

**AN INVESTIGATION INTO EMERGENCY MANAGEMENT  
PREPAREDNESS OF CHILDREN'S PHYSICAL SAFETY IN PRE-  
SCHOOLS IN THIKA WEST DISTRICT, KENYA**

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A research project submitted in partial fulfillment of the requirements for the award of the degree  
of Master of Education in Early Childhood Education in the Department of Educational  
Communication and Technology of University of Nairobi

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## **DECLARATION**

This project is my original work and has not been submitted for an award of degree in any other institution.

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This project has been submitted with the knowledge of the supervisors.

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## **DEDICATION**

This research project is dedicated to my parents, Samuel Gathanwa and the late Martha Wambui Gathanwa whose unconditional love, support and understanding have always served as the pillar from which I draw my strength.

And thanks to my siblings and my very close acquaintances for their continued support and encouragement throughout this research work.

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Honour and glory to the Almighty God, your grace is sufficient for me.

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## **ABBREVIATION AND ACRONYMS**

CFS	Child Friendly School
ECD	Early Childhood Development
ECE	Early Childhood Education
FEMA	Federal Emergency Management Agency
FPE	Free Primary Education
KESI	Kenya Education Staff Institute
KIE	Kenya Institute of Education
MDGs	Millennium Development Goals
MOE	Ministry of Education
NACECE	National Centre for Childhood Education
NGOs	Non Governmental Organizations
PE	Physical Education
SMC	School Management Committee

SWOT	Strength, Weakness, Opportunities and Threats
UNESCO	United Nation's Educational Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund
VVOB	Kenya Flemish Association Development Cooperation and Technical Assurance

## ABSTRACT

The government of Kenya being a signatory to international conventions and protocols that have emphasized the rights of every human being is committed to promoting safety of children. The launch of the Early Childhood Development Service Standard Guidelines for Kenya in 2006 at Kenya Institute of Education was a step towards realization of this noble goal. Therefore, this study sought to investigate emergency management preparedness in pre-schools on children's physical safety while in learning institution. The study was anchored on Abraham Maslow Hierarchy of Needs Theory and Comprehensive Emergency Preparedness and Response for Schools Model. Random sampling was used to select the sample population in Thika West District. The study employed descriptive survey design to target 2100 preschool children, 126 preschool teachers and 588 school management committee members from preschools in Thika West District. Purposive sampling was used to select preschools to participate in this study. Questionnaires, interview schedule and observation guide were used as methods of data collection. Interview schedules were used to collect data from the sampled preschoolers and school management committee. Data collected was analyzed using descriptive statistics. The findings of the study may provide better understanding on children's physical safety. The study established that despite the fact that pre-schools did not have safety precaution strategies, some took precaution measures like putting up perimeter fences, cutting branches that hung over roofs and also ensuring that hazardous materials were kept away from children. It however emerged that windows, doors and corridors were strategically placed. The study also established that there were no emergency doors in most pre-schools and in the few that had, they were not well labelled. Preschoolers reacted to emergencies by reporting to their teachers and asking their friends for help. Teachers administered first aid and informed parents. The biggest challenges faced in enhancing safety were: lack of financial resources, lack of knowledge on safety and inadequate infrastructure. The study recommends that: Teacher Education should include aspects of safety and management of emergencies that hamper children's physical safety within schools; The Ministry of Education and relevant line ministries should intensify supervisory of pre schools physical infrastructure and safety levels; the government should fully mainstream Early Childhood Education in the funding of capital and recurrent expenditure; among other recommendations. The study also recommends further research on children's psychological safety within and without school school.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Problem**

Emergency preparedness can be defined as the process of ensuring mitigation or prevention, awareness, response, and recovery in case of an emergency. In educational institutions such as schools and preschools, a safe and secure environment is a prerequisite for effective child development as well as teaching and learning. According to the United State's Council on School Health (2008), schools are generally considered to be safe havens for millions of children and the greatest socializing institutions after the family. However, the recent experiences with natural disasters, in-school violence, acts of terrorism, and the threat of pandemic diseases such as cholera and flu demonstrate the need for schools all over the world to be prepared for all-hazard crisis possibilities.

There is a fundamental link between day-to-day emergency readiness and emergency preparedness. Threats to the safety and security of children and school property can arise from natural hazards – for example earthquake, floods and storms – or from human actions – such as vandalism, arson, and violence. While catastrophic events and human tragedies cannot be eliminated entirely, there is a role for facility designers, institutional managers, emergency response teams, and post-crisis intervention in mitigating their negative impact. Schools that are well prepared for an individual emergency involving a child or staff member are more likely to be prepared for complex events and disasters. In many countries of the world, including Kenya, there is a great regard for the role of school safety in creating environments conducive to learning. Such learning environments provide for children's needs so that they can perform to the best of their ability (Wortman and Loftus, 1988). On the contrary, an unsafe environment poses

great threat and anxiety in both teachers and children and causes lots of damage to schools and education systems (Orpinas and Frankowski, 2001).

Emergency preparedness is especially critical in preschools for a number of reasons. Caretakers in preschools are responsible for a group which is identified as being at risk during an emergency. The fear which can be experienced by young children means that their reactions during an emergency are sometimes unpredictable. For young children, life revolves around regular routines. They spend the day within the familiarity of their world, at home, with baby sitters, or at a pre-school. When there is an interruption to their normal routine, the child experiences anxiety and fear. How adults help the child resolve these 'problem times' may have a lasting effect (Henley, 2005).

Early childhood education (ECE) is not only a fundamental right for every child but also an indispensable element for learning at subsequent levels of education. Crucial as it is, ECE has received the least support within the Kenyan education sector and for long was not included in the Free Primary Education programme (Riechi, Mbiti and Kisilu, 2006). Kenya does not have a national framework of providing ECE services. The provision of ECE is regulated by scattered legislations without a clear policy. Therefore, issues of importance such as safety of preschools have not been given adequate attention.

The safety of the learners is central to the provision of quality education in any country. It is particularly critical for learners at the basic education level in view of their relatively tender age. Children of this early age are vulnerable to threats such as inappropriate school facilities and infrastructure. These may include poorly constructed classrooms and playing grounds, insufficient and broken down toilet facilities, inadequate and inappropriate desks and other furniture.

The safety of children at all times and everywhere therefore cannot be over emphasized. It is in this respect that the government of Kenya launched the Early Childhood Development Service Standard Guidelines for Kenya in January of 2006. The launch of the policy underscores the government commitment to the safety and overall welfare of learners and especially children. Children's Act 2001 emphasizes on the need for children to be offered any form of protection against any impending danger such as unfit physical infrastructure sickness, food poisoning among others.

In addition to early childhood Service Guidelines for Kenya, the Kenya government in collaboration with Church World Service developed Safety Standards Manual for Schools in Kenya as a way of making schools safe zones for children. These documents are geared towards providing a rallying point to reflect on children's safety. They are a blue print for enhancing the safety of our schools. Threats to children require to be addressed through carefully thought out measures and strategies; as such it is the responsibility of the head of every early childhood education centre, school management committee, teachers, parents, and guardians to take keen interest on the safety of children within and outside the schools. The current study therefore sought to investigate emergency management preparedness on children's physical safety in Pre School specifically on mitigation, management and preparedness aspects of emergencies in Thika West District, Kenya.

## **1.2 Statement of the Problem**

The first government of Kenya after independence identified ignorance, poverty and diseases as the main enemies of national development. The government therefore encouraged communities and parents to put up school to cater for the increasing number of children. More emphasis was therefore placed on developing new schools, yet health and safety standards were not entirely

enforced. As a result, there have been cases of unrest in our schools; some of these cases are related to the state of buildings and sanitary facilities (MOE, 2007). The notion of school as a safe haven has been shattered by the sound of gunfire and fires. Protecting children is not simply a matter of public policy, rather it is a matter of strengthening our educational institution to help cope with emergencies as they come in order to keep them safe for children and those teaching them (Elimu News, Issue No.5 Page 15). Therefore, in line with international obligations and having ratified the international agreements on the welfare of children, the Kenya Government ECD policy, commits itself to ensuring that every child has a good start to life through promoting quality, nurturing care and a safe environment.

Threats to school safety that emanates from within the school environment such as accidental injuries caused by fires, insect bites, weak railings, sharp objects, poor ventilation among others, have rendered the child insecure while in school. This study therefore, sought to investigate emergency management preparedness on children's physical safety in preschools in Thika West District in Kenya.

### **1.3 The Purpose of the Study**

The purpose of the study was to investigate emergency management preparedness on children's physical safety in preschools in Thika West District Kenya.

### **1.4 Objectives**

The study sought to fulfill the following objectives:

- 1) To identify the strategies put in place to help reduce risks in preschools.
- 2) To establish the extent to which preschools are prepared in the management of any emergency eventuality related to children's physical safety while in school.
- 3) To determine the constraints preschools face in the management of emergencies.



## **1.5 Research Questions**

The study sought to answer the following questions;

- 1) What strategies are put in place to help reduce risks in preschools?
- 2) To what extent are preschools prepared in the management of any emergency eventuality related to children's physical safety while in school?
- 3) What are the constraints faced by preschools in the management of emergencies?

## **1.6 Significance of the Study**

The research findings may help to create awareness, especially to teachers, on the importance of children's safety within the preschools. Awareness of some emergencies may also be created. Preschool administrators, proprietors, parents, the community, and other stakeholders would have a point of reference when putting up strategies to help in reduction of risks that are a threat to children's safety.

The study also sought to make recommendations for policy makers and those involved in approving establishments of schools to draw from. In addition, the study may form a strong basis for further academic research in areas pertaining to safety of children

## **1.7 Limitation of the Study**

Due to the fact that the researcher was working and studying, time for research was limited. In addition, private preschools are business entities and as such proprietors may withhold information as a way of avoiding to unveil what was not supposed to be revealed. Also being a self sponsored student, extensive research may not be possible due to limited finances therefore; results may not be generalizable to the whole country but Thika West District only.

### **1.8 Delimitation of the Study**

The study was carried out in Thika West District which has forty two preschools both public and private. This scope was so big so the study dealt with fourteen preschools drawn from public and private institutions .Seven public preschools, constructed long time ago, and seven private preschools purposively sampled for the study. The study was also limited to a few emergency management factors specifically mitigation, management and preparedness.

### **1.9 Assumptions of the Study**

This study assumed that Thika West District preschools do not have adequate disaster management mechanisms such as early warning system for emergencies such as fire. The study also assumed that the respondents cooperated and gave accurate information. In addition, it assumed that each preschool had a Standard Safety Guideline from the Ministry of Education from which information was drawn from.

