Play And Stress Management Among Children At Heritage Of Faith And Hope
Children Rehabilitation Centre, Machakos: A Descriptive Study

by

Rachel Mbula Muteti

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PLAY AND STRESS MANAGEMENT AMONG CHILDREN AT HERITAGE OF 
FAITH AND HOPE CHILDREN REHABILITATION CENTRE, MACHAKOS: A
DESCRIPTIVE STUDY

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Rachel Mbula Muteti

In accordance with Daystar University policies, this thesis is accepted in partial fulfillment of
the requirements of Master of Arts degree.

Date signed: ________________________

Grace W. K. Karanja, MA
Supervisor

Kimani Chege, DMin
Reader

Kimani Chege, DMin.
HOD, Psychology, Counselling and Child Development

Alice Munene, PsyD.
Dean, School of Human and Social Sciences
DECLARATION

THE ROLE OF PLAY IN STRESS MANAGEMENT AMONG CHILDREN AT HERITAGE OF FAITH AND HOPE CHILDREN REHABILITATION CENTRE, MACHAKOS

I declare that this is my original work and has not been submitted to any other university for academic credit.

Signature: ___________________________________   Date: _____________________

Rachel Mbula Muteti
DEDICATION:

I dedicate this work to Almighty God who gave me the grace to go through my work and secondly, to all children, all primary caregivers, all aspiring mothers and those who intend to work with children. Finally, I dedicate it to my children: Mercy and Jordan.
ACKNOWLEDGEMENTS

With gratitude, I would like to acknowledge the following people who have supported and worked with me tirelessly to see the completion of this paper. Their encouragement and prayers have had a very great impact in my life and my project.

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ABSTRACT

Play is said to be work in a child’s world. Children work very hard during play and they work themselves out to make it interesting. The best part about children's play is that they learn a great deal and develop different skills while having fun, such as language, thinking, motor, creative, social and problem-solving skills. For a child to attain these skills, all barriers need to be removed to allow him to have play opportunities. Some of these barriers that children experience include tensed programs, heavy workload, societal demands and expectations which do not allow children to have time enjoy play. This study was carried to establish play and stress management among children at Heritage of Faith and Hope Children Rehabilitation Centre (HFHCRC). The problem was that children today are engaged in heavy schedules from morning till evening with minimal time for play. They are given daily assignments and the pressure to perform mounts every day. Moreover, there is high degree of aggressiveness, anxiety, fights and quarrels among children in the playgrounds and class too. The researcher presumed that it was due to stress; the excessive energy and inbuilt tensions that have resulted due to lack of play. The objectives of the study were to establish stressors among children, to establish the play environment, to identify types of play among children and to establish the role of play in managing stress among children in HFHCRC. A qualitative approach with a descriptive design was employed to this study. To collect the data, 89 questionnaires were administered to pupils, teachers, support staff and school director. The researcher also used semi-structured interviews on 27 pupils in nursery and pre-unit at HFHCRC, due to their level of education. The other instrument that was used was an observational guide. The response rate was 96.6%. The population sample was drawn from pupils from lower primary, their teachers, support staff and the school director. The study found out that the major type of play was brikicho (40%). The play environment was not very conducive, since the pupils were offered limited time and space to play, with very little support from the primary caregivers. The other finding is that most pupils were stressed by cognitive (with 40%, according to the teachers) and psychological issues (with 50% according to the support staff and the school director), which were managed mostly with social support; all support staff and the school director indicated they managed stress by offering social support while 50% of the teachers also indicated the same. The assumption of this study was that pupils at HFHCRC were stressed and needed to play and exercise to achieve overall well-being, productivity and be able to manage stress. During observation, the researcher found out that the day’s programme was indeed fully packed from morning till evening with several activities and limited time to play. However, with the introduction of play and stress management, there was an alteration of stress level from high to low (see Appendix C). The study has suggested play as a manageable technique that causes no financial constraint on the pupils or their primary caregivers. Some of the key recommendations were for the teachers, to take a deliberate action on integrating learning with play as a way of relieving stress. The support staff are to be engaged in children’s play, since it is important to expose children to play every day. The school administration is to plan for a school playing ground, and the Ministry of Education to enforce policies that govern the establishment of schools, and ensure that each school has a playground before the certificate of commencement is issued. The researcher recommends that a further study be done in the same locality of Mlolongo Town, Mavoko Municipality, with respondents from the same level; lower primary; but from a different institution. This will help in generalizing the findings to all lower primary pupils in private institutions.
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ABBREVIATIONS AND ACRONYMS

GAP  General Adaptation Syndrome
GoK   Government of Kenya
HFHCRC Heritage of Faith and Hope Children Rehabilitation Centre
Km²   Kilometre Squared
P. E.  Physical Education
GLOSSARY

‘Baba’ is the Swahili name for father.

Bant is a slang word used by children to mean one has failed to accomplish a certain level or stage in a game or is disqualified after failing. Therefore ‘umebant’ means one has failed.

