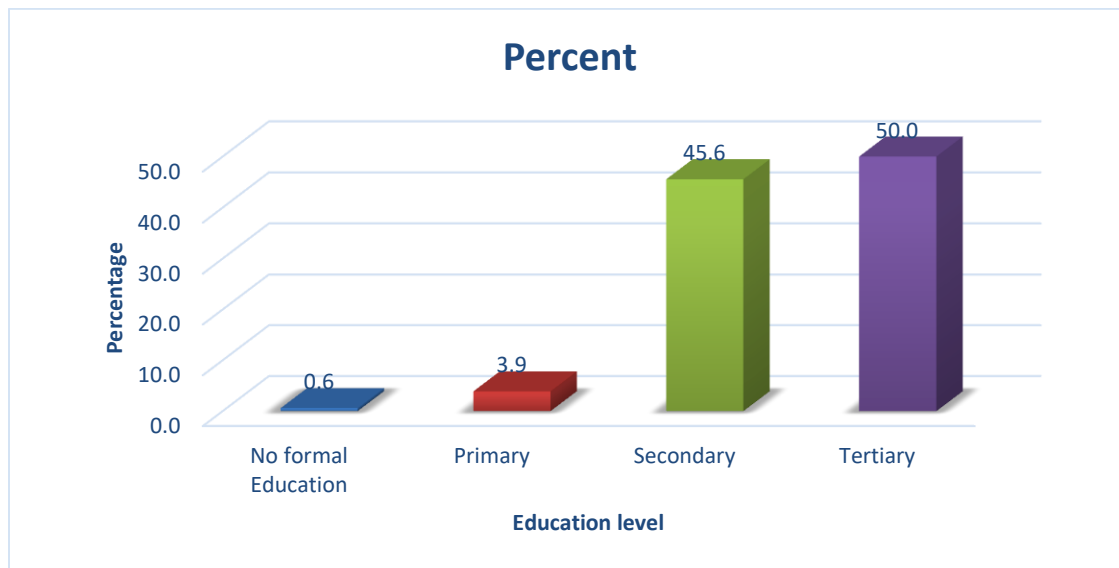
Figure 4 *Distribution of Respondents by Age*



### 4.3.3 Level of Education

The study also sought to establish the level of respondents' education. This was to give the researcher an idea on the level of comprehension on the questions and subject of discussion. As illustrated in Figure 5, half of the respondents (50%) reported to have attained tertiary level of education. In addition, 45.6% had only completed secondary school level, 3.9% had primary school level of education while only a paltry 0.6% reported no formal education.

*Figure 5 Respondents' Level of Education*



### 4.3.4 Respondents' Years of Attendance in Church

Similarly, the respondents were asked how long they had been attending services in their respective churches. This was to gauge their level of information on matters pertaining to the processes as well as activities of the church. Table 3 presents results of respondents' years of church attendance.

*Table 3 Respondents' Years of Church Attendance*

	Frequency	Percent
Less than 2 years	38	20.9
2 – 10 years	78	42.9
above 10 years	66	36.3

<b>Total</b>	<b>182</b>	<b>100.0</b>
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From the results, a larger proportion of the respondents (42.9%) reported attending or being members of the church for a period between two and ten years. This was followed by 36.3% who had attended services in these churches for more than ten years while only 20.9 percent reported that they had been attending services in the church for less than two years. This shows that majority of the respondents were long term members of the churches and were in a better position to discuss what happens in the church.

#### **4.4 Nature of Criminal Attacks and Perceived Vulnerability against Church Buildings**

On the first objective, the study sought to investigate the nature of criminal attacks and perceived vulnerability against church buildings in Nairobi County. In order to understand and respond to the objective, the respondents were asked on their perceptions about violent attacks against the churches in Nairobi County. The results were as presented in Table 4.

*Table 4 Respondents' Perceptions on Violent Attacks Against Churches*

		No	Yes	Total
Violent attacks against the churches in Nairobi County are on the increase	n	51	131	182
	%	28.0	72.0	100.0
Violent attacks against the churches in Nairobi County have inspired fear among church attendants	n	85	97	182
	%	46.7	53.3	100.0
Fear as a result of violent attacks against churches in Nairobi County has had negative impact on church attendance	n	58	124	182
	%	31.9	68.1	100.0

Based on the results in Table 4.3 above, majority of the respondents that participated in this study (72%) agreed that violent attacks against the churches in Nairobi County were on the increase with only 28% holding a contrary view. Moreover, 68.1% of the respondents concurred that fear that is as a result of violent attacks against churches in Nairobi County has had negative impact on church attendance. It was also the assertion of 53.3% of the respondents that violent attacks against the churches in Nairobi County have inspired fear among church attendants.



#### 4.4.1 Type of Attacks Prevalent in Church Buildings

The study further explored the various types of attacks that were prevalent in church buildings in Nairobi County. Generally, there were different types of attacks witnessed in churches. The respondents were asked the whether the attacks were prevalent in churches within Nairobi. The respondents were not limited to what they might have witnessed in their churches but were required to give information about their knowledge on violent attacks on other churches within Nairobi. The various types of attacks are presented in Table 5.