### **1.10 Definitions of Key Terms**

This section contains meanings of specific terms as used in the study.

**Child-** Is a person of below eighteen years (18) of age.

**Emergency** - An unexpected situation involving danger in preschools in which immediate action is necessary to prevent a bad situation from becoming worse.

**Emergency Management** - Refers to the process of ensuring mitigation or prevention, awareness, response and recovery in case of an in emergency in pre-schools.

**Guidelines** - Recommended practices that preschools should undertake to meet the safety standards suggested by the ministry of education.

**Hazards** – Is a condition or agent that has potential to cause harm in a preschool.

**Initial risk audit** – Refers of an effort to identify possible areas which would prevent pre-schools from achieving safety goals.

**Mitigation** - A reduction in how unpleasant, serious something is. Make something less harmful

**Preparedness**- The state of being prepared to handle any occurrence of emergencies in pre schools as a way of ensuring children’s physical safety.

**Preschool child** - Refers to a child between the age of 3 and 6 years who attends an educational institution for learning.

**Preschool**-Refers to an education institution of learning for children aged between 3- 6 years.

**Risks** – Refers to the future issues that can be avoided or mitigated, rather than present problems that must be immediately addressed in our preschools.

**School as a safe haven (zone)** - A legally designated identifiable physical space around the school that is conducive environment for school children’s safety.

**School safety**- These are measures undertaken by the staff, parents, learner’s school administration, to either minimize or eliminate risky conditions or threats that may cause accidents, bodily injury.

**Stakeholder** - A group of people with role or interest to play in the running of a school.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section contains a review of literature related to safety measures that has been credited by scholars. It focuses on safety issues in preschools and it had literature based outside and within Kenya. The chapter also covers theoretical framework and conceptual framework as well.

#### **2.2.1 School Physical Infrastructure Requirements**

It has been known for long time that human beings are both consciously and subconsciously affected by their environment. In one study ten (10) functional characteristics were identified (Lander and Sumption, 1951) that have profound impact upon the quality of schools buildings. These characteristics have been extensively used as guides throughout the world by planners and designers of learning spaces. One of the 10 characteristics was safety, those features that make a building structurally sound and protect its occupants from hazards of traffic, fire and accidents. Healthfulness, the degree to which children are ensured freedom from dirt and excessive noise, and are provided with satisfactory facilities for lighting ,ventilation ,sanitation ,and a plentiful and convenient supply of water. The study done therefore reckons that safety of learners was of paramount importance in the learning process.

Pre schools offer learning experiences before the start of formal education for children. Programs need plenty of carefully chosen toys and equipment should be well spaced, giving children enough room to swing and slide without hurting themselves or others. In selection of a childcare and early childhood centre one should have a checklist and among the issues to look for include safety (Hilderbrand V., 2000) the programs should provide fire exits that are well marked ,smoke detections gadgets ,emergency procedures and emergency telephone numbers. Picking up of

children should be done by authorized persons and visitors have to identify themselves before gaining entry. Safety within school premises is therefore important and this study sought to establish how safety issues are handled in preschools of Thika West District.

According to guidelines given by FEMA emergencies may be infrequent but training of staff was important. Practice on disaster responses regularly help maintain adequate levels of knowledge skills. Educating every new employee and volunteer on disaster response procedures through conducting routine drills was necessary. Training approaches suggested by Red Cross and FEMA include short briefing held at frequent intervals, covering aspects of disaster preparedness, training session with staff and volunteers ,table top exercises. Teaching young children what to do during a disaster was very effective in helping them protect themselves in case of an emergency such as fire. Self protective measures need to be practiced with the children in frequent drills (FEMA).The current study sought to establish the extent of preparedness in terms of training in a Kenya situation specifically in Thika West District.

Research has shown that well functioning preschools are not just scaled-down version of elementary schools or simply play spaces .They should address particular design issues to achieve a safe enjoyable and educational environment. The safety of the child was of paramount importance in the early childhood center. Safety features such as fastened carpeting, scald-proof faucets, and covered electrical outlets, and gates, stairways should be standard through the facility. A hard surface should be available for bicycles, and play ground equipment should be appropriately scaled. Rubber flooring should be used through to prevent major accidents and injuries. Fencing around the outdoor space is an important safety and security feature. Security issues include providing adequate eventual lighting for the parking and entrance areas.

According to Riopelle and Harrison (2004) some hazards (conditions or agents that have potential to cause harm) are created by nature while some are manmade. Some are predictable others come without warning. Most are acts of nature or accidents, but some hazardous events can be as a result of intentional acts of violence and terror. Regardless of the origin, planning and preparing can help lessen the impact of a hazardous event on the health and safety of children and staff. Planning and preparing can also help to reduce property damage, monetary losses and down the time for the school program. However, disaster preparedness does not receive a lot of time and attention until a disaster hits close to home. Milleti (2001) advocates for preparedness that involves developing, evaluating, and exercising disaster plans which defines the policies, procedures, and resources put in place to prepare for, respond to, and recover from any type of disaster. Accordingly, it involves planning and practicing before a disaster, for what you will need to do during and after a disaster.

### **2.2.2 Historical Development of Health and Safety Standards in Kenya**

According to the Ministry of Education Report (2007), the first government of Kenya after independence identified ignorance, poverty and diseases as the main enemies of national development. The government therefore encouraged communities and parents to put up schools to cater for the increasing number of children. More emphasis was therefore placed on developing new schools, yet health and safety standards were not entirely enforced. As a result, there have been cases of unrest in our schools; some of these cases are related to the state of buildings and sanitary facilities (MOE, 2007). In order to keep schools safe, it is important to observe the minimum safety and facility standards as recommends the Ministry of Education. Towards this end the ministry of education, through the Kenya Education Staff Institute (KESI) and Kenya Flemish Association for Development Cooperation and Technical Assistance

(VVOB), has provided module series, the first of their kind to be published for the purpose of training school managers in Kenya. However, the training targets Primary Schools Management Committees (SMCs) and head teachers, but not early childhood centers. As such, this study sought to investigate on emergency preparedness levels in relation to children's physical safety while in school.

### **2.2.3 Kenyan Preschools Physical Infrastructure State of Affairs.**

A study carried out by Owano (1986) in Baringo, Nakuru and Siaya District on facilities, parents' attitude and benefits of preschool education to children. This study revealed that out of the nineteen pre-schools studied only two had permanent structures, six were semi-permanent, seven were temporary. A number of them did not own the buildings and two preschools had their classes under a tree. The state of repair of many of the buildings was unsatisfactory and the condition of the roofs and walls was observed to be in a deplorable state rendering them inadequate. Provision of toilet facilities in the sampled schools revealed that 35.5% of the preschools operated without this facility and 67.7% of the schools had toilets that left a lot to be desired. No provisions were made for children to wash their hands after using the toilets. The research also found out that pre-schools lacked the necessary training to handle child illnesses and emergency cases. The recommendations made by the researcher included; education and training of teachers to help them care for health problems of children under their custody and actions to take in such situations. He also recommended for their investigation on how teachers handle emergencies in preschools and how well equipped they are to handle emergencies. The current study sought to fill the gap on emergency preparedness on physical safety of preschoolers.

NACECE (1995:50) carried out a survey in Kericho, Narok and Siaya on who takes care of children less than three years and dwelt on physical facilities (classrooms, kitchens and toilets). According to the survey, the conditions of most of these classrooms was subjectively judged ranging from fair to good and most of the structures were temporary others semi permanent and permanent. The study used an observation schedule to determine the availability, type and sanitation conditions of pre-schools visited during the survey. This survey did not cater for emergency issues that may arise as a result of the poor conditions of the physical facilities. The current study sought to fill that gap.

The National Conference on Education and Training held in November 2003 brought together 800 key players in the sector and among the key issues deliberated on were early childhood education programmes. It was noted that the government contribution to the recurrent expenditure in ECD is less than 0.1 %. This means that early childhood programme is primarily provided by households, communities, NGOs and private providers while development of curriculum implementation guidelines, supervision of curriculum implementation is the government preserve. A SWOT analysis done for the ECD subsector during the conference revealed that there existed weaknesses and threats that hampers children's safety. Some of the constraints highlighted included unsafe school environment, lack of awareness about children's rights inadequate and inappropriate physical facilities. On threats, natural calamities and poor physical facilities and infrastructure were cited (National Action Plan pg 35-36). This is clearly an indication that safety issues in preschools are wanting and therefore some of these institutions are not a safe haven for pre-schoolers. The study may therefore help establish the level of safety of these children.



According to UNESCO policy brief on early childhood education, introduction of free primary education in 2003 has had consequences in other areas of education, preschool education being one of them. UNESCO Early Childhood Policy Review Mission (2004) observed that the FPE policy has had unintended consequence on preschools set up on the premises of public primary schools where due to an upsurge of enrollment in primary education sparked off by FPE, preschoolers have either to put up with reduced space or worst classrooms on the premises. This scenario was a risk to the safety of the young children in terms of space and the inappropriateness of their classrooms. The current study established what was on the ground in terms of these children's physical safety.

#### **2.2.4 MOE Policy on Safety Specifications**

MOE/UNICEF (1993) carried out a project on child survival and development and came up with a draft teachers' guide for schools and some of the recommendations they made was on how children should be guided on looking after themselves and others to avoid common accidents at school. The draft guide asserted that children should acquire certain knowledge and skills which will enable them to take prompt first aid actions during an emergency. This will enable them save lives and those of others. The draft emphasized on the responsibility of teachers to observe necessary aspect of safety to avoid accidents. Proper use of available space during P.E activities to avoid overcrowding which is the main cause of accident was also highlighted. The draft didn't see the light of day and as such, this study seeks to establish safety measures that have been put in place in preschools to help cope with emergencies when they occur.

Child protection issues intersect with every one of MDGs as observes UNICEF. According to UNICEF (2008), MDGs cannot be achieved if children are not protected. Schools are considered a safe haven and therefore strongly believed that attending school protects children from

violence, abuse and exploitation. UNICEF work with partners to establish secure, healthy and protective learning environment where children can learn and grow. UNICEF believes that the way to achieve this is through the child friendly school initiative. The CFS model provides the ideal environment in which to offer right- based quality education where children feel safe. The CFS concept will be used as a key tool to institutionalized inclusive right based and protective education that include safe and secure environment. This study sought to investigate whether preschools are really a safe haven as purports UNICEF. As such the study established emergency management preparedness level and specifically on aspects pertaining to mitigation, management and preparedness in relation to children's physical safety.