‘Blada’ is made from a used car tyre tube. It is cut into a certain thickness; not too thin and not thick; and the length is determined by the size of the tyre. The two ends are then joined together to make a circular shape.

Brikicho is a game for children where they play hide and seek. However, the word is also used to mean ‘are you ready?’

Banture is a slang word used during hide and seek to mean ‘not ready.’

‘Chini’ – is the first stage of the ‘blada’ game. The ‘blada’ is put at ankle height.

Churumundu is a common game among young children which is normally rectangular in shape. The rectangle is divided into five pairs of equal cubes. The game is played by pushing a cubical stone with one’s foot to every cube. It can be both an indoor and outdoor game.

‘Hicho’ is a very rough game mostly played by boys. It involves patting, holding, wrestling, chasing and punches with no intention of harming anyone.

‘Jiko’ is a charcoal cooking stove normally made of old tins.

‘Kati’ is a type of play for girls only. The players are divided into teams: one team playing while the second one is outside. The one outside tries to hit the one inside with the ball and whoever is hit by the ball has ‘burnt’ and has to be out of the game until rescued by the team members.

Kalongolongo is a type of play in which the children engage in imaginative play. The children role-play the duties of their parents in a home setting.
‘Kifua’- is the fifth stage of the ‘blada’ game, the ‘blada’ is positioned under the arms.

Kwenda huko- this is a Swahili word that means ‘go away’; it is normally used in an abusive way.

‘Mabega’- is the sixth stage of the ‘blada’ game placed on the shoulders.

‘Magoti’- this is the second stage of the ‘blada’ game which is knee high.

‘Mama’ is the Swahili name for ‘mother’.

‘Mkonde’ is the second level of the ‘blada’ game in which the players holding the ‘blada’ will make it thinner and slimmer by using one leg and in the next stages as one moves higher in different levels, the players hold the blada while standing on their sides.

Mjinga is a Swahili word meaning ‘a fool.’

‘Shingo’ - is the seventh and last stage of the ‘blada’ game in both levels which is set on the neck.

‘Sufurias’ is the plural for cooking pan.

‘Sukuma wiki’ is a green leafy vegetable which is very common in many households in Kenya.

‘Tako’ – this is the third stage of the ‘blada’ game at thigh high.

‘Tapo!’ is slang for tapping.

‘Ugali’ is a staple food for Kenyans. It is prepared using boiled water and maize flour, which is stirred up until it makes a paste.

‘Wafanyikazi’ is a Swahili name for household workers.

‘Waisto’ - this is the fourth stage of the ‘blada’ game at waist level.

‘Watoto’ is a Swahili word which means ‘children.’
CHAPTER ONE: INTRODUCTION AND BACKGROUND TO THE STUDY

Introduction

The early years of a child's life are very crucial for physical, cognitive, social, emotional and spiritual development. It is therefore, important for one to take every necessary step to ensure that children grow up in environments where their social, emotional and educational needs are met to foster holistic growth.

As a child grows through early childhood, his world begins to open up. He becomes more independent and develops a desire to explore his surroundings more. Primary caregivers and all those around him help in shaping his thinking pattern and personality. On the other hand, play makes a lot of meaning in a child’s life, as the child benefits immensely from play. Free and unstructured play is healthy and essential in helping children attain important social, emotional, and cognitive developmental milestones as well as helping them manage stress and become resilient (www.child-development-guide.com).

Background to the Study

According to research by various developmentalists, children are by nature explorers (Berk, 1999; Lefrancois, 1994; Piaget, 1962). The children engage in different kinds of play activities as a way of finding meaning in their lives. In the evenings, children congregate after school outside their houses to play for some time before they are called by their primary caregivers to take up their assignments or homework.

Zuck and Clark (1975), quoting Luke 2:52, state that Jesus grew in four main domains; physical, cognitive, social and spiritual. Children should grow in the same way in all those aspects concurrently for holistic development to occur. Every aspect of growth is equally important as the other. In social development, the child grows from one stage to the
other and learns how to socialize (Berk, 1999) with the immediate family members. Consequently, as he grows he also learns how to relate with friends, the school community, extended family and the rest of the community. Emotionally, children learn to relate with others, solve their problems and develop self-control. According to Stewart and Kock (1983), the child develops trust or mistrust depending on the level of attachment. Intellectual development is another aspect of growth in a child. In every stage a child’s intellect grows to a certain level, depending on the personality and circumstances around. As the child interacts with primary caregivers, his thought pattern and volition leads to a specific action as interpreted by the mind. He therefore develops learning skills and intelligence. Spiritual development of a child is very much dictated by the faith of the parents; a child grows spiritually by observing and listening to the parent’s faith. He therefore takes up the parents’ religious values and ethics. All this growth comes as the child experiences new things in life, learning about morals and ethical issues. Physical development is another domain that is discussed by Berk (1999). The author noted that a child develops motor skills, responds to reflex actions, is able to smile, turn and with time he is able to walk, jump, run and throw objects. These activities become more coordinated with time as he keeps making use of his muscles during play with his peers. It is worth noting that during play all these domains develop.