*Table 5 Types of Attacks Prevalent in Church Buildings*

		No	Yes	Total
Gun attack	n	128	54	182
	%	70.3	29.7	100.0
Car bombs	n	164	18	182
	%	90.1	9.9	100.0
Suicide bombs	n	158	24	182
	%	86.8	13.2	100.0
Explosive attacks	n	145	37	182
	%	79.7	20.3	100.0
Knife attacks	n	129	53	182
	%	70.9	29.1	100.0

As evidenced on Table 4.4, gun attacks were the most prevalent in church buildings (29.7%) closely followed by knife attacks (29.1%), explosive attacks (20.3%), suicide bombs (13.2%) and the least form of attack was the car bombs as reported by 9.9% of the respondents.

#### 4.5 Congregants Perceptions of What Constitutes Church Buildings Security and Safety

The second objective of the study sought to establish congregants' perceptions of what constitutes church buildings security and safety in Nairobi County. Here, the respondents were required to give their level of agreement with the various measures of ensuring security and safety in the church buildings. The results were as presented in Table 6.

*Table 6 Aspects that Enhance Security and Safety in Church Buildings*

		<b>No</b>	<b>Yes</b>	<b>Total</b>
Perimeter Walls	n	0	182	182
	%	0	100.0	100.0
Parking Lots with Patrol guard's security	n	60	122	182
	%	33.0	67.0	100.0
CCTV security in and around Church Guards	n	44	138	182
	%	24.2	75.8	100.0
Access Control in Churches	n	17	165	182
	%	9.3	90.7	100.0
Armed security in churches	n	45	137	182
	%	24.7	75.3	100.0
Use of psychological deterrence or barriers which scares criminals' away e.g., dummy cameras	n	33	149	182
	%	18.1	81.9	100.0
Use of Floodlights at evening or overnight church services	n	35	147	182
	%	19.2	80.8	100.0
Use of Metal Detectors in church entrances	n	13	169	182
	%	7.1	92.9	100.0

From the results, all the respondents agreed that Perimeter Walls were important in ensuring church security and safety of the congregants. This was followed by the use of Metal Detectors in church entrances (92.9%) as well as the use of psychological deterrence or barriers which scare criminals' away e.g., dummy cameras as reported by 81.9% of the respondents. During the evening and/or night services, the use of Floodlights at evening or overnight church services was reported to be an important measure of enhancing security and safety in church (80.8%).

Other aspects that the respondents perceived to be enhancing security within church buildings were Access Control in Churches (90.7%) where people are screened and give reasons for their visit especially during other days of the week (services are mainly on Sunday). Moreover, some

churches have resulted to use of Armed security in churches especially on Sunday to also secure the offering and the congregation. This method was reported to be effective in enhancing security and safety in churches by 75.3% of the respondents. Other aspects of security mentioned include use of CCTV security in and around Church (75.8%) and Parking Lots with Patrol guard's security (67%) respectively.

This information was supported by the key informants who indicated that it is important for all places of worship to be equipped with adequate security measures in order to ensure the safety of congregants. Top of what was pointed out by these informants was the surveillance cameras and having enough security guards to man all the areas of the church. Even though psychological deterrence such as dummy cameras can be used to prevent attacks, they can have little effect if criminals realize that they are not real cameras. This would then be even more costly for the church as they will be required to install real surveillance cameras.

#### **4.6 Level of Safety and Security Preparedness in Church Buildings**

The third objective of the study sought to determine the level of safety and security in case of attacks while in church buildings service in Nairobi County. Under this objective, the respondents were asked various questions regarding the level of preparedness to counter violent attacks in churches. Their responses were as presented in Table 7.

*Table 7 Measures to Counter Violent Attacks in Church Buildings*

		<b>No</b>	<b>Yes</b>	<b>Total</b>
This church has sufficient barriers to deter unauthorized vehicles from entering church compound	n	41	141	182
	%	22.5	77.5	100.0
This church has in place physical barriers to keep all but authorized vehicles at a safe distance and to mitigate against a hostile vehicle attack	n	25	157	182
	%	13.7	86.3	100.0
This church has nominated and trained evacuation marshals in case of insecurity incidents	n	120	62	182
	%	65.9	34.1	100.0
This church has reliable, tested communications facilities in the event of an incident?	n	10	172	182
	%	5.5	94.5	100.0
This church has proper guidelines to worshipers on what to do if they notice anything suspicious?	n	5	177	182
	%	2.7	97.3	100.0
Does this church have a security policy showing security procedures within this place of worship?	n	16	166	182
	%	8.8	91.2	100.0
Do you involve counter terrorism agencies in developing security procedures of this church?	n	133	49	182
	%	73.1	26.9	100.0

Based on the results illustrated in Table 4.6, the churches had employed various measures to counter violent attacks. The most notable measures reported by the respondents were that church has proper guidelines to worshipers on what to do if they notice anything suspicious (97.3%), that the church has reliable, tested communications facilities in the event of an incident (94.5%), and that this church have a security policy showing security procedures within this place of worship (91.2%). Besides, 86.3% of the respondents indicated that the churches have in place physical barriers to keep all but authorized vehicles at a safe distance and to mitigate against a hostile vehicle attack. Moreover, 77.5 percent of the respondents reported that the church has sufficient barriers to deter unauthorized vehicles from entering church compound.

One of the priests at Holy Family Basilica stated.

*“We have enough security measures to protect the members. The church has heavily invested in security personnel as well as equipment such as cameras, metal detectors. We also talk to our members on what to do in case of any attack”.*

On the contrary, 73.1% of the respondents disagreed that the churches involve counter terrorism agencies in developing security procedures of the church while another 65.9% refuted assertions that church had nominated and trained evacuation marshals in case of insecurity incidents.