The Ministry of Education has established an emergency unit under the directorate of Basic Education to mitigate and coordinate the effects of emergencies. The emergency unit concern is on emergencies brought about by disasters such as floods, armed conflict and food insecurity and strong winds. The unit is geared towards improving the ministry's response to the effects of emergencies in Education. The unit plays a critical role in normalizing the environment for children and significantly helping them to overcome psychological impact of disasters. It also provides a protective environment for children who are more vulnerable to exploitation and abuse in the period of emergencies or armed conflicts (Elimu News, issue No.5 2010, Page 15). Therefore, the day to day emergencies such as accidents, illnesses are not catered for by the emergency unit and as such this study helped establish the level of emergency preparedness in preschools in Thika west District.

In a circular No. G9/1/169 (2001, April), the Ministry of Education articulated issues that were reviewed concerning safety standards in all educational institutions. The review recommended that any facility which has not been put up in conformity with the existing regulations should be

modified. Basic specifications for classrooms, doorways, stairways, corridors, windows and dining facilities are stated. Food safety, environmental factors and sanitation guidelines are highlighted. The circular also indicates the need for First Aid and safety education particularly in disaster and crisis management. It emphasizes on the need for training on how to handle emergencies including fires by undertaking fire drills frequently. All this is geared towards meeting health and safety standards in educational institutions. Since this is just a policy document the current study sought to establish emergency management preparedness of preschools in ensuring children's physical safety within the school.

The Government commitment towards the provision of quality education development of infants and young children is an urgent priority in our national development agenda. As such the government has come up with a number of policies that seeks to offer guidelines as to how preschools should be run. In that connection, in 2006, the Early Childhood Development Service Standard Guidelines for Kenya was launched at K.I.E and the guidelines are geared towards promotion of children's safety. Some of the key issues highlighted in the guideline include stocking of firefighting equipment including extinguisher, blankets and water besides safe drugs and first Aid kits, children training courses for non teaching staff, certificate of goods conduct showing teachers have no criminal records. The government having set the stage through the policy for all preschools to fall back on in terms of children's safety, the current study sought to establish the measures and strategies put in place by parents and other stakeholders, who are the key financiers of the early childhood education programs, to help meet emergency needs related to physical safety of children.

## **2.3 Theoretical Framework**

This study was anchored on Abraham Maslow's Theory (1970) and Comprehensive Emergency Preparedness and Response for Schools Model.

### **2.3.1 Maslow's Hierarchy of Needs Theory**

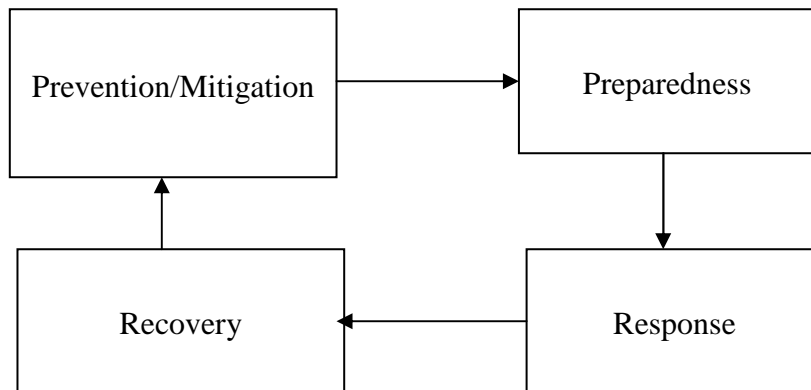
Maslow illustrated motivational through a hierarchy of needs. Motivation is a desire or drive to achieve as such it causes an individual to seek to satisfy certain goals. According to Maslow, needs at the lower portion of the hierarchy must be at least relatively satisfied before people can satisfy needs higher up. He asserts that people can be truly creative only if they have satisfied their more basic needs enough to be relatively free of them.

This theory fits into this particular study, that is, emergency management preparedness on children's safety in that safety is one of the basic needs after physiological ones as indicated by Maslow. Therefore, school safety is a necessary element for a conducive learning environment. There is a need for security, safety and protection of children in preschools. The staff working in preschools needs to exercise safety measures within the school compound. Insecure children are not likely to benefit much from the education being offered. As such threats to learner's safety require to be addressed through carefully thought out measures and strategies.

### **2.3.2 Comprehensive Emergency Preparedness and Response for Schools Model**

According to the Comprehensive Emergency Preparedness and Response for Schools Model by Cole, Henry, Tyson, Fitzgerald & Hopkins (2008), school safety plans, also known as emergency operation plans, should be based on what Cole et al (2008) refer to as the four phases of incident management: a) Mitigation/Prevention, b) Preparedness, c) Response, d) Recovery. Figure 1.1 below outlines the four phases, which illustrates that the life cycle of incidents can be depicted as on-going, overlapping activities or phases.

**Figure 2.1: The Four Phases of Incident Management**



**Source:** Cole et al (2008).

Cole et al (2008) however note that while prevention, preparedness and mitigation activities tend to be on-going, response and recovery activities tend to have starting points while response tends to also have an end point.

**Mitigation and Prevention:** Both Mitigation and Prevention occur during the first phase. Mitigation is defined as on-going actions taken to identify assets and risk factors, steps taken to reduce and/or eliminate harm to persons or property, and efforts undertaken to protect the environment. Such actions may include school policy and rules, community education, environmental assessments and subsequent implementation of countermeasures. Prevention is defined as actions taken to protect life and property and avoid or intervene in incidents. It requires the application of intelligence and other information and may include surveillance, immunizations, inspections, warning systems, public notification, development of response partnerships, and exercise or testing various aspects of the school's Safety Plan.

**Preparedness:** The second phase in the incident management cycle is Preparedness. Preparedness is defined as pre-determining responses prior to incidents, developing contingency plans, practicing the plan with school and first responders such as local police and fire

departments, and identifying transitional steps necessary to move the school environment from incident response into recovery. Preparedness actions could include identifying a Safety Team to develop the plan including recognizing the triggers that move schools from normalcy to crisis response, identifying the various resources, detailing response roles and responsibilities, developing methods and protocols for communicating with staff, students, parents and the media, practicing the three school-wide response (Evacuation, Shelter-in-place, Lock-down), and identifying and incorporating lessons learned from other incidents into updated Safety Plans.

**Response:** The third phase of the incident management cycle is response. Response is defined as providing emergency assistance to save lives, protect property, and speed recovery. Response actions generally include the mobilization of emergency personnel and equipment to assess the situation, save lives, protect property and the environment, and contain the incident.

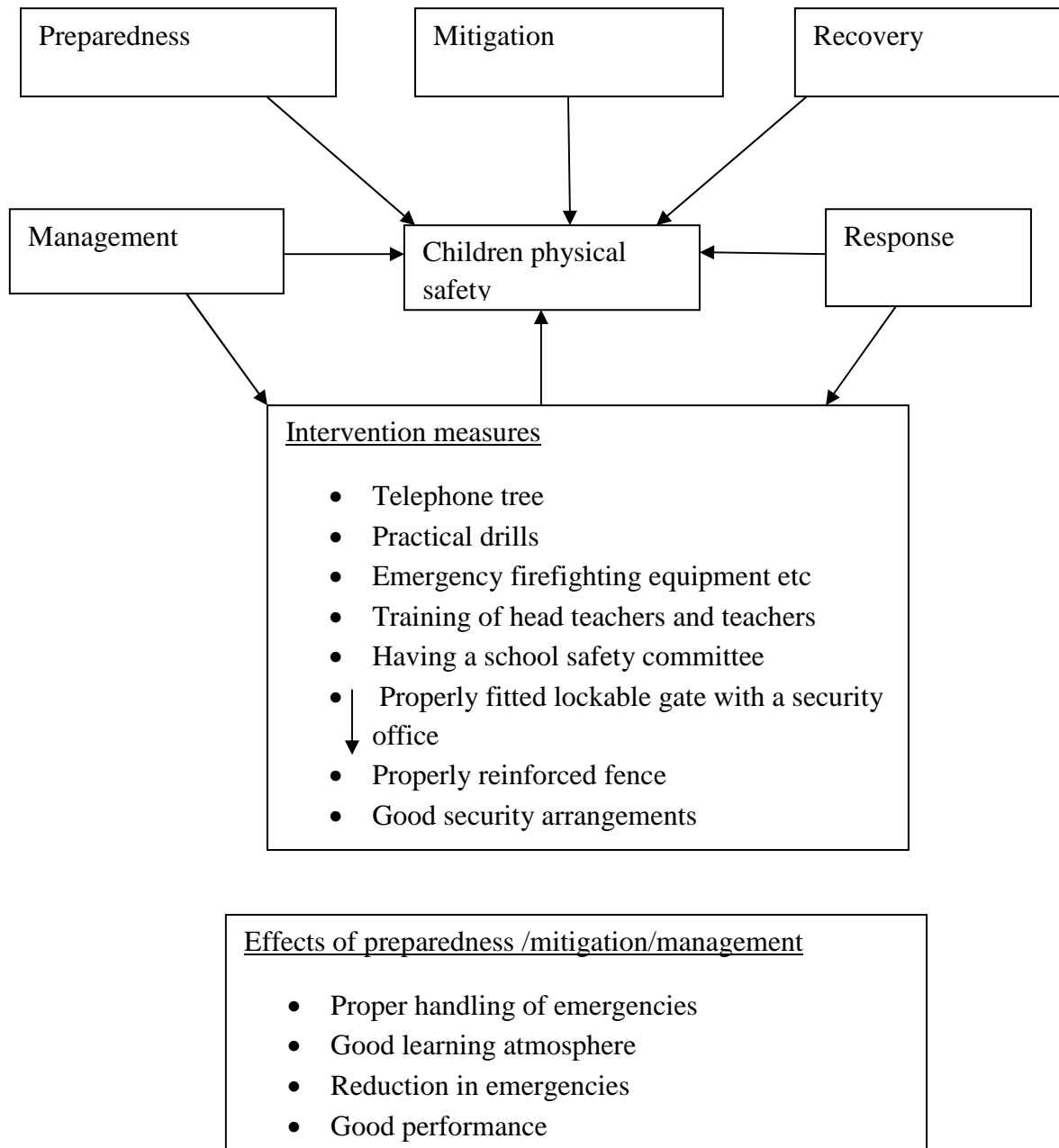
**Recovery:** The fourth and final phase of incident management is Recovery. Recovery is defined as long-range actions taken to restore the community to some degree of normalcy, as quickly and completely as possible through the provision of services and programs. Within a school setting, recovery usually includes a plan for academic, social-emotional, physical facilities, and fiscal recovery. Recovery actions may include cleaning the area, repairing the structure, restoring disrupted services, providing counselling or grief support, and preparing for the resumption of classes. Once started, the Recovery phase often continues for a period of time. There are usually well devised, albeit time-consuming strategies for restoring the physical environment. However, restoring the social and emotional environment is generally more complex.