A child undergoes different developmental stages and each is necessary in ushering the next one. Whenever a child does not negotiate developmental tasks completely in one stage the child’s growth becomes affected. From infancy to adolescence a child is able to express himself through emotions and words. This expressiveness helps him to identify different things about the world around him and for himself too. The age between 3-5 years is known to be the playful years of the child (Mussen et al., 1984), which extend to around nine years. In this age bracket, the child is very energetic and can use his tiny muscles in
different kinds of plays and games. As the child develops play makes more meaning since he is more coordinated. He is able to make friends and make rational decisions in regard to his play. During play he is able to express his emotions and control them.

A child, like any other person, undergoes stressful moments, which go unnoticed due to different cultural orientations. The researcher conversed with Munyambu, an elder in the researcher’s community, on a few issues regarding play and stress among children and found out a few cultural practices that inhibit children from expressing their stress. Munyambu said that in the Kamba culture, a child was only to be seen and not to be heard, and this made the child suffer emotionally. The researcher submits that it is important to realize that children undergo emotional instabilities, just like adults, children need to be listened to and understood. They require someone who can help them handle and manage their emotions.

Further observation revealed that the child’s life has become so complicated that he rarely has time to be a child, but almost functions at the level of an adult. For instance, a child is in school for nine hours; from 7:00 am to 5:00 pm. This means that a 3-9 year old attends school for a minimum of 40 hours per week while an adult works between 40 - 45 hours a week (Sommer, 2003). This strains the child in all developmental aspects.

Appendix A shows the child’s timetable and the kind of lessons that they are involved in at Heritage of Faith and Hope Children Rehabilitation Centre. The schedule is packed from morning till evening with lessons running back to back; not giving the child room to play. Though the timetable shows there is time for break, it’s not used for play, but as feeding time.

Heritage of Faith and Hope Children Rehabilitation Centre

This study focused on Heritage of Faith and Hope Children Rehabilitation Centre (HFHCRC), which is a faith-based organization founded with the aim of reaching the
destitute children within the community. HFHCRC was established to feed street children along the streets of Nairobi. The need became so overwhelming that the directors had to look for a placement for the street boys. This was paramount to facilitate transformation of the street children through change of environment. This need prompted Teresia Waweru, one of the directors, to open her home for them. The numbers grew from one child to thirty-eight, which compelled her to look for a bigger space to accommodate the children. She moved to Athi-River where they were housed in one of the children’s homes in the vicinity. They later moved to Ngwata area, Mlolongo town in a thirty-three roomed building. The building houses the offices for the institution, visitors’ lounge, and dormitories for girls and boys, kitchen, store, libraries and a big verandah that is used as the dining area. Mlolongo is in Mavoko Municipality, Athi-River Division, Machakos County (Appendix B). Mlolongo town covers an area of 693 km², with an average population of 80,000 (www.knbs.or.ke.2010).

The goal of HFHCRC’s existence is to provide shelter and give hope to orphans and vulnerable children in the environs by offering holistic transformation. The holistic transformation involves the following aspects: physical, cognitive, social, emotional and spiritual. The institution has a primary school called Heritage of Faith Christian School, founded in 2005. According to the school records, accessed by the researcher during a pre-visit, the school has children from the home and the surrounding community. The aspect of mixing the children from the home and the community was to help the HFHCRC’s children integrate with the community. The school has approximately 200 pupils from baby class, nursery, pre-unit and class one to eight (HFHCRC, 2010).

The vision of the institution is ‘to provide shelter home and hope to vulnerable children (HFHCRC, 2010).’

The key objectives of the institution are:
1. To meet the basic needs of all children.

2. To offer emotional support and hope for future to the distressed.

3. To teach basic Christian doctrines and dependence on God to the children.

4. To ensure quality education is offered to all children.

5. To offer guidelines in life regarding godly morals and ethical issues.

6. To promote skill and talent development by offering tertiary education.

7. To promote awareness on human rights and responsibilities.

Statement of the Problem

Play in most cases has several functions: cognitive development, emotional development and social development. However, this research studied play as a means of managing stress. Like most Kenyan children, children at Heritage of Faith and Hope Children Rehabilitation Centre (HFHCRC) are mostly occupied with homework; which addresses only one aspect of the developmental functions, namely cognition. The intensity of homework is so much that the child has no time to play and vent out stress.

The education system in Kenya is rather heavy for an average child. Onyango, a parent to a child in preunit, states that the expectations set by the school and home are to a certain extent high for the child to meet with the demand to perform better and gain higher grades are escalating every day hence mounting pressure to finish assignments. A normal day is ‘jam-packed’ with teaching sessions, with the teachers’ desire to cover the syllabus (Kigotho, 2010). The day has two breaks, which in most cases are used for feeding the children.
In HFHCRC, a child’s day begins very early; children wake up at around 5am to go for prayers till 5:30am, take a bath at 6am, breakfast at 6:30am, then walk to school and remain in class from 7am to 4pm in the evening (HFHCRC, 2010). In addition, it is worth noting that Physical Education (P.E.) has no allocation on the timetable for nursery class. This leads to accumulation of muscle tension in children, hence feelings of anxiety.