#### **4.7 Discussions of Results**

This section discusses the results above in relation to other research studies conducted. The section is organized as per the objectives and include comparison with other studies. The study objectives included the nature of criminal attacks and perceived vulnerability against church buildings in Nairobi County, congregant's perceptions of what constitutes church buildings Security and Congregants' Perceptions of preparedness and what should be done to Prevent Attacks in Nairobi County.

##### **4.7.1 Nature of Criminal Attacks and Perceived Vulnerability against Church Buildings**

The study's first objective sought to investigate the nature of criminal attacks and perceived vulnerability against church buildings in Nairobi County. In order to understand and respond to the objective, the respondents were asked about their perceptions about violent attacks against the churches in Nairobi County. The results objective was divided into two sub-objectives, which are perceptions about violent attacks against the churches and the type of attacks prevalent in church buildings. In the perceptions about violent attacks against the churches, results showed that the majority of the respondents agreed that indeed there were fears of violent attacks against the churches in Nairobi. Moreover, the respondents concurred that fear resulting from violent attacks against churches in Nairobi County had had a negative impact on church attendance and this had since inspired fear among church attendants. In the type of attacks prevalent in church buildings, results showed that gun attacks were the most prevalent in church buildings closely followed by knife attacks, explosive attacks, suicide bombs, and the least form of attack was the car bombs. The results concur with those of Scholars Bulger (2009), Gorski (2007), Koe (2006), and Ex-Morninglanders (2010) nature of attacks against churches ranges from active gun shooter

situation, use of car bombs and suicide bombers, use of explosives, amongst others. Furthermore, the results were in consistent with those of Lynn (2013) who noted that in there is possibility of a residential burglary in the gated Church. Even when we consider housing units such as tenure, revenue and location, the characteristics of persons, such as age and race, come to be recognized as being one of the key factors that worry about safety and crime as well as fear of crime.

#### **4.7.2 Congregants Perceptions of What Constitutes Church Buildings Security**

With regard to the second objective which was designed to evaluate the congregant's perceptions of what constitutes church buildings Security in Nairobi County, the results showed that Perimeter Walls were important in ensuring church security and safety of the congregants. Other measures included Access Control in Churches, use of Metal Detectors in church entrances, the use of psychological deterrence or barriers that scare criminals away, e.g., dummy cameras, as well as Floodlights' use at evening or overnight church services. Moreover, some churches have resorted to Armed security in churches, especially on the days of worship, to secure the offering and the congregation. This method was reported to effectively enhance security and safety in churches. Other aspects of security mentioned include the use of CCTV security in and around Church and Parking Lots with Patrol guard's security.

The results were inconsistent with those of The Building and Construction Authority (BCA) (2005), who stated that building owners, which include churches, should determine the type of security they would want in their buildings since there was usually no established standard for the security to be provided in a building. The safest way many church administrators chose to respond to security threats was through active security measures, which were done in response to the perceived security challenges they faced. Furthermore, the results concur with those of the Technical Guidance Document (TGD) (2007) that stated that for effective passive security of a building, issues to be considered must deny unauthorized vehicular access and make escape difficult while delaying possible intrusion. The benefit of such considerations is that the design of the building makes it less obvious to the users that they are being restricted or monitored; hence the building appears normal.

Moreover, the results contradicted with those of Dohan (2004), who stated that the design considerations for public buildings usually vary depending on the function and category of people expected to use the building. The author also stated that the nature of the activity to be undertaken within such buildings usually determines the building's security level. Furthermore, Konstant (2013) opined that an open design of a building could lead to a security risk with the building. This explains why many building designers, in attempting to reduce the security risk associated with their design, usually play down the openness of their buildings. In contrast, Gordon (2004) argued that the church is a public building because it is open to members of the public, and there is little or no restriction to the type of people who make use of such a facility.

#### **4.7.3 Congregants' Perceptions of Preparedness and What Should be done to Prevent Attacks.**

The third objective of the study sought to determine the level of safety and security in case of attacks while in church buildings service in Nairobi County. Under this objective, the respondents were asked various questions regarding the level of preparedness to counter violent attacks in churches. The results indicated that the main ways that are adopted to prevent attacks are that the church has proper guidelines to worshipers on what to do if they notice anything suspicious (97.3%), the church has reliable, tested communications facilities in the event of an incident (94.5%), and the church have a security policy showing security procedures within this place of worship (91.2%). Besides, the churches have physical barriers to keep all but authorized vehicles at a safe distance and mitigate against a hostile vehicle attack (86.3%). Moreover, 77.5 percent of the respondents reported that the church has sufficient barriers to deter unauthorized vehicles from entering the church compound.

The results were consistent with those of the American Crime Prevention Institute (2011) and Houses of Worship Security Practices Guide (2013) who stated that enhancement of church security includes the following areas of security; financial security, children and youth security, property inventory, keys management control, interior building areas, video surveillance, electronic access control, electronic intrusion detection system, building perimeter, external grounds, the property perimeter, and neighborhood security.