This model was relevant to the study because it clearly outlines the phases that are needed for a school to effectively manage safety situations. In this study, focus was on the prevention and

mitigation phase, the steps taken to reduce and/or eliminate harm to children, and efforts undertaken to protect the environment.

## 2.4 Conceptual Framework

Figure 1.2 presents the conceptual framework of the study, which diagrammatically presents the hypothesized model identifying the variables under study, and their relationships that is, dependents and independent variables.



**Figure: 2.2 Conceptual Framework**



The conceptual framework describes specific factors that can help bring safety of children while within school. It also outlines some effects of intervention measures on children's safety. These effects of emergency management preparedness in one way or another may contribute to children's safety. Intervention measures are also suggested and this may help reduce cases of children's insecurity. When children's safety within school was hampered the core purpose of education was hampered leading to wastage and school phobia.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This part outlines methodology used in the study. It comprises of research design, population, sampling techniques and sample size, instruments of data collection, validity, reliability of data collection instruments, procedure for data collection and data analysis.

#### **3.2 Research Design**

Descriptive survey design was used in this study. This type of research design depicts the state of affairs as it exists (Kothari ,2004).The researcher had no control over the variables and can only report what had happened or what was happening .Therefore ,this research design was appropriate for gathering information, summarizing, presenting and interpreting it for the purpose of clarification (Orodho 2002). The design helped the researcher to produce statistically significant information on issues related to children’s physical safety that are currently of interest to policy makers and education.

#### **3.3 Target Population**

Gay (1981) defines population as the group of interest to the researcher, the group to which the researcher would like the results of the study to be generalizable. In this study the targeted population consisted of 2100 preschool children aged between 3-6 years from forty two preschools, 126 preschool teachers and 588 school management committee members from preschools in Thika West District of Central province, Kenya.

### 3.4 Sampling and Sample Procedures

A sample is a subject of the population which the researcher intends to generalize the finding (Cohen and Morrison, 1994). In order to get representative sample for the study the researcher purposively sampled public and private pre schools. According to Mugenda and Mugenda (2003) purposive sampling is a sampling technique that allows a researcher to use cases that have the required information with respect to the objectives of the study.

The researcher therefore used extreme or deviant case purposive sampling which involves selection of special cases which represent the purest or most clear cut instances of a phenomenon the researcher was interested in. Fourteen pre schools were sampled, seven of which were old preschools while the rest seven were drawn from private pre schools.

To get participants from each sampled preschool simple random sampling was done at pre-school level in order to select children to be interviewed. All the teachers in the 14 sampled pre-schools participated in the study since they were few in number. Two school management committee members drawn from each preschool also participated.

**Table 3.1: Sample Design**

<b>Component</b>	<b>Target population</b>	<b>Sample size</b>
Pre school children	2100	104
Pre school teachers	126	48
School management committee	588	28
Head teachers	42	14

### **3.5 Research Instruments**

The researcher used two questionnaires, an interview schedule and an observation guide.

#### **3.5.1 Questionnaires**

Questionnaires were used in this study because all pre school teachers and the head of preschools who participated in this study were literate and therefore were in a position to respond to the items satisfactorily. The questionnaire comprised of open ended and close ended questions. Open ended question required the respondent to come up with own opinion about the issues in question while in closed ended type of questions the respondent were expected to respond with “Yes”, “No” or “I don’t know the answer”.

##### **a) Questionnaire for Preschool Teachers**

Pre school teacher’s questionnaire comprised of two sections: section A and B. Section A was on demographic details like age, gender, length of teaching, highest level of education and the number of pre school children in their classrooms. The questions required the respondents to tick applicable answers. Section B: this section contained both close ended and open ended questions. Open ended type of questions requires pre school teachers to supply more information on how they manage emergencies should they arise and how this affects children’s safety while in school.

##### **b) Questionnaire for Head Teachers**

Head teacher’s questionnaire had two sections; section A and section B. Section A comprised of demographic details such as gender, children enrolled at Pre School and highest level of education.

Section B: this section contained close ended questions where the head teacher was expected to tick the most appropriate response. Open ended sought to establish the measures and strategies put in place to help in risk reduction. The questions also established how prepared the institution was in handling emergencies when they occur.

### **3.5.2 Observation Schedule**

Observation schedule enabled the researcher to obtain authentic information to questions pertaining to preschools preparedness in management of emergencies. The researcher employed non participant observation schedule to help establish the preparedness measures put in place in terms of physical infrastructure appropriateness. The researcher had a checklist of things to be observed.

### **3.5.3 Interview Guide for Preschoolers and School Management Committee**

Given that Pre School children were not be able to answer questions from a questionnaire, interview guide were used to obtain information from pre school children on issues of safety. A separate interview guide for the school management committee was also used. The interview schedule covered a range of issue related to management of emergencies by children themselves while in school, for example in case of an illness, cuts, and falls.

## **3.6 Validity of the Instruments**

According to Mugenda and Mugenda (2003) validity is the accuracy and meaningfulness of inferences based on research results. It is the ability of the instrument to measure well what it purports to measure. To test for validity the researcher used content related validity, which applies to how representative of the total defined domain that instrument was, that is, does the instrument contain adequate traits expected to measure the domain Kasomo (2006). As such, the researcher in the current study administered the instruments to three experts in education and

research, who carefully and critically examined the items that make the instruments in order to ascertain whether each of them was adequately constructed to elicit desired responses.

### 3.7 Reliability of the Instrument

Gay, L.R., (1981) defines reliability as the degree to which a test consistently measures whatever it measures. In this particular study the researcher tested reliability of the research instruments by applying test-retest procedure. The instruments were administered to selected preschools with similar characteristics to the target population. After two weeks the same instruments were re-administered to the same group. The two sets of data were then correlated using The Pearson Product Moment Correlation Coefficient (r) formula.

$$r = \frac{\frac{\sum xy - (\sum x)(\sum y)}{N}}{\sqrt{\frac{\left[ \sum x^2 - (\sum x)^2 \right]}{N} \frac{\left[ \sum y^2 - (\sum y)^2 \right]}{N}}}$$

Where N = total number of Scores

X = Scores in the first test items

Y = Scores in the retest items

To test for the reliability of the whole instrument the Spearman Brown Prophecy Formula was used as follows:

$$Re = \frac{2r}{1+r}$$

Where:  $R_e$  = reliability of the first test

$r$  = Coefficient for half of the instrument

(Gay, 1981: 300-301)

The researcher also made the instructions used in the instruments as clearly as possible in order to improve clarity to the respondents. In addition, the researcher made the instrument moderately longer in order to improve reliability.

### **3.8 Procedures for Data Collection**

The researcher obtained a researcher permit from the Ministry of Higher Education. The researcher then reported to the District Education Officer (D.E.O), Thika and gave a copy of the research permit before carrying out on research. The researcher then visited sampled schools, explained to the head of the institution the mission of the visit. With permission granted the researcher explained to the teachers the need for them to fill the questionnaire. The researcher then administered the questionnaires and conducted interview and made observations as well. The questionnaire was distributed to head teachers and preschool teachers and was collected on the same day and if not the following day.

### **3.9 Data Analysis**

Data collected from the field was coded and keyed into the computer for analysis using the Statistical Package for Social Sciences (SPSS). As Martin and Acuna (2002) observe, SPSS is able to handle large amount of data, and given its wide spectrum of statistical procedures purposefully designed for social sciences, it is quite efficient. Data collected were both qualitative and quantitative nature. Qualitative data were analyzed by arranging responses according to the research questions and objectives. Descriptive statistics including percentages and frequency counts were used to analyze the quantitative data obtained. Bell (1993) maintains

that when making the results known to a variety of readers, simple descriptive statistics such as percentages have a considerable advantage over more complex statistics. Borg and Gall (1989) also hold that the most widely used and understood standard proportion is the percentage. The results of data analysis were presented in frequency/percentage tables and bar charts. Thereafter, conclusions and recommendations were drawn.



## **CHAPTER FOUR**

### **DATA ANALYSIS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents data analysis and discussion of the study findings. The general objective of the study was to investigate emergency management preparedness on children's physical safety in Pre School in Thika West District Kenya. The findings of the research are presented based on the four research questions: What strategies are put in place to help reduce risks in preschools? To what extent are preschools prepared for any emergency eventuality related to children's safety? How do preschools manage emergency cases? What are the constraints faced by preschools in management of emergencies? The background data of the respondents is given first, followed by the analysis and discussion of each of the four research questions.

#### **4.2 Background Data of the Respondents**

The participants comprised 104 pre-school children, 28 school management committee members, 14 head teachers and 48 pre-school teachers. The participants were drawn from 14 pre-schools, 7 public and 7 private. The data was therefore analyzed based on 194 respondents. Out of the 14 head teachers, there were 6 males and 8 females. Out of the 48 pre-school teachers, there were 7 males and 41 females. Out of the 28 pre-school management committee members, there were 7 (25%) males and 21 (75%) females. Table 4.1 shows the pre-school teachers and head teachers' working experience.

**Table 4.1: Teaching Experience**

<b>Years</b>	<b>Class teachers</b>		<b>Head teachers</b>	
	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
1-3 years	12	25.0	4	28.6
4-6 years	25	52.1	7	50.0
7-9 years	7	14.6	2	14.3
10 yrs and above	4	8.3	1	7.1
<b>Total</b>	<b>48</b>	<b>100.0</b>	<b>14</b>	<b>100.0</b>

Table 4.1 shows that 12 (25%) teachers had served as class teachers for duration of 1-3 years, 25(52.1%) had served for a duration of 4-6 years, 7(14.6%) indicated 7-9 years while 4(8.3%) indicated 10 years and above. The table also shows that 4(28.6%) head teachers indicated they had served as an administrator for duration of 1-3 yrs, 7(50%) indicated a period of 4-6 yrs, 2(14.3%) reported they had served between 7 and 9 years while 1 indicated above 10 yrs. This shows that the headteachers and teachers had served in the preschools long enough to be aware of the emergency preparedness situation in their centre.

Table 4.2 shows the duration in which school committee members had held their positions.

**Table 4.2: Duration as Committee Members**

<b>Duration</b>	<b>Frequency</b>	<b>Percent</b>
1-6 months	8	28.6
7-12 months	12	42.8
Above 1 year	8	28.6
<b>Total</b>	<b>28</b>	<b>100.0</b>

Table 4.2 shows that 12(42.8%) members indicated they had been members of committee for 7-12 months, while a ratio of 1:1 indicated they had been committee members for duration of 0-6 months and over 1 year respectively. The findings in the table imply that the school committee members had served in their capacity long enough and were therefore in a position to shed light on the emergency preparedness situation in their centres.