Berk (1999) states that a child’s concentration span is low; he cannot handle a lot of information at once, an attempt to do so, results in tension, exhaustion and fatigue on the child’s body. Munyambu, one of the elders in the community, affirmed that there is a high degree of aggressiveness, anxiety, fights and quarrels among children in playgrounds. Whenever they are irritated by small things, their faces portray frustration. The researcher presumes this is due to stress; inbuilt tensions and excessive energy, which may mainly result due to lack of play.

Purpose of the Study

This study intended to establish play and stress management among children at Heritage of Faith and Hope Children Rehabilitation Centre (HFHCRC).

Research Objectives

1. To establish stressors among children in HFHCRC.

2. To describe the play environment in HFHCRC.

3. To identify types of play among children in HFHCRC.

4. To establish stress management techniques used by primary caregivers in HFHCRC.
Research Questions

1. What are stressors among children in HFHCRC?

2. How is the play environment in HFHCRC?

3. What types of play activities do children in HFHCRC engage in?

4. What are the stress management techniques used by primary caregivers in HFHCRC?

Justification of the Study

To the best of the researcher’s knowledge, there was no literature in Kenya on play and its significance in regard to stress management. This study would therefore serve as a tool to address the literature gap on the subject. Secondly, many primary caregivers offer limited or no time to children to play and do not get involved in their play. Thirdly, the study is timely in the sense that there are so many institutions that are mushrooming everywhere without having a space for children to play. This study serves as a basis to offer inspiration to the administration when they are undertaking school planning.

Assumptions of the Study

1. The researcher assumed that the workers and primary caregivers would volunteer the required information and that the children would answer the questions posed to them.

2. This study assumed that children in HFHCRC were stressed.
Limitations and Delimitations

1. The children were not able to understand the questions posed to them. The researcher did a pre-test of the study among children in a different institution to ensure that the instruments were valid and reliable.

2. Some children in lower primary and support staff were not able to understand English. The researcher translated the questions into Swahili.

3. The top management was not willing to release classified information to the researcher and at the same time the support staff of HFHCRC were unwilling to offer the required information for this research fearing victimization. The researcher assured the management and support staff of confidentiality and anonymity of all respondents.

4. Since the researcher had been involved with the institution earlier on as an intern, she took precaution to address the prevention of any possibility of bias. The researcher chose two research assistants and trained them on how to collect the data.

Significance of the Study

This study has the potential to provide information to primary caregivers. This is by offering documented work that can help them understand the importance of play in managing stress in children; through having fun, releasing excessive energy and anxiety, reducing tension from within and causing objective thinking and innovation.

The school administration would understand and comprehend the need of allowing children time to play. The study would help the government planners formulate policies
that would help institutions in acquiring space for children to play when creating residential estates in towns.

Methodology

The approach for the study was qualitative with a descriptive research design. The study used questionnaires, interviews and observational data collection method. The population for the study was Heritage of Faith and Hope Children Rehabilitation Centre – Machakos, which had a total population of two hundred and twenty-one pupils, with thirty teachers, six support staff, and two directors. The researcher did stratified purposive sampling, so as to get the desired information (Singleton et al., 2005). The researcher purposely selected all pupils in lower primary; their total population was eighty-three pupils.

The collected data was analyzed by creating themes and patterns that arose from play and stress. Finally, the findings will be disseminated to relevant institution: National Council for Science and Technology through providing copies of the findings.

Definition of Terms

Child: Any human being under the age of eighteen years (Kenya Gazette, 2001). The researcher concentrated on children between the ages of 3 – 9 years old and used ‘he’ to mean both genders.

Play: A fun-oriented activity that elevates the spirit and brightens a child's outlook of life. This activity must draw out emotions and feelings of satisfaction (Woolfolk, 1995).

Stress: The response of the individuals to the circumstances and events called stressors that threaten them and tax their coping abilities (Halonen & Santrock, 1996).
A stressor: A specific condition or event in the environment that challenges or threatens a person (Coon, 2006).

Stress Management: A set of techniques and programs intended to help people deal more effectively with stress in their lives by analyzing specific stressors and taking positive actions to minimize their effects (Gale Encyclopedia of Medicine, 2008). This study used stress management as a technique that relieves the effects of stress on a child.

Sick: One who is afflicted with ill health or disease (Wehmeier, 2005). In this study the researcher refers to a sick child as one who is deeply affected with some unpleasant feeling, as of sorrow, mild ailment, disgust, or boredom.