Moreover, the results were inconsistent with Counter Terrorism Protective Security Advice (2009), which stated the main perceptions of preparedness to counter criminal attacks include screening and patrolling as a significant deterrent suitable protective security consideration for your place of worship. The routine searching and patrolling of your premises represents another level of vigilance covering both internal and external areas. However, the results 73.1% of the respondents disagreed that the churches involve counter terrorism agencies in developing security procedures of the church while another 65.9% refuted assertions that the church had nominated and trained evacuation marshals in case of insecurity incidents.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter looks into the summary of the study, conclusions based on the findings and recommendations.

#### 5.2 Summary

The study was motivated by the fact that despite research continuing to expose evidence of increasing insecurity on churches, the vast majority of churches lack sufficient security measures against criminal attacks, which seemingly is exposing them to risks and vulnerability of various types of soft targets and with churches in Kenya has experienced terrorist attacks targeting the clergy and congregants resulted to casualties, deaths, and damage to property. This vulnerability has been associated with increased public perceptions of insecurity in churches and presumably the dwindling number of church congregants attending church services. Still, some congregants still consider the churches' physical security as outside their faith and that God should protect them regardless of the situation. In an attempt to understand the problem and elicit mitigating measures on the problem, this study sought to investigate the nature of violent attacks, establish the congregants' perceptions of what constitutes church safety, congregants' perceptions of their preparedness in case of an attack while in church, and congregant's perceptions of what they think should be done to secure places of worship in Nairobi Kenya.

The study adopted a cross-sectional survey design to examine the perception of congregants on the vulnerability of church buildings to security threats in Nairobi County, Kenya. Findings revealed that the perceptions on violent attacks against churches include violent attacks against the churches in Nairobi County are on the increase, violent attacks against the churches in Nairobi County have inspired fear among church attendants, and fear that is as a result of violent attacks against churches in Nairobi County has had a negative impact on church attendance.

Under the first objective on investigating the nature of criminal attacks and perceived vulnerability, the study findings indicated that violent attacks against the churches in Nairobi County were on the increase and fear that is as a result of these violent attacks against churches

in Nairobi County has had negative impact on church attendance. The study findings further revealed that gun attacks were the most prevalent in church buildings, closely followed by knife attacks, explosive attacks, suicide bombs, and the least form of attack was the car bombs as reported by the respondents.

Under the second objective on the establishment congregants' perceptions of what constitutes church buildings security and safety, results showed Perimeter Walls were important in ensuring church security and safety of the congregants. This was followed by the use of Metal Detectors in church entrances and the use of psychological deterrence or barriers that scare criminals away, e.g., dummy cameras. During the evening and/or night services, the use of Floodlights at evening or overnight church services was reported to be an important measure of enhancing security and safety in the church. Other aspects included Access Control in Churches where people are screened and give reasons for their visit, especially during other days of the week (services are mainly on Sunday). Moreover, some churches have resorted to Armed security in churches, especially on Sunday, to secure the offering and the congregation. More so, other aspects of security mentioned include the use of CCTV security in and around Church and Parking Lots with Patrol guard's security.

Finally, under the third objective on determining the level of safety and security in case of attacks, the findings revealed that the churches had employed various measures to counter violent attacks. The most notable measures reported by the respondents were that the church has proper guidelines to worshipers on what to do if they notice anything suspicious, that the church has reliable, tested communications facilities in the event of an incident and that this church have a security policy showing security procedures within this place of worship. Besides, the churches have physical barriers to keep all but authorized vehicles at a safe distance and mitigate against a hostile vehicle attack. Moreover, the church has sufficient barriers to deter unauthorized vehicles from entering the church compound are other strategies. However, there was a disagreement that the churches involve counter terrorism agencies in developing security procedures of the church while there were also assertions that the church had nominated and trained evacuation marshals in case of insecurity incidents.

## **5.3 Conclusions**

This section covers the conclusions of this study based on research findings. The conclusions are divided into two categories, namely: theoretical conclusions; and empirical conclusions.

### **5.3.1 Theoretical Conclusions**

The Defensive Space Concept theory concludes that there is a direct correlation between high crime areas and the physical layout of a building. Further, the theory concludes that the more complex and anonymous the housing environment, the more hardened it becomes for bad behaviors to penetrate. The theory contends that private buildings with large public areas that are accessible from many different paths increase the risk of criminal activity. In addition, large environmental residential and layout breaks down the community's sense of control and personal responsibility for their surroundings, making it less likely that they will question intruders or intervene in criminal activity. However, the theory argues that an area is safer when people feel a sense of ownership and responsibility. As the findings reveal, majority of the HOW have proper guidelines to worshipers on what to do if they notice anything suspicious, that the churches have reliable, tested communications facilities in the event of an incident, and that the churches have security policies showing security procedures within the place of worship. Furthermore, the churches have in place physical barriers to keep all but authorized vehicles at a safe distance and to mitigate against a hostile vehicle attack. This are all indications of a watchful community that would make intruders feel less secure committing crime as reiterated by the Defensive Space Concept theory.