Table 4.3 shows the academic qualifications of the headteachers and teachers.

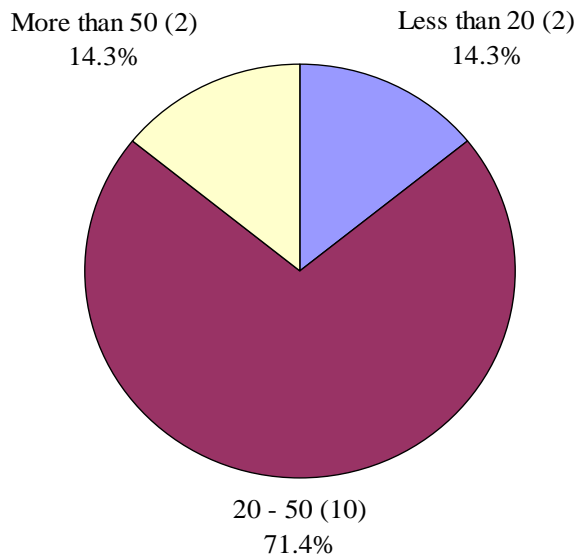
**Table 4.3: Academic Qualifications**

Qualifications	Head teachers		Teachers		Committee members	
	F	%	F	%	F	%
Primary CP.E/K.C.P.E 0		0.0	1	2.0	0	0.0
Secondary	5	35.7	20	41.7	17	60.7
K.C.E/K.C.S.E						
Diploma	7	50.0	27	56.3	6	21.4
BED in ECE	2	14.3	0	0.0	5	17.9
<b>Total</b>	<b>14</b>	<b>100.0</b>	<b>48</b>	<b>100.0</b>	<b>28</b>	<b>100.0</b>

Table 4.3 shows that 50% of the head teachers indicated they were Diploma holders, 5 indicated they had Secondary certificate while 2(14.3%) had BED in ECE. On the other hand, 1 teacher indicated had a Primary certificate, 20(41.7%) indicated they were Secondary qualifiers while 27(56.3%) indicated they were diploma holders. 60% of the committee members indicated had secondary K.C.S.E, 6(21.4%) indicated they were Diploma holders while 5 (17.9%) indicated

they had Degree qualification. It has been shown through research in different organizations, schools included, that training improves employee awareness of emergency preparedness, and this is an essential determinant to enhance safety performance (Law, Chan & Pun, 2006).

**Figure 4.1 Shows the Number of Pre-Schoolers in Schools**



**Figure 4.1: Number of Pre-Schoolers**

Figure 4.1 Shows that most of the preschools 10 (71.4%) had 20-50 pre-schoolers, 2 (14.3%) had less than 20 while the other 2 (14.3%) had more than 50. When a preschool has very many children, there is a tendency to overcrowd them in classes. The Government's policy on preschool is 25 children per classroom. Observations by the researcher indicated that three preschools had exceeded this government directive.

#### **4.3 Strategies Put In Place to Help Reduce Risks in Preschools**

The first research question of the study sought to establish the strategies put in place to reduce risks in pre-schools. To find answers to this question, the respondents were asked a series of questions and their responses are discussed below.

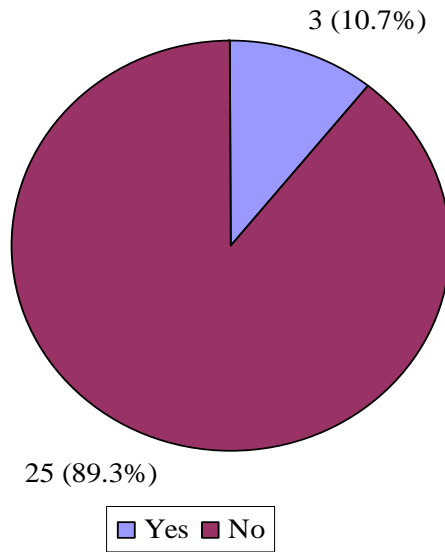
The head teachers were given a list of items in a table regarding strategies put in place to help reduce risks in pre-schools. They were required to either agree or disagree with the statements in the table, and their responses are shown in table 4.4.

**Table 4.4: Strategies Employed To Help Reduce Risks**

Statement	Yes		No	
	F	%	F	%
Does the centre maintain an emergency kit/s?	13	92.9	1	7.1
Does the centre have a telephone that is accessible to members of staff in cases of emergency?	8	57.1	6	42.9
Do you conduct regular spot check on the condition of the physical infrastructure?	6	42.9	8	57.1
Does your centre maintain a list of responsibility and assignments of staff during an emergency situation?	5	35.7	9	64.3
Does the centre have a telephone tree list of all parents, teachers and support staff?	4	28.6	10	71.4
Do you train new staff during orientation and familiarize them with their role in an emergency event?	3	21.4	11	78.6
Is the gate manned by a guard who maintains a visitor register?	3	21.1	11	78.6
Have you ever attended any course on safety issues?	2	14.3	12	85.7
Does the centre conduct any monthly drills (e.g. fire drills) to familiarize staff and children with emergency procedures	1	7.1	13	92.9

As shown in table 4.4, the preschools were employing a number of strategies to reduce risks. The main strategies employed included maintaining emergency kits (92.9%), having telephones that are accessible to members of staff in case of emergencies (57.1%), and conducting regular spot checks on the condition of physical infrastructure (42.9%). It however emerges that only one of the preschool conducted monthly drills such as fire drills to familiarize staff and children with emergency procedures. The table also shows that only two preschools had head teachers who had attended courses on safety issues; and only three had their gates manned by guards who maintained a visitors' register. This shows that in most of the pre-schools, the strategies put in place were inadequate to reduce risks. This is an implication that pre-schools could not handle emergencies should they occur, since there were no strategies put in place to reduce them.

To establish more strategies in reducing risks, the pre-school management committee members were asked whether they had any building construction knowledge and whether they had ever supervised any public utility construction. In response, 20 (71.4%) of the respondents indicated that they had knowledge in construction while 8 (28.6%) did not. On the other hand, 11 (39.3%) of them had supervised public utility constructions while 25 (89.3%) had not. Knowledge in building construction and supervision of public utilities would help the committee members to make wise decisions concerning pre-schoolers' safety in school. The committee members were further asked whether they sat down to decide the type of physical infrastructure needed in schools. Their responses are shown in Figure 4.2.



**Figure 4.2: Combined Decision on Infrastructure**

Figure 4.2 shows that 25 (89.3%) of the committee members did not sit down to decide the type of infrastructure needed while 3 (10.7%) did. This implies that there are bound to be problems in the infrastructures since the decision is made by a few individuals rather than all the committee members.

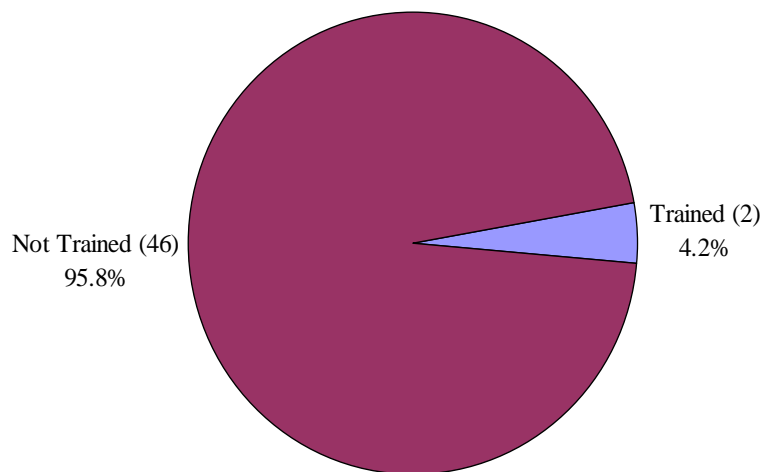
On being asked the appropriate size of classrooms, the committee members responded as shown in table 4.5.

**Table 4.5: Appropriate Classroom Sizes**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
7.5 by 5.85m	14	50.0
7.5 by 6.00m	8	28.6
6.00 by 5.85m	6	21.4
<b>Total</b>	<b>28</b>	<b>100.0</b>

Table 4.5 shows that 50.0% of committee members indicated sizes of the classrooms as 7.5mm - 6.00m, 28.6% indicated 7.5 - 6.00m while 21.4% indicated 6.00 - 5.85m. Further, 14(50.0%) school management committees indicated that doors and windows were designed to open inward, 9 (32.1%) indicated they open outwards while 5 had no idea. The way in which doors are designed to open may either hinder or aid preschoolers during emergencies, thus consideration is expected.

The teachers were also asked whether they had been trained on safety issues. Their responses are shown in figure 4.3.



**Figure 4.3: Proportion of Teachers Trained On Safety**

Figure 4.3 shows that 2(4.2%) teachers indicated they were trained on safety issues while the highest proportion of 95.8% indicated they had never attended any training lessons on safety. This is an implication that teachers were not adequately prepared to handle safety issues, thus training as a strategy to reduce risk was not implemented. This finding is consistent with results of a research by Owano (1986) in Baringo, Nakuru and Siaya District on facilities, which



established that preschool teachers lacked the necessary training to handle child illnesses and emergency cases. In Kenya, programmes geared toward training teachers on disaster preparedness only target primary schools management committees (SMCs) and head teachers, but not preschools.

Teachers were asked whether their classes had safety rules and whether there was an emergency awareness programme in their school. They responded as shown in Table 4.6.

**Table 4.6: Safety Measures**

Statements	Yes		No	
	F	%	F	%
Does your class have safety rules to be observed by children?	18	37.5	30	62.5
Is there an emergency awareness program in your centre?	3	6.3	45	93.8

Table 4.6 shows that most schools had no safety rules and regulations; this was implied by the result of 30(62.5%), 45(93.8%) teachers who indicated that there were no safety rules and emergency awareness programs in their preschools respectively. This implies that the strategies employed were inadequate.

The results presented in the preceding section lead to the conclusion that preschools in Thika West district had not put in place adequate measures to ensure emergency preparedness. Of importance to note is that only two preschools had head teachers who had attended courses on safety issues, which is an implication that preschools had not invested in training as a way of

promoting child safety and managing emergencies. Only three centers had their gates manned by guards who maintained a visitor register. This means anybody could gain access to the preschools, raising questions about the security of children. Researchers such as Holcombe, Wolery & Katzenmeyer (1995) have argued that cases of abduction in preschools are on the rise around the world. They recommend that in addition to putting in place security measures, it is important to teach preschoolers to avoid abduction by strangers.