Summary

This chapter looked at the background of the study with a brief history of the organization under study. The researcher also gave attention to the problem statement, purpose, objectives of the study and research questions. The chapter has also addressed the justification of this study, assumptions and significance of the study. Finally, the chapter stated the operational definitions of the study.
CHAPTER TWO: LITERATURE REVIEW

Introduction

The literature review in this chapter addresses play and its importance in relation to cognition and relationship. This is followed by types of play, literature on signs of stress and stressors among children. The chapter then discusses play and stress management, theoretical and conceptual framework of the study.

Play is a varied and rich medium for learning and development among children. Play is freely chosen, inherently driven and personally directed (Vygotsky, 1978). Playing has been long documented as a critical aspect of childhood and child development. It is essential to facilitate children to reach important developmental milestones; that is, social, emotional, and cognitive as well as helping them manage stress and become resilient.

When children wrestle, roll, climb on each other’s backs and role play, they are interacting with each other and the environment and also acquiring some skills which are necessary for their development. There are different types of play that children engage in, namely imaginary and active play. Berger (2005) states that active play involves wrestling, chasing or hitting which occurs in fun with no intention of harming anyone. The imaginary play is where a child has imaginary friends and having a conversation with them, or he pretends to be someone and is able to play different roles in a story (Berger, 2005). This helps the child to be imaginative, develop self-concept and be able to regulate his emotions among peers.

Play and Knowledge Construction

Play is a valid and rich tool for learning amongst children. As one watches kids organize their play activities, there is a lot of creativity that is involved through consultation
of one another and exchange of ideas. Developmentalists say that during play a child gains cognitive development: language development, intelligence, thought and ideas. This development aids their imaginary and creative thought, which raises their level of intellectual functioning. Vygotsky states that their knowledge construction is greatly contributed by the social interaction with peers at play (Eggen & Kanchak, 2010). A child’s intellectual capacity advances and he can think more abstractly during play. Piaget and Vygotsky in *Of children and introduction to child development* (Lefrancois, 1994) say children’s age determines their cognitive complexity. Children of different age groups cannot play together comfortably since the age group determines their mental capacity, understanding, and intellect, hence defining the group’s nature of play and enjoyment.

Through role play, children practise and master their future skills especially in imaginary plays; for example, when girls do role playing as mothers or nurses, they are mastering the art of nurture, patience and perseverance. Children utilize several concepts like being a doctor, a nurse, a police or even a shopkeeper. They learn the concept of saving lives, being disciplined, serving people and the role of money respectively. During play children gain cognitive intelligence, which Roopnarine et al., (2009) call the capacity to control language and thought and to work with them. Children learn to get a grip of their everyday world by developing their thought pattern, language and perception. When a child is playing he perceives what is best for himself and his peers and how to resolve arising issues and is able to communicate with them as they learn together.

Since advanced stages of learning are built on the initial ones, it is very important to allow the first stage to be firm and extensive before a child moves or is pushed to the next stage. The qualities of spontaneity, wonder, creativity, imagination, and trust, are best developed in early childhood play (www.originalplay.com/develop).
Play as a Relational Tool

During play a child learns how to relate with significant others. His emotions are stirred up to a point that he can sense his own emotions as he plays. He expresses himself through different emotions and conducts himself in a social manner. In their book *Approaches to early childhood education* Roopnarine et al. (2009) state that a child develops emotional intelligence which includes personal, social and emotional development. Play builds social skills; the children are able to relate with respect to each other, behave and conduct themselves in a self-regulatory and confident manner. They begin playing with inanimate and non-threatening objects, like cuddly toys and bricks among others, as a way of practising their interactive skills. Later on as the play continues, children develop their skills as they learn to share, take turns, solve issues, assert themselves and begin to empathize with others.

Play brings together ideas, creativity, relationships and feelings. This helps the child to use what he knows and understands about the world and the people around him. At this time he gets things under control so that he can face the world and deal with it. Secondly, he gets ready for the future ahead and thirdly, he thinks about things that have happened to him in the past and develops a sense of well-being and ends up understanding and caring about others.

In their social play, children develop an awareness of their own effectiveness with others and have an opportunity to try to improve it. For example, a child who is listened to by others assigns roles to the rest of the children. In so doing he gets a boost in striving to develop a positive self-concept and can also help the others in dealing with their issues.

During play a child is involved with peers, teachers, family, relations, and children in the neighbourhood. In social institutions each of these persons influences the life of a child in a diverse way. Each interaction is personal and affects the social and emotional
development of the child. Eggen and Kanchak (2010) discuss Bronfenbrenner’s theory of ecology of human development, that each of these developmental aspects is directly or indirectly influenced by family, peers, social institutions, the child’s communication and the immediate culture that surrounds the child’s settings.

In the first school years, a child appears to be self-confident, socially mature and outgoing. Erickson’s psychosocial theory of development, as discussed by Berk (1997), states that if a child had a warm responsive care from infancy, he would develop a sense of trust and confidence. This is more evident during play where a child becomes more innovative and proud of his abilities and creations. He learns how to relate with other children during play through competition, collective responsibility and new inventions. In so doing he releases the tension that is within. Brisbane (1976) states that in most cases the child will try to show off how his creations are better and bigger than others. At times he goes on learning how to respect other children and create room for them in his life and can share his toys and ideas also with peers. This is the time the child learns to be sympathetic and practical (Brisbane, 1976), and develops a capacity for empathy. This happens when a child hits another so hard during play and learns that it hurts.