The theory of Crime Prevention through Environmental Design (CPTED) compliments the theory of the Defensive Space Concept. Hence, the theory is based on the fact that people can fundamentally prevent crime through environmental design suggest that you can change how people act in a place by altering its design the reason why we have a central business district, the reason for recreational parks and pitches, the need for office building layouts and residential places. Therefore, the theory concludes that to reduce crime and fear and improve the quality of life, its five basic principles are considered and include (1) Natural surveillance, (2) Access control, (3) image and maintenance, (4) Target hardening (5) Territoriality. Furthermore, the theory concludes that Crime prevention through environmental design retains the functional

aspects of Territoriality and mechanical surveillance, which involves security equipment such as closed-circuit television (CCTV) and lighting, amongst other methods that strengthen the access controls like screening, activity support, and reinforcement of selected areas. This theory is relevant to the study as seen with presence of Perimeter Walls that have been considered important by the respondents in ensuring church security and safety of the congregants. The use of Metal Detectors in church entrances as well as the use of psychological deterrence or barriers which scares criminals' away e.g., dummy cameras are some of the ways in which the study align with the theory on the concept of anticipating the thought process of a potential offender and creating an environment that discourages follow through. The findings also indicate the adoption of the Crime Prevention through Environmental Design theory's main principles of natural surveillance, natural access control as well as territorial reinforcement by the churches.

### **5.3.2 Empirical Conclusions**

This study's findings were to examine the perception of congregants on the vulnerability of church buildings to security threats in Nairobi County, Kenya.

The study's first objective sought to investigate the nature of criminal attacks and perceived vulnerability against church buildings in Nairobi County. The study concludes that violent attacks against the churches in Nairobi County are on the increase, violent attacks against the churches in Nairobi County have inspired fear among church attendants, and fear that is because of violent attacks against churches in Nairobi County has had a negative impact on church attendance. Furthermore, the study concludes that the main types of attacks are gun attacks that were most prevalent in church buildings closely followed by knife attacks, explosive attacks, suicide bombs, and the least form of attack was the car bombs as reported by of the respondents.

The second objective of the study sought to establish congregants' perceptions of what constitutes church buildings' security and safety in Nairobi County. This objective concluded that the main measure that ensures church security and safety of the congregants included the Perimeter Walls, the use of Metal Detectors in church entrances, and psychological deterrence or barriers that scare criminals away, e.g., dummy cameras. During the evening and/or night services, the use of Floodlights at evening or overnight church services was reported to be an

important measure of enhancing security and safety in the church. Other aspects included Access Control in Churches where people are screened and give reasons for their visit, especially during other days of the week (services are mainly on Sunday). Moreover, some churches have resorted to Armed security in churches, especially on Sunday, to secure the offering and the congregation. More so, the study concluded the use of CCTV security in and around Church and Parking Lots with Patrol guard's security are other aspects of security.

The study's final objective was to seek to determine the level of safety and security in case of attacks while in church buildings service in Nairobi County. The findings of this objective concluded that the churches had employed various measures to counter violent attacks. The most notable measures were that the church has proper guidelines to worshipers on what to do if they notice anything suspicious, that the church has reliable, tested communications facilities in the event of an incident and that this church has a security policy showing security procedures within this place of worship. The study also concluded that other measures that are lower influence were that the churches have put in place physical barriers to keep all but authorized vehicles at a safe distance and mitigate against a hostile vehicle attack. Moreover, the church has sufficient barriers to deter unauthorized vehicles from entering the church compound.

#### **5.4 Recommendations**

In order to ensure safety of congregants within church buildings in Nairobi County, Kenya, this study makes the following recommendations in respective areas of objectives:

- i. On handling the different nature of attacks, the study recommends the churches in Nairobi and others in Kenya to form security committees that will include religious leaders, congregants, security and medical professionals, law enforcement to oversee the development and implementation of the security plans, schedule regular meetings to review procedures and incidents of the different nature of attacks in order to mitigate all the possible types of attacks on the churches. This committee should also organize trainings for the security teams on how to respond to medical emergencies, train on the handling of letter bombs and improvised explosive devices (IEDs), firearms training, conduct evacuation drills, plan and practice scenario-based response procedures identifying suspicion behavior, handling a threatening situation and lockdowns.

- ii. The churches in Kenya and elsewhere in the world must limit the number of entry points during non-worship hours to limit un-authorized access, monitor the staff and ushers' entry points to prevent unauthorized access, ensure security patrols are conducted regularly to avoid compromised access, regularly audit badges and keys to ensure access to sensitive areas are accounted for. There is also need to post signs that deter potential criminal activity that clearly state that any intruders are being watched and monitored by video surveillance cameras.
- iii. The churches must also focus on the communication, crisis management and media procedures by having a list of emergency contacts to include phone numbers and all forms of social media contacts, establish emergency communication protocols to clearly designate the chain of command as to who should be contacted in the event of an emergency, designate a spokesperson for the congregation and stipulate that others refrain from speaking to the media when needed, as well as regularly search social media for the mention of the HOW and the religious leaders. There is also need to keep personal files on all the staff and volunteers and vetting of any new recruits before they serve in various capacities.

### **5.5 Suggestions for Further Research**

The current study focuses on examining the perception of congregants on the vulnerability of church buildings to security threats, it may be a reference to provide a solution that may reduce the number of deaths and injuries not only those targeted-on churches but also to other places of worship

It may also assist to convince the church leadership to invest more in the security and safety of buildings and the congregants, equip and improve the current security and safety status of their churches

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## **APPENDICES**

### **Appendix I: Letter of Introduction**

HUDSON BARAZA ASHIBENDE  
EGERTON UNIVERSITY  
BOX 536  
NJORO -KENYA

Dear Respondent,

#### **RE: DATA COLLECTION**

#### **ASSESSING CONGREGANTS' PERCEPTION OF VULNERABILITY OF CHURCH BUILDINGS TO SECURITY THREATS IN NAIROBI COUNTY, KENYA**

I am a student at Egerton University pursuing Master of Arts Degree in Security Management. I am currently conducting a research entitled “investigating the perception of congregants on vulnerability of church buildings to security threats in Nairobi County, Kenya. Please find the participants information sheet as guidance before proceeding in answering the questionnaire.