#### **4.4 Extent To Which Preschools Are Prepared For Any Emergency Eventuality Related To Children's Physical Safety While In School**

The second research question sought to find out the extent to which preschools are prepared for any emergency eventuality related to children's physical safety while in school. To establish this, the respondents were asked some questions whose answers would provide the answers to the question. Below is a discussion of their responses.

An observation was conducted to find out how prepared pre-school were. The results are as shown in table 4.7.

**Table 4.7: Status of Emergency Preparedness**

<b>Physical infrastructure</b>	<b>Yes</b>		<b>No</b>	
	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>
Are there labeled emergency doors in classes?	2	14.3	12	85.7
Are the buildings fitted with serviced fire extinguishers?	5	35.7	9	64.3
Are there evacuation maps in every entrance and exit?	1	7.1	13	92.9
Are there tree branches hanging precariously near the3 buildings?		21.4	11	78.6
Is there a secure perimeter fence?	3	21.4	11	78.6
Are there trees to break the wind and prevent roofs being8 blown off?		57.1	6	42.6
Is there a manned gate where visitors register before4 gaining access to the centre?		28.6	10	71.4
Are there threatening or sharp objects in the play field?	6	42.9	8	57.1
Are doorways locked?	3	21.4	11	78.6
Are the play equipments and materials safely secured?	8	57.1	6	42.6
Are windows grilled?	9	64.3	5	35.7

Table 4.7 illustrates that, based on observations made by the researcher, of the 14 preschools, 12 (85.7%) had no emergency doors in classes, 13(92.9%) had no evacuation maps in every entrance and exit, 12 (85.7%) did not have labeled emergency doors in classes and 11 (78.6%) did not have secured perimeter fence around the school compound respectively. It also emerges from the table that 74.1% of the preschools did not have manned gates where visitors register

before gaining access to the centers. This means that anybody could gain access to some preschools which is risky. A further 64.3% preschools had their classroom windows grilled, which would prevent children from gaining access to emergency exits in case of a disaster such as fire. These results show that most preschools need to improve on their disaster preparedness. The field observation findings reported above were corroborated by committee members, who, upon being given statements on preparedness, responded as indicated in Table 4.8.

**Table 4.8: Preparedness for Emergencies**

	Yes		No	
	F	%	F	%
In case of emergency such as fire, are there emergency exit doors designed to cater for quick evacuation of children and their teachers	6	21.4	22	78.6
Are they adequately labeled as ‘emergency exit’	5	17.9	23	82.1

Table 4.8 shows that a proportion of 78.6% school committees indicated there were no emergency exits designed to cater for quick evacuation of children and their teachers in cases of emergency. On the other hand, a minor proportion of 21.4% indicated their schools had emergency exit though they were not adequately labeled (82.1%). This shows that the schools were not adequately prepared for emergencies.

The committee members were asked how the windows and corridors were designed. 17(60.7%) of them indicated that windows in their schools were grilled while 11(39.3%) indicated they were not grilled. Grilled windows can be risky for example in case of fire as children cannot escape through them. On the other hand, 8(28.6%) committee members described corridors as narrow, less than 2m, ventilated and lit while 20(71.4%) members described them as wide more

than 2m, well ventilated and lit. Further, the committee members indicated that that the buildings in their preschools were not storey while 6 indicated they had storey buildings in their schools. Four of the committee members indicated that the stairways were located at both ends of the building whereas two indicated at the middle of the building.

According to Hilderbrand (2000), early childhood centers should provide fire exits that are well marked, smoke detections gadgets, emergency procedures and emergency telephone numbers. Picking up of children should be done by authorized persons and visitors have to identify themselves before gaining entry. This study established that most of the preschools did not ensure these safety precautions were in place. This leads the study to a conclusion that most of the preschools in Thika West District were not prepared for emergency eventualities related to children's physical safety while in school.

#### **4.5 Management of Emergencies in Pre-Schools Should They Occur**

The third research question sought to establish how emergencies were managed in pre-schools in case they occur. To establish this, 104 preschoolers were interviewed and asked whether they have ever had experienced various incidences such as injuries and other emergencies. Their responses are shown in Table 4.9.

**Table 4.9: Emergencies Experienced By Preschoolers at School**

<b>Emergencies</b>	<b>Yes</b>		<b>No</b>	
	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>
Cuts and wounds	104	100.0	0	0.0
Illness	104	100.0	0	0.0
Nose bleeding	93	89.4	11	10.6
Foreign objects in eye; nose or ears	71	68.3	33	31.7
Insect stings	44	42.3	60	57.7
Fracture	22	21.2	82	78.8
Chocking	19	18.3	85	81.7
Poisoning	7	6.7	97	93.3
Animal bites	4	3.8	100	96.2

Table 4.9 shows that all the preschool children (100%) had experienced cuts, wounds and illnesses while at school. Another 89.4% of the children indicated that they had experienced nose bleeding, while 68.3% had experienced foreign objects in eyes; nose or ears. Other incidences of emergencies included insect stings, fractures, choking, poisoning and animal bites. This shows that there were widespread cases of emergencies in preschools.

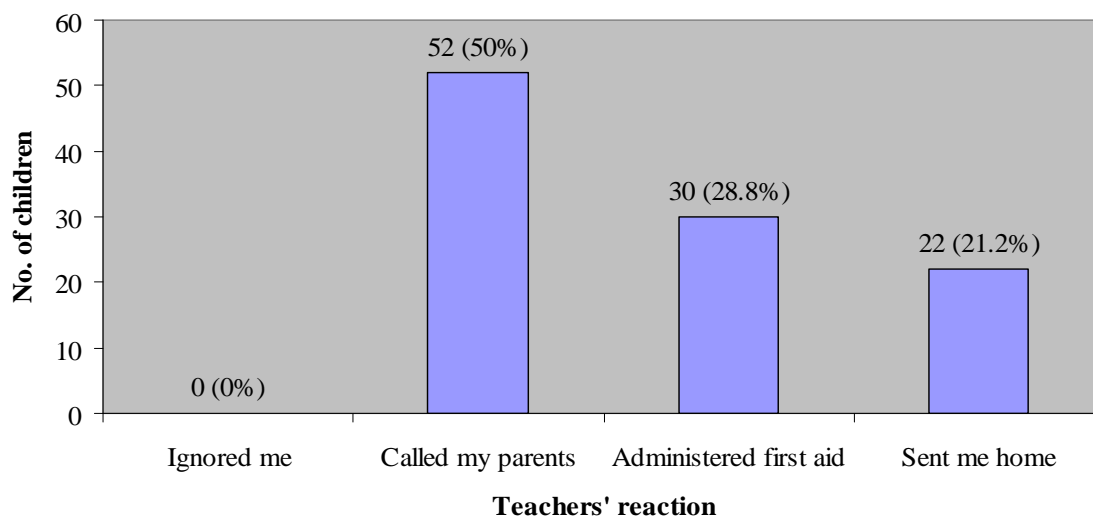
While some emergencies may be unavoidable, schools need to be prepared to manage them when they occur (Purkey, 1999). The study therefore sought to find out the steps taken by preschools when children experience various emergencies. The 104 preschool children were asked what they did when they had the emergencies, to which they responded as shown in Table 4.10.

**Table 4.10: Pre-Schoolers' Reactions to Emergencies**

<b>Reactions</b>	<b>Frequency</b>	<b>Percent</b>
Kept quiet	33	31.7
Reported to the teacher	37	35.6
Asked my friends to help	19	18.3
Went home	15	14.4
<b>Total</b>	<b>104</b>	<b>100.0</b>

Table 4.10 shows that 37(35.6%) of the pre-schoolers indicated they reported emergencies to the teacher, 33(31.7%) indicated they kept quiet, 19 (18.3%) reported they asked for help from their friends while 15(14.4%) indicated they went home. On further inquisition as to what their friends did about the problems, 11 (57.9%) of the 19 children who had reported to friends indicated that their friends informed the teacher, 5 (26.3%) responded that their friends kept quite while 3 (15.8%) indicated their friends assisted them.

The pre-schoolers were further asked their teachers' reaction to the emergency. They reported as shown in Figure 4.4.



**Figure 4.4: Teachers' Reactions to Emergencies**

Figure 4.4 shows that 50% of the preschool children reported that the teacher called up the victim's parents in cases of emergencies, 28.8% reported that the teacher administered first aid while 21.2% reported that the teacher sent the injured child home. This shows that teachers reacted positively in cases of emergencies, with none of them ignoring the children.

The head teachers were asked how the centers helped in restoring calm to preschoolers in emergency situations. Their responses are shown in table 4.11.

**Table 4.11: Management's Reaction to Emergencies**

Statement	Yes		No	
	F	%	F	%
By offering counseling or taking the attacked children to the hospital	12	85.7	2	14.3
Ignore the situation	3	21.4	11	78.6
Send the children home to be attended by their parents	7	50.0	7	50.0



Table 4.11 shows that 85.7% of the head teachers indicated children were taken to hospital and given counselling in case of being frightened by bees, army worms and snakes. Similarly 50% of the headteachers indicated they sent affected children home to be attended by their parents. On the other hand, a large proportion of 78.6% indicated that the situations were never ignored.

The school management committee members were asked to indicate the sources of safety risks in their preschools when putting up physical facilities and how they can be managed. Their responses are as shown in Table 4.12.

**Table 4.12: Sources of Safety Risks in Physical Facilities and Their Management**

	Yes		No	
	F	%	F	%
<b>Sources of safety risks while putting up physical facilities</b>				
Ignorance of the required procedures	23	82.1	5	17.9
Lack of resources	22	78.6	6	21.4
Absence of risk management policy	22	78.6	6	21.4
Lack of regular review of procedures and processes	21	75.0	7	25.0
Inadequate supervision	20	71.4	8	28.6
Embezzling of resources	4	14.3	24	85.7
<b>Requirements for the management of risks</b>				
Monitor the construction carefully	28	100.00	0.0	
Adopt a risk based audit	28	100.00	0.0	
Make sure all the safety guidelines are adhered to	28	100.00	0.0	
Take action on those that are not following the guidelines	22	78.6	6	21.4

Table 4.12 illustrate some of the sources and management of risks, 23 (82.1%) members indicated ignorance as the key source of risk, Similarly 78.6% of the committees members reported that absence of risk management policy and lack of resources were also major sources of the risk. However a large number of 24 (85.7%) members indicated that embezzling of resources were not sources of risks. On the other hand, the table points out that all members (100.0%) who participated in the study agreed that monitoring the construction carefully, adopting a risk based audit and making sure all safety guidelines were adhered to were major requirements for risk management, it also emerged that 22(78.6%) members supported taking actions on those who were not following guidelines as another control of risks occurrences.