There are several stereotypes that are related to different kinds of play and gender. The type of play in which boys and girls are encouraged builds their personality. The boys’ games involve use of muscles and sometimes weighty matters. This encourages boys to be able to think critically and solve the “tough” issues in life since they choose to be doctors and mechanics, while the girls choose to be nurses and teachers. This stereotyping is reinforced more by societal expectations later in life. All caregivers need to be involved in child’s play and modify their social script and expectations (Mussen et al., 1984). The caregiver can look at the script and give the children new roles in which the girls can be involved with masculine tasks like going to the garden and boys cooking and washing dishes. This gives the child
another perspective of the sex roles and be in a position to develop new skills gradually. In relation to stereotyping, the child in some cases may refuse the role given and it is important to be lenient with them. With time they will accept the routine in everyday play and will be practising in their imaginative play and be interactive with others.

Types of Play

There are different types of play in the African culture, a few of which are discussed in what follows.

*Kalongolongo*

*Kalongolongo* is a type of play in which the children engage in imaginative play. It is also known as *‘cha baba na cha mama’*. This basically means children are taking the roles of either *‘baba’* or *‘mama’* in the play structure. The play is framed from a variety of experiences and situations that children explore during their daily interaction with their parents or guardians.

During *‘Kalongolongo’* children first negotiate and agree on taking roles and the requirements of the play. The key people in the play are *‘baba’* and *‘mama’*, then the rest become *‘watoto’* and others are chosen to be *‘wafanyikazi’* in the home. Much of it they will imitate the adults in their environment. For example, girls have an inclination of taking the role of *‘mama’*, while boys take the role of *‘baba’*. The *‘mama’* much of the time indulges in cooking, setting up the house and feeding the children and also assisting the children with their homework. The *‘baba’* will be seen most of the times reading the newspaper while watching television, disciplining children and going to work.

Children use their creativity and innovation in making *‘jikos’* and *‘sufurias’*. They imagine cooking simple meals and serving them to their family. There are those that cook
simple miniature meals e.g. ‘sukuma wiki’ and ‘ugali’. Most of their furniture during play is in abstract; such as seats, tables, beds, television, among others.

In kalongolongo children learn a lot, though many people may view the play as just something to keep them busy while parents are engaged elsewhere; the child develops a strong self-concept through interaction with others. The authors of *Exploring child’s behaviour* state that imaginative play coupled with socio-dramatic play cause children to:

- Explore and rehearse the social roles they see being enacted around them.
- Test their own ability to explain and convince others of their ideas. Regulate their emotions through imagination, as they pretend to be afraid, angry and so on. Develop a self-concept in a non-threatening context, taking the part of a brave soldier, a happy mother and so on (Helmes & Turner, 1976).

**Blada**

This is a different type of play that is mostly played by girlsy; nevertheless some boys participate in it. ‘Blada’ is made from a used car tyre tube. It is cut into a certain thickness that is not too thin and not thick; and the length of the tyre determines its size. The two ends are then joined together to make a circular shape. The game involves three or more players each taking a turn to play. Two people will be holding the ‘blada’ at any given time, while the other(s) play (see Figure 1).
‘Blada’ has two levels, each with seven stages, which must be accomplished satisfactorily by each player. The difference between the two levels is that level one is wider than level two. Each stage must be played effectively to move to the other stage. If one fails to thrive in one level, she cannot go to the next stage or level. Once she fails to succeed, she will be the one to hold the ‘blada’ for the next player to play. At any given time two people will hold the ‘blada’ at each end as others take turns to play. The stages in each level are: ‘Chini’ – the ‘blada’ will be put at ankle height. ‘Magoti’- this is the second stage which is knee high. ‘Tako’ – this is the third stage at thigh high. ‘Waisto’- this is the fourth stage at waist level. ‘Kifua’- is the fifth stage which is positioned under the arms. ‘Mabega’- is the sixth stage placed on the shoulders. ‘Shingo’- is the seventh and last stage in both levels which is set on the neck.

Playing the game is simple: Two people hold the ‘blada’ and one player at a time will jump in the circular ring and out of it, jump in, then apart, then jump across the whole blada, as shown in Figure 2.
The game is played in a sequence of in, out, in, apart (both legs out but on different sides while the blada is in between the legs) in, out and over. All these must be done without touching the blada; if one touches the blada she fails the game. If a player makes a mistake or does not manage to follow the sequence, then she fails and is out of the game, giving chance to the next player. Then one who manages to reach the end, that is, ‘shingo’ first is the winner of level one. In level two the player holding the blada will make it thinner and slimmer by using one leg and in the next stages as one moves higher they hold it while standing on their sides, which is known as ‘mkonde’.