#### **PARTICIPANT INFORMATION SHEET**

##### **1. Invitation to participate.**

You are being invited to take part in this research project. It is vital to understand why the study is carried out and what it involves before you plan to do so. Please take your time to carefully read and speak to others if you like. Ask us if something is unclear or if you want more details. Take the time to decide whether you wish to participate. Thank you for reading this. Thank you for reading.

##### **2. What is the purpose of the project?**

The purpose of this research project is to examine the perception of congregants on vulnerability of church buildings to security threats in Nairobi County, Kenya. This project draws on previous studies by the research team and others and is intended to enable comparisons to previous results.

##### **3. Why was I selected?**



You are chosen because you have knowledge of research data services in the church practices in management of attacks and team capability as a Member in the given church, Pastor, Reverend, or individual who holds similar positions.

4. Should I participate?

You must determine whether you are to participate or not. You will keep a copy of the information sheet and indicate your agreement on the online consent form if you wish to participate. At any moment, you can withdraw. There is not any reason to or not participate.

5. If I participate, what will happen to me?

You will be requested to complete a 30-minute online distribution of open-ended questionnaires which may include consent to an interview to learn more about your strategy.

6. What do I do?

The questions in the questionnaire should be answered. There are no other participatory obligations or lifestyle constraints.

7. What are the pros and cons of participation?

You will not have any inconvenience or discomfort if you participate in the study. The possible psychological or physical harm or pain would be the same as daily life.

8. How will participants benefit?

Although there are no immediate advantages for those involved, this study will help church member and leaders understand their roles in the curbing attacks in churches and other places of worship, hence enabling them to take necessary measures. In order to educate their ethical working, the results will be shared with the participants.

9. What if the investigation ends sooner than anticipated?

We will tell you why if the study is stopped sooner than expected and you are affected in some way.

10. What if there is something wrong?

You can contact any member of the research team if you first have any complaints about the project. You may contact the Secretary of the University of XXX to extend your complaint if your complaint has not been treated to your satisfaction (see below).

11. Can I remain confidential in my participation in this project?

The details we gather about you will be kept strictly secret in the process of study. In no records or publications will you be able to be named or identified, nor will it be marked or identifiable to

your institution. Any data collected on you will be stored online and protected using passwords and other related security processes and technologies.

The collected data can be exchanged freely to allow the research team and other third parties to reuse it. These anonymized data would not permit the identification or identification of persons or organizations.

12. Will I be registered, and how will the media be used?

Without separate permission from you, you will not be recorded in any other way than your questionnaire entry.

13. What kind of information would I be searching for, and why is this information critical to achieving the objectives of the research project?

You will be asked about your views and existing activities in conjunction with project management systems and methods. Your views and experience are just the subjects of the project.

14. What are the research outcomes going to happen?

Results of the investigation will be released. No article or publication will identify you. In no article or publication will your organization be named. Please ask that if we include you on our circulation list if you wish to receive a copy of any reports resulting from the study.

15. Who reviewed the project in ethical terms?

This project was accepted ethically by the Ethics evaluation procedures of the Knowledge School and then endorsed by Egerton University's ethical guidelines. The Research Ethics Committee of the University of Egerton oversees the university's implementation and execution of the ethical assessment procedure.

I want to express my sincere appreciation for your assistance and Thank you for your participation in this report.

Thank You.

Yours Faithfully,

A handwritten signature in black ink that reads "Hudson Baraza". The signature is written in a cursive style with a large initial "H" and "B".

**HUDSON BARAZA**

**Appendix II: Questionnaire for Main Respondents**

Kindly fill the questionnaire as appropriately as possible. Be assured that the information you give.

will be treated with utmost confidentiality and will be used only for research purpose.

**Section A: Background Information**

1. Gender:

Gender	Male	Female

2. Age (years):

3. Level of education: What is your level education (Tick where appropriate)

No formal Education	Primary	Secondary	Tertiary

4. For how long have you been coming to this church?

Less than 2 years  2 – 10 years  above 10 years

**Section B: Nature of Attacks Against Church Buildings in Nairobi County, Kenya**

The following statements describe aspects of nature of attacks against church buildings in Nairobi County Kenya. For each statement indicates your agreement by ticking in appropriate box either; 2=Yes or 1=No

No	Item	Yes	No
B1	Violent attacks against the churches in Nairobi County are on the increase.		
B2	Violent attacks against the churches in Nairobi County have inspired fear among church attendants.		
B3	Fear that is as a result of violent attacks against churches in Nairobi County has had negative impact on church attendance.		

**Section B 4: Nature of Attacks Against Church Buildings in Nairobi County, Kenya**

The following statements describe the type of attacks prevalent in church buildings. For each statement indicates your level of agreement by ticking in appropriate box either; 2=Yes or 1=No

	Item	Yes	No
4,1	Gun attack		
4,2	Car bombs		
4,4	Suicide bombs		
4,5	Explosive attacks		
4,6	Knife attacks,		

B5 what other threat do you think was left in the list above?