The teachers were asked to list the basic things done to prevent emergencies from happening. They reported that their schools had an alert system that alerted teachers and children in cases of emergencies like fires and also policies and guidance that explain what should and what should not be done in emergencies. Upon further enquiry as to what they do to take charge when emergencies occur, the teachers responded that they: apply first aid procedure and attend to the victim, communicate to the guardian of the victim, take the victims to hospital incase the injuries were serious, and inform the school authority of what was happening.

#### **4.6 Constraints Preschools Face in Management of Emergencies**

The fourth research question sought to find out the constraints faced in the management of emergencies. The respondents were asked some questions whose answers aided in the answering of this question. The school committee members were asked the challenges they faced in enhancing safety facilities in schools. Their responses are shown in Table 4.13.

**Table 4.13: Challenges Faced In Enhancing Safety**

<b>Challenges of enhancing safety facility standards</b>	<b>Yes</b>		<b>No</b>	
	<b>F</b>	<b>%</b>	<b>F</b>	<b>%</b>
Lack of financial resources	25	89.3	3	10.7
Lack of knowledge on the importance of safety	22	78.6	6	21.4
Geographical factor not allowing construction of permanent structures	6	21.4	22	78.6
Inadequate infrastructure	23	82.1	5	17.9

Table 4.13 shows that lack of financial resources and inadequate infrastructure were the major challenges for enhancing safety facilities, these outcomes were portrayed by 25 (89.3%) and 23 (82.1%) committee members respectively. 22(78.6%) members also indicated that lack of safety awareness as the other challenge met during enhancement. On the other hand, 22(78.6%) members specified that geographical factors were not a challenge while enhancing safety facility. The head teachers were also asked the challenges they faced in the provision of safety measures. Their responses are as shown in table 4.14.

**Table 4.14: Challenges Faced In Provision of Safety Measures by Head Teachers**

Challenges	Yes		No	
	F	%	F	%
Lack of adequate financial resources	11	78.6	3	21.4
Poor leadership by management committee	7	50.0	7	50.0
Lack of emergency handling awareness	14	100.0	0	0.0
Lack of a safety standard manual from the ministry	9	64.3	5	35.7

As shown in Table 4.14, 14 head teachers indicated that lack of awareness on emergency handling was the major factor in all preschools, 11 head teachers indicated lack of adequate financial resources while 9(64.3%) indicated lack of safety standard manual from the ministry. On the other hand, a significant proportion of 50% indicated poor leadership by management was not a big challenge. From the table, it also emerged that safety skills should be introduced to all members (teachers, preschoolers and parents) in the school.

The school committee members were asked the measures they put in place in regard to fire incidences, security and emergency preparedness. They responded as shown in Table 4.15.

**Table 4.15: Safety Measures**

<b>Measures for fire incidences</b>	<b>Frequency</b>	<b>Percent</b>
Ensure doors open outward and locks can be managed by the preschoolers	22	78.6
Provide fire extinguishers outside all classrooms and ensure teachers and grown up in the school know how to use them	14	50.0
Educate preschoolers on the effects of fire and what they should do in cases they see one	10	35.7
<b>Measures for security in school</b>		
Educate preschoolers on the importance of reporting any injuries to grown ups the time they occur	22	78.7
Keep all hazardous material away from the reach of children	20	71.4
Ensure the play grounds are well maintained to avoid accidents while playing	19	67.9
Hire a watchman and ensure they keep a visitors register	6	21.4
<b>Measures for emergency preparedness</b>		
Have a list of all the preschoolers and their parents' contacts in case of anything	24	85.7
Ensure teachers are well trained in handling emergencies while in class	4	14.2
Ensure there is a first aid kit in all classes	2	7.1

Table 4.15 shows that regarding measures for fire incidences, the preschools ensured that doors open outward and locks can be managed by the preschoolers and they provided fire extinguishers outside all classrooms and ensure teachers and grown up in the school know how to use them. With regard to measures for security, the preschools ensured they kept all hazardous material away from the reach of children and educated preschoolers on the importance of reporting any injuries to grown ups the time they occur. Regarding measures for emergency preparedness, the pre schools ensured that teachers are well trained in handling emergencies while in class and they had a list of all the preschoolers and their parents' contacts in case of anything.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1: Introduction

This chapter presents the summary of the study, conclusions and recommendations arrived at. It also gives suggestions for further studies.

#### 5.2: Summary

The purpose of this study was to investigate emergency management preparedness on children's physical safety in Pre School in Thika West District Kenya. The participants comprised of 104 pre-school children, 28 school management committee members, 14 head teachers and 48 pre-school teachers. The data was therefore analyzed based on this number.

- **Strategies Put In Place To Help Reduce Risks In Preschools**

One of the goals of the study was to identify the strategies put in place to help reduce risks in preschools. Regarding this, the study established that preschools in Thika West district had not put in place adequate measures to ensure emergency preparedness. It was established that only two preschools had head teachers who had attended courses on safety issues, which is an implication that preschools had not invested in training as a way of promoting child safety and managing emergencies. Only three preschools had their gates manned by guards who maintained a visitor register, which means there was no adequate security for preschoolers.

- **Extent To Which Preschools Are Prepared For Emergency Management**

The study sought to establish the extent to which preschools are prepared in the management of any emergency eventuality related to children's physical safety while in school. Based on the field observations by the researcher, it emerged that most of the preschools had no emergency doors in classes, no evacuation maps in every entrance and exit, did not have labelled emergency

doors in classes, did not have secured perimeter fence around the school compound respectively, and they did not have manned gates where visitors register before gaining access to the centers. Most of the school committees indicated there were no emergency exits designed to cater for quick evacuation of children and their teachers in cases of emergency, adding that windows in their preschools were grilled.

- **To Determine The Constraints Preschools Face In The Management Of Emergencies**

Another key objective of the study was to determine the constraints preschools face in the management of emergencies. It emerged from the study that lack of financial resources and inadequate infrastructure were the major challenges for enhancing safety facilities. Lack of safety awareness was another challenge faced during enhancement of safety in the preschools. Other challenges experienced included lack of a safety standard manual from the ministry, poor leadership by management committee, lack of emergency handling awareness, and lack of adequate financial resources.

Regarding measures for fire incidences, the preschools ensured that doors open outward and locks can be managed by the preschoolers and they provided fire extinguishers outside all classrooms and ensure teachers and grown up in the school know how to use them. With regard to measures for security, the preschools ensured they kept all hazardous material away from the reach of children and educated preschoolers on the importance of reporting any injuries to grown ups the time they occur. Regarding measures for emergency preparedness, the preschool teachers are not well trained in handling emergencies while in class although they had a list of all the preschoolers and their parents' contacts in case of anything.



### **5.3: Conclusion**

Based on the findings of the study as summarized above, it can be concluded that pre-schools in Thika West District did not have enough strategies in place to reduce the risk of emergencies. The study revealed that teachers were not adequately prepared to handle emergencies. The study found out that despite the fact that pre-schools did not have safety precaution strategies, they took precaution measures like putting up perimeter fences, cutting branches that hung over roofs and also ensuring that hazardous materials were kept away from children. In addition, it emerged that windows, doors and corridors were strategically placed. However, it was established that there were no emergency doors in most pre-schools and in the few that had, they were not well labeled. Preschoolers reacted to emergencies by reporting to their teachers and asking their friends for help. Teachers administered first aid and informed parents. The biggest challenges faced in enhancing safety were: lack of financial resources, lack of knowledge on safety and inadequate infrastructure.

### **5.4: Recommendations**

The following are the recommendations of the study based mainly on findings. The recommendations should be useful to Pre-School teachers, administrators, the community, proprietor as well as policy makers and those involved in approving of schools establishments.

This study recommends that:

- The ministry of Education and relevant line ministries should intensify supervisory of pre schools physical infrastructure and safety levels.
- The government should fully mainstream Early Childhood Programme in the funding of capital and recurrent expenditure.

- Teacher Education should include aspects of safety and management of emergencies that hamper children's physical safety within schools.
- Erecting of physical infrastructure in pre-schools should be approved and manned by professionals in the field of building and construction.
- Curriculum developers should incorporate aspects of safety in Early Childhood Education and especially in the activity area.
- At pre-schools level, the study recommends that:
  - Every head of pre-school should have a copy of the Standard Service Guidelines which spells, out the safety requirements for every pre-school.
  - The school community should have regular fire drills and evacuations procedures in the school programmes to ensure preparedness in handling fire incidences.
  - Smoke detectors should be fitted in every building as well as fire extinguishers
  - Pre-schools should have perimeter fences and gate guards to manage and keep visitors' register to ensure safety of children.
  - Children should be trained to report any kind of emergency as soon as they occur to teachers and support staff.
  - Initial risk Audit should always be carried before any construction is done.
  - Proper labelling of emergency exits should be done.

### **5.5 Recommendations for Further Research**

- The report highlights the emergency management preparedness on children's physical safety in pre-schools in Thika West District. Additional research concerning other areas is recommended.

- Additional research is recommended determining children's psychological safety within and without school.
- There is need for a specific study on children's safety when using various modes of transport to school (bicycles, motor bikes, school buses and public transports).

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**APPENDICES**

**APPENDIX I**

**QUESTIONNAIRE FOR HEAD TEACHER**

Instruction: Answer the questions carefully and frankly. Your response will be treated with strict confidentiality and will not be used for any other purpose apart from the current research.

**SECTION A**

1. Name of your pre – school

.....

2. Indicate your gender

Male ( ) Female ( )

3. For how long have you been an administrator in a pre a school?

0-3 years ( )

4-6 years ( )

7-9 years ( )

10 ears and above ( )

4. Indicate the highest level of education

Primary CP.E /K.C.P.E ( )

Secondary K.C.E /K.C.S.E ( )

Diploma ( )

BED in ECE ( )

Others ( )

5. What is the total number of pre school children in your centre?

Less than 20 ( )

20-50 ( )

More than 50 ( )

## **SECTION B**

1. Have you ever attended any course on safety issues?

Yes ( )

No ( )

2. Does the centre have a telephone tree list of all parents, teachers, and support staff?

Yes ( )

No ( )

3. Does the centre have a telephone that is accessible to members of staff in case of emergency?

Yes ( )

No ( )

4. Does your centre maintain a list of responsibility and assignments of staff during an emergency situation?

Yes ( )

No ( )

5. Does the centre conduct any monthly drills (e.g. fire drills) to familiarize staff and children with emergency procedures

Yes ( )

No ( )

6. Do you train new staff during orientation and familiarize them with their role in an emergency event?

Yes ( )

No ( )

7. (a) Do you conduct regular spot check on the condition of the physical infrastructure?