The blada game helps children to exercise patience and perseverance in preparing the blada, for it requires a lot of steadiness and accuracy to avoid cutting thinner pieces which will make it break easily. It also helps the children develop high jump skills and prowess, since one has to estimate very well to avoid missing the mark. They use their minds for concentration purposes and they develop a sense of boldness since they are not afraid of heights. As the researcher spoke to Ms. Njiru she said that blada requires a lot of attention and focus for the player to ensure that she calculates the height correctly.
Hicho

‘Hicho’ is a very rough game played mostly by boys, though some girls play it. It is played by more than one person. One person chases the other(s) to get hold of them. The person, who is caught, will be the one to chase the rest. If the player chasing the rest gets hold of one of them, he states ‘hicho’ meaning, he has already caught him. Sometimes the game may turn a little rough, moving from holding to use of kicks and punches as a way of avoiding to be caught. Helmes and Turner (1976) say that play may also involve wrestling and hitting but it actually occurs with fun making it more stimulating. ‘Hicho’ becomes more intense and rougher with age but with no intention of harming each other. It builds motor skills as one has to run as fast as possible not to be caught and also wrestle with the other party to free and defend him. Muũo, one of the children in the researcher’s neighbourhood, said hicho is very educative in that it develops a child’s intellect. One has to effectively calculate his distance from one’s partner so as to ensure that one is not easily caught. This makes him begin the game with a well calculated distance and enough room to run.

Churumundu

Churumundu can be both an indoor and outdoor game, which is played by both boys and girls. The game is drawn on the floor in a rectangular shape. The rectangle is divided into five pairs of equal cubes. It is played by pushing a cubical stone with one’s foot to every cube. To accomplish the game the player has to go round the ten cubes (see Figure 3).
Figure 3: Churumundu game
(Developed by the Researcher)

The first player moves with one leg pushing a cubic stone. The player will try as much as possible to push the stone on the spaces to avoid being in touch with the boundaries. If the leg of the player steps on the line or the stone falls on the line, he has bant, he has to give chance to the next player. Maweu, one of the children in the researcher’s neighbourhood, urges that one can never win unless they win a house (cube) for themselves. Therefore, on accomplishing the ten cubes, the final leg, the player has to move on each pair, with both legs to the end, one leg on separate cubes. On arrival at the last cube he jumps outside the playing square, that is, outside the drawn game and throws his stone over his
shoulders to try and win one of the cubes as his house. If he succeeds, he will be put his mark as a sign of belonging to that cube. If he fails he waits for another chance.

![Diagram of the churumundu game](image)

**Figure 4: Playing churumundu game**  
*Developed by the Researcher*

After he wins the other players to avoid stepping on that cube or even avoiding throwing the stone from falling on that particular cube for it is occupied or won. If in any case the stone falls on that cube on the players step on it, they are disqualified, as they say *umebant*. The player has to step out of the game to give room to the rest of the player(s).

The game becomes very competitive, for the more cubes you win, the more houses you have and the more points you gain.
*Churumundu* helps the child to be very attentive since one has to watch keenly each move to make sure that the player plays correctly. There is very close supervision of all and on all players which encourages team unity, concentration on the game, calculation of points and mastery of the cubes to ensure that each player restarts exactly at the point that they *bant*. The researcher spoke to Mutheu, a child from the researcher’s neighbourhood, who was playing *churumundu* and she attested that the game encourages accountability, integrity and team spirit which is evident as all players join force to ensure fairness and justice is done to all players. It relieves one's tension since the whole concentration is on the game rather than on personal interest.

**Brikicho**

*Brikicho* is a very interesting game that involves more than one child. One child will close his eyes facing the wall (he is player No. 1) while the others create conducive environments for their hiding. The player closing the eyes is the one to look for the other players once they are ready, but will keep asking *brikicho* (are you ready), while the others who are hiding will respond by saying *banture* (which means not ready). The game goes:

Player No. 1: *brikicho*

Others: *banture*

Player No. 1: *brikicho*

Others: *banture*

Player No. 1: *brikicho*

Others: *banture*

Player No. 1: ‘Are you ready?’

Others: ‘no’

Player No. 1: ‘Are you ready?’
Others: ‘no’
Player No. 1: ‘Are you ready?’
Others: ‘no’
This will continue for a time until all the players have hidden themselves in very safe places
where player No. 1 cannot get them. Once they are ready they will respond,
Player No. 1: ‘Are you ready?’
Others: ‘yes’

On the yes response, player No. 1 will move from the wall and start searching for the
other players who are hiding. The players who are in hiding have to be very silent with no
movement to avoid being noticed. Player No. 1 will look for the other players and once he
finds them, he will run back to the wall shouting that particular player’s name and say tapo!
as he taps the wall, that becomes a win for him, but if they tap before him he loses. He will
keep looking for the others and do the same. There are times that some players will be faster
than him and tap before him and other times he makes it to tap before them depending on
their swiftness.