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**Section B6: Congregants Perceptions of What Constitutes Church Buildings Security and Safety in Nairobi County**

The following statements describe aspects of congregant’s perception of what constitutes church security and safety. For each statement indicates your level of agreement by ticking in appropriate box either; 2=Yes or 1=No

No	Item	Yes	No
6, 1	Perimeter Walls		
6, 2	Parking Lots with Patrol guard’s security.		
6, 3	CCTV security in and around Church Guards		
6, 4	Access Control in Churches		
6, 5	Armed security in churches		

6, 6	Use of psychological deterrence or barriers which scares criminals' away e.g. dummy cameras		
6, 7	Use of Floodlights at evening or overnight church services		
6,8	Use of Metal Detectors in church entrances		

B7. What other aspects of security do you think was forgotten?

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**Section B7: Congregants Perceptions of Their Preparedness to Counter Terror Attacks**

The following statements describe aspects of congregant's preparedness to counter attacks against insecurity. For each statement indicates your level of agreement by ticking in appropriate box either; 2=Yes or 1=No

No	Item	Yes	No
7,1	This church has sufficient barriers to deter unauthorized vehicles from entering church compound		
7,2	This church has in place physical barriers to keep all but authorized vehicles at a safe distance and to mitigate against a hostile vehicle attack.		
7,3	This church has nominated and trained evacuation marshals in case of insecurity incidents.		
7, 4	This church has reliable, tested communications facilities in the event of an incident?		
7,5	This church has proper guidelines to worshipers on what to do if they notice anything suspicious?		
7, 6	Does this church have a security policy showing security procedures within this place of worship?		
7, 7	Do you involve counter terrorism agencies in developing security procedures of this church?		

B8 Anything else do you think was forgotten?

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**Section B 9: Congregants Perceptions of What Can Be Done to Secure Churches Against Vulnerabilities in Nairobi County**

9.1 What do think can be done to secure church buildings and church services against vulnerabilities?

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**Appendix III: Key Informants Schedule**

1. What types of attacks against church buildings are common in Nairobi County Kenya?

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2. What constitutes church buildings security and safety in Nairobi County Kenya

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3. How prepared are the congregants in case of a criminal attack while in church buildings or church service in Nairobi County Kenya?

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4. What do you think should be done to secure church buildings in Nairobi County Kenya?

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## Appendix IV: Permission to Conduct Research from Egerton University Graduate School

**EGERTON**  
Tel: Plot: 254-51-2217620  
254-51-2217877  
254-51-2217631  
Dir.line/Fax: 254-51-2217847  
Cell Phone



**UNIVERSITY**  
P.O. Box 536 - 20115  
Egerton, Njoro, Kenya  
Email: [bpgs@egerton.ac.ke](mailto:bpgs@egerton.ac.ke)  
[www.egerton.ac.ke](http://www.egerton.ac.ke)

### OFFICE OF THE DIRECTOR GRADUATE SCHOOL

Ref: **AM21/17549/17**.....

Date: **14<sup>th</sup> October, 2020**.....

Mr. Hudson Ashibende Baraza  
Dept. of PSSS  
Egerton University,  
P. O. Box 536,  
**EGERTON**

Dear Mr. Baraza

#### **RE: CORRECTED PROPOSAL**

This is to acknowledge receipt of soft copies of your corrected proposal entitled **"Assessing Congregants Perception of Vulnerability of Church Buildings to Security Threats in Nairobi County, Kenya."**

You are now at liberty to commence your fieldwork. However note the following: -

1. You must register each semester.
2. Pay your fees every semester.
3. Submit progress reports every four (4) months (Masters) or six (6) months (PhDs). Without this, your thesis/project will not be accepted. Forms are available at the Board.
4. You are expected to publish one (1) paper (Masters) or two (2) papers (PhD) in peer-reviewed journal and present them before issuance of "Intent to Submit Thesis/Project" form by the Board.

Thank you.