Yes ( )

No ( )

b) If 'yes' specify what is included in the checklist.

(c) How often do you conduct a hazard vulnerability, analysis to help identify potential disaster situation?(tick where applicable)

Every month ( )

After three months ( )

After six months ( )

Other\_\_\_\_\_

8. (a)Does the centre maintain an emergency kit/s

Yes ( )

No ( )

b) If 'Yes' indicate the items found in the kit by ticking where appropriate

i. First aid kit ( )

ii. Whistles ( )

iii. Fire blankets ( )

iv. Fire extinguishers ( )

v. Blue prints of the school buildings ( )

9. Is the gate manned by a guard who maintains a visitor register?

Yes ( )

No ( )

10. What are the challenges to the provision of safety measures in your centre. Tick where appropriate

i. Lack of adequate financial resources ( )

ii. Poor leadership by management committee ( )

iii. Lack of emergency handling awareness ( )

iv. Lack of a safety standard manual from the ministry ( )

v. Any other. Please add. ( )

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11. Which of the following listed items do you consider to be safety risks?

(a) Delinquency

(b) Truancy and absenteeism

(c) Poorly placed furniture such as desks, benches and tables

(d) Slippery Surfaces

12. In case children are frightened or attacked by bees, army worms, and snakes, how does the centre help in restoring calms?

- (a) By offering counseling or taking the attacked children to the hospital
- (b) Ignore the situation
- (c) Send the children home to be attended by their parents.

Any other? Please add.

.....

.....

.....

.....

## APPENDIX II

### QUESTIONNAIRE FOR PRE SCHOOL HEAD TEACHER

Instruction: Answer the questions carefully and frankly. Your response will be treated with strict confidentiality and will not be used for any other purpose apart from the current research.

#### SECTION A

1. Name of your pre school

.....

2. Indicate your gender

Male ( )

Female ( )

3. For how long have you been a class teacher?

0-3 years ( )

4-6 years ( )

7-9 years ( )

10 years and above ( )

4. Indicate the highest level of education

Primary C.P.E/ K.C.P.E ( )

Secondary K.C.E/K.C.S.E ( )

Diploma ( )

BED in ECE ( )

Others \_\_\_\_\_

**SECTION B**

1(a) Have you ever received any kind of training on safety issues?

Yes ( )

No ( )

b) If 'yes' when (specify) .....

.....

c) How has the training assisted or helped you in tackling emergencies?

Specify .....

.....

2 a) what is the number of children in your class?

Less than 30 ( )

More than 30 ( )

b) Does your class have safety rules to be observed by children?

Yes ( )

No ( )

c) If 'Yes' how effective are they in preventing accidents (specify)

.....

.....

3 a) Is there an emergency awareness program in your centre?

Yes ( )

No ( )

b) If 'Yes' specify the basic things done to prevent emergencies from happening

.....

.....

4. As a teacher how do you take charge when any emergency such as illness or injury occurs?

(Specify).....

.....



**APPENDIX III**

**OBSERVATION SCHEDULE**

The following observation schedule will be done through visits of pre schools purposively selected to help establish how prepared these preschools are for any emergency occurrence.

Name of the school.....

Observation will be carried out in the following areas;

1. physical infrastructure

a) How do doorways and windows open?

Inwards ( )

Outwards ( )

b) Are doorways locked from outside at any time when children are inside?

Yes ( )

No ( )

c) Are windows grilled and reasonable in size for the purpose of escape

Grilled ( )

Not grilled ( )

d) How wide are the stairways, ramps, and corridors?

Less than 1.2 metres ( )

More than 1.2 metres ( )

e) Are there labeled emergency doors in classes?

Yes ( )

No ( )

f) Are the buildings fitted with serviced fire extinguishers?

Yes ( )

No ( )

g) Are there evacuation maps in every entrance and exit?

Yes ( )

No ( )

## 2. School grounds

a) Are there tree branches hanging precariously near the buildings?

Yes ( )

No ( )

b) Are there trees to break the wind and prevent roofs being blown off?

Yes ( )

No ( )

c) Is there a secure perimeter fence?

Yes ( )

No ( )

d) Is there a manned gate where visitors register before gaining access to the centre?

Yes ( )

No ( )

e) Are there threatening or sharp objects in the play field?

Yes ( )

No ( )

f) Are the play equipments and materials safely secured?

Yes ( )

No ( )

### 3. School facilities

a) Is the furniture appropriate for use by children?

Appropriate ( )

Not appropriate ( )

b) How is the positioning of electrical sockets?

Secured ( )

Not secured ( )

**APPENDIX IV**

**INTERVIEW GUIDE FOR PRESCHOOL CHILDREN**

The following interview schedule will be administered to preschoolers to find out how prepared children are in case of any emergency.

Name of the school.....

Good morning / Good afternoon

1. Have you ever had the following while in school?

a) Nose bleeding

Yes ( )

No ( )

b) Foreign objects in the eyes, nose or ears

Yes ( )

No ( )

c) Animal bites

Yes ( )

No ( )

d) Poisoning

Yes ( )

No ( )

e) Fracture

Yes ( )

No ( )

f) Fainting

Yes (     )

No (     )

g) Insect stings

Yes (     )

No (     )

h) Chocking

Yes (     )

No (     )

i) Cuts and wounds

Yes (     )

No (     )

j) Illness

Yes (     )

No (     )

2. What did you do when any of the above happened to you?

a) Kept quiet (     )

b) Reported to the teacher (     )

c) Asked my friends to help (     )

d) Went home (     )

When you informed your friends about your problem (cut, nose bleed etc)

What did they do?

a) Ran away (     )

b) Informed the teacher ( )

c) Kept quiet ( )

d) Assisted me ( )

3. When your teacher was informed about your problem what did she or he do?

a) Ignored me ( )

b) Called – up my parents ( )

c) Administered first aid ( )

d) Sent me home ( )

**APPENDIX V**

**INTERVIEW GUIDE FOR THE SCHOOL MANAGEMENT COMMITTEE**

Interview guide for committee members /proprietors of private pre-schools.

**SECTION A**

1. Name of your pre-school.....

2. Indicate your gender

Male ( ) Female ( )

3. For how long have you been a member of the current school committee?

0-6 months

7-12 months

Others .....

4. What is your highest level of education

Primary CPE/KCPE ( )

Secondary KCE/KSCE ( )

Diploma ( )

Degree ( )

Others .....

**SECTION B**

1. Do you have any building construction knowledge?

Yes ( )

No ( )

2. Have you ever supervised any public utility construction?

Yes ( )

No ( )

b) If yes, state what went wrong in the course of erecting the buildings?

.....  
.....

3(a) Do you sit down as a committee and decide on what type of physical infrastructure you want?

Yes ( )

No ( )

(b) If yes, what is the appropriate size of your classrooms?

- i. 7.5 x5.85m ( )
- ii. 7.5 x6.00 ( )
- iii. 6.00 x5.85 ( )
- iv. Others .....
- v. I don't know

4. How are the classrooms doors and windows in the building designed to open?

- a) Outwards ( )
- b) Inwards ( )
- c) No idea ( )

5. How are the windows designed?

- a) With grills ( )
- b) Without grills ( )

6. How are the corridors designed?

- a) Narrow class (less than 2m ) ventilated and lit



- b) Wide (more than 2m) well ventilated and lit
- c) Others specify.....

7 (a) Are there story buildings in your preschool?

Yes ( )

No ( )

(b) If yes, where are the stairways located?

- i. At both ends of the building
- ii. At the middle of the building

8. (a) In case of emergency such as fire, are there emergency exit doors designed to cater for quick evacuation of children and their teachers

Yes ( )

No ( )

(b) If yes, are they adequately labeled as 'emergency exit'?

Yes ( )

No ( )

9. What according to you are the sources of safety risks when putting up physical facilities?

**Expected responses**

- i. Absence of risk management policy ( )
- ii. Inadequate supervision ( )
- iii. Ignorance of the required procedures ( )
- iv. Lack of resources ( )
- v. Embezzling of resources ( )
- vi. Lack of regular review of procedures and processes ( )

Others .....

10. What are you required to do in order to manage risks?

**Expected responses**

- i. Monitor the construction carefully
- ii. Adopt a risk based audit
- iii. Make sure all the safety guidelines are adhered to
- iv. Take action on those that are not following the guidelines

Others.....

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11. What preschool specific safety measures have you put in place in your institution in regard to;

a) Fire incidences

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B) Security of children within school.....

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C) Emergency preparedness.....

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12 (a) Does the Pre School reserve some funds for training of staff on how to handle emergencies such as illnesses and fires?

Yes ( )

No ( )

b) If yes, how often is the staff given these refresher courses?

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13. What challenges of enhancing safety facility standards do you face?

**Expected responses**

- i. Lack of financial resources ( )
- ii. Lack of knowledge on the importance of safety ( )
- iii. Geographical factor not allowing construction of permanent structures ( )
- iv. Inadequate infrastructure ( )

14 a) Do you conduct an initial risk audit (assessment) before constructing physical facilities?

Yes ( )

No ( )

b) If yes, what considerations do you come up with?

**Expected responses**

- i. What does the Pre School Need? ( )
- ii. Do we have the necessary resources? ( )
- iii. How will we do it? ( )
- iv. What might go wrong? ( )
- v. Is the risk low, moderate or high? ( )

Others.....  
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**APPENDIX VI**  
**AUTHORIZATION FOR RESEARCH**

**APPENDIX VII**

**LETTER TO RESPONDENTS**

Department of Educational Communication and Technology

University of Nairobi

P.O. BOX 30197, 00100

Nairobi.

May 2011

Dear Participant,

**RE: RESEARCH ON EMERGENCY**

**MANAGEMENT PREPAREDNESS OF CHILDREN'S PHYSICAL**

**SAFETY IN PRE-SCHOOLS IN THIKA WEST DISTRICT**

I am a post graduate student in the Department of Educational Communication and Technology, University of Nairobi, Pursuing a master degree program in Early Childhood Education.

I hereby request you to participate in the study whose purpose is to investigate emergency management preparedness in preschools. You are requested to provide sincere and accurate responses to all items in the questionnaire and interview schedule.

Your responses will be treated with confidentiality and will not be used for any other purpose apart from the study.

Kindly do not write your name on the papers provided during data collection.

Thank you very much,

Lucy W. Gathanwa