Yours sincerely

15 OCT 2020

  
Prof. Nzula Kitaka

**DIRECTOR, BOARD OF POSTGRADUATE STUDIES**

c.c. Dean, FASS  
COD, PSSS  
Supervisors

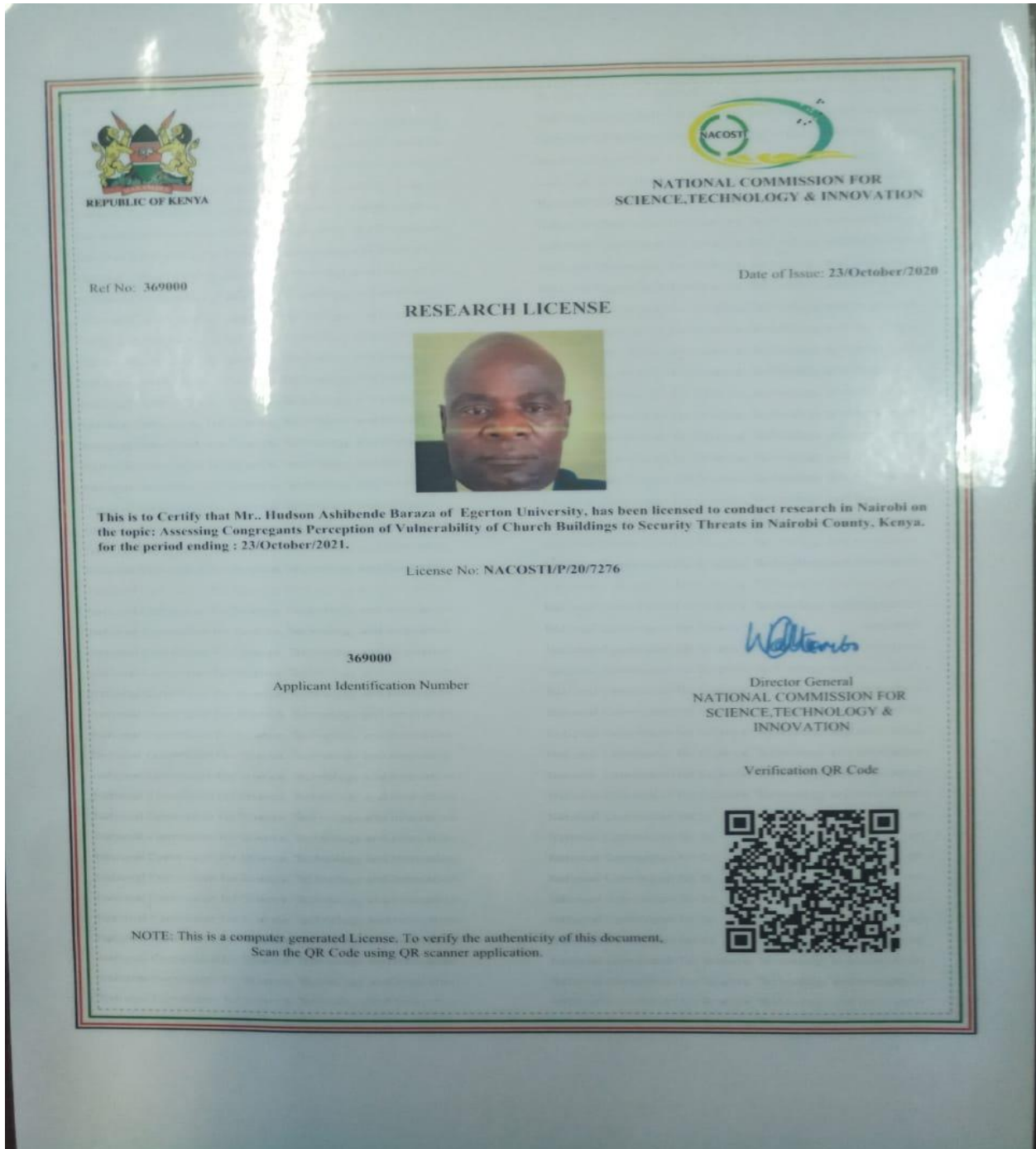
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**Appendix V: NACOSTI Research Licence**



## Appendix VI: Publication Abstract

Advances in Social Sciences Research Journal – Vol. 8, No. 5

Publication Date: May 25, 2021

DOI:10.14738/assrj.85.10064.

Ashibende, H., Mwangi, S. W., & Ngetich, K. (2021). Assessing Congregants Perception of Vulnerability of Church Buildings to Security Threats in Nairobi County, Kenya. *Advances in Social Sciences Research Journal*, 8(5). 213-228.



### **Assessing Congregants Perception of Vulnerability of Church Buildings to Security Threats in Nairobi County, Kenya**

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Department of Peace Security and Social Sciences, Egerton University, Kenya

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#### **ABSTRACT**

This paper uses data collected for an MA Thesis on Assessing Congregants' perception of Vulnerability of Church Buildings to security threats in Nairobi County, Kenya. The study has been necessitated by increased cases of targeted criminal attacks on congregants and church buildings in addition to increased perceptions of congregants as soft targets of insecurity, more pertinently in Nairobi County. The study will be guided by the following objectives; to investigate the nature of perceived vulnerability against church buildings; to explore congregant's perceptions of what constitutes church buildings security and safety; to establish congregant's perceptions of their level of preparedness in case of a criminal attack while in church buildings service; and to determine the congregant's perceptions of what they think should be done to secure church buildings in Nairobi County Kenya. This study was grounded by two theories; Defensive Space Concept and Crime Prevention through Environmental Design (CPTED). This study adopted a cross-sectional survey design while Stratified random sampling technique was used to pick all the main respondents. Questionnaires were used to collect data from 182 members of each church (main respondents). In addition, Key Informants (K.I) guide was used to collect qualitative data from 8 K.I who include 4 Priests (1 from each church), and 4 security guards (one from each church). Data was analyzed with the aid of Statistical Package for Social Sciences (SPSS) and results presented using tables, bar and pie charts. The study results revealed that violent attacks against the churches in Nairobi county are on the increase (72%) and that the violent attacks against the churches in Nairobi county have inspired fear among church attendants (68.1%). Further, results showed the gun attacks were the most prevalent in church buildings (29.7%) closely followed by knife attacks (29.1%), explosive attacks (20.3%), suicide bombs (13.2%). Further, the results have revealed that some churches had employed various measures to counter violent attacks that included amongst other measures employed full time trained security staff to manage such incidents. Congregant's perceptions on violent attacks against churches include; Knife and explosive attacks during services, but which have prompted fears of future gun or other terror attacks as is the case in other countries. According to the study; main measure of church security and safety included the Perimeter Walls, use of Surveillance cameras, use of Metal Detectors in church entrances, and heavy