There are times that a player who is in hiding may decide to remove their tops and
leave them hanging at a point then move to different destination, so as to camouflage his
presence. On seeing player No. 1 moving to the outfit, he will run to tap. The game will end
when all members have been found. The player who was first to be found and tapped will be
player No. 2 to look for the others, and the cycle continues. However, if the last person taps
before player No. 1, then all the other players who had been disqualified will be saved and
player No. 1 has to repeat it all over. If he taps before the last player then player No. 2 will
have to seek all the other players.

Mutheu, whom the researcher was observing, demonstrated that this game brings out
a lot of creativity among the children in the way they try to create hiding places for
themselves and also camouflaging. At the same time it fosters intellectual growth for one has to think very fast and innovate hiding options for each game. It also refreshes and stimulates one’s mind and spirit hence clearing all tensions from the body when celebration time comes, that is, when the last player saves all the disqualified players. Mhola, a playmate to Mutheu, added that *brikicho* encourages mastery skills for the player looking for the playmates; he has to master what each player is wearing since there are times when one can look behind only once to check who it is then run to tap. Looking back the second time will jeopardize the only chance one might have of winning. The game encourages team spirit, when it comes to encouraging one another to hide further, and also cheering one another as they run to tap. Finally, it fosters motor development, as each player runs as fast as possible to ensure that they tap before the other.

Play enriches a child’s learning in all areas of life. When a child is allowed to play his brain is at work; progressively being influenced by the environment on what he is being exposed to which has long term influence on his development. It improves a child’s physical, emotional, social as well as language skills. Play is and should be the right of every child in the society, for it expands self-expression, self-knowledge, self-actualization and self-efficacy, enhancing self-esteem and interpersonal relationships (www.originalplay.com).

**Stress**

Stress is a natural part of life, but it can also be a major risk factor if prolonged. Like adults, children undergo stressful events which need to be checked to avoid the children sinking into depression. Wright (1993) defines stress as any type of action of situation that places conflicting or heavy demands upon a person, while Taylor (2003) posits that stress is the consequence of a person's appraisal process: the assessment of whether personal resources are sufficient to meet the demands of the environment fit. These two authors show
that stress is the daily pressures and demands that destabilize the body's equilibrium making it hard to withstand normal activities.

Signs of Stress

The following are common signs of stress among children; feeling tired and irritated most of the time, difficulty enjoying regular activities that used to give pleasure, feelings of being down, feeling dizzy, headaches, loss of appetite, short attention span, new misbehaviours, tense muscles in the neck and shoulders, aggressiveness and unruly behaviour, anxiety, bullying, regression to thumb sucking or bed wetting, quarrels and fights (Wright, 1993; Wades & Tauris, 2000; Grannis, 2010).

Levels of Stress

In Psychology, the brain, the person, the World, Selye outlines three stages of stress namely: Alarm phase, Resistance phase and Exhaustion phase (Kosslyn & Rosenberg, 2004).

Alarm Phase

The perception of the stressor triggers the alarm phase which is characterized by fight or flight response. The body mobilizes itself to either fight or flee from the threatening stimulus. Neurotransmitters and normal secreting causes breathing, blood rate and blood pressure to increase causing more oxygen to move into the muscles which prepares them to fight or flee (Kosslyn & Rosenberg, 2004).

Resistance Phase

Once the body is ready to fight or flee, it now mobilizes the resources to achieve equilibrium despite the continued presence of the stressor. In other words it adapts to the stressor. This stage requires a lot of energy; therefore, there is increased blood flow which
helps to deliver it quickly (Kosslyn & Rosenberg, 2004). In this stage, due to the persistent stressor, the body adapts to the stressor and returns to the normal level of the activity and resistance arises, Crinder et al. (1986) state that the presence of the stressor causes the body to adapt.

Exhaustion Phase

This is the last phase of the general adaptation syndrome (GAS). In this stage the persistence of the stressor causes the body to be exhausted. Selye states that owing to limited resources in fighting the stressor, the body begins to become damaged leading to risk related diseases (Kosslyn & Rosenberg, 2004). The resistance now falls below the normal again, since it cannot adapt any longer (see Figure 5).

![Selye's 3 stage stress response](Adapted from Kosslyn and Rosenberg, 2004)
Types of Stressors among Children

There are different kinds of stressors, namely physical, psychological and social stressors. However, there are some stressors that are related to play and they are elaborated as follows.

Physical Stressor

Physical stressors are associated with environmental factors that lead to stress and are in most cases linked to urban life (Brannon & Feist, 2010). Some of these factors are noise from the neighbourhood, traffic jam, construction of buildings and even loud music from nearby night clubs and restaurants. In most cases the environmental factors are more strenuous in urban settings. It is evident in some rural surrounding and it can be noisy, hot, polluted, cold, or even people crowded in one room. Brannon and Feist (2010) note that living in a polluted, noisy and crowded environment creates chronic daily hassles that not only make life unpleasant, but may also affect behaviour and performance, hence posing a risk to one’s health.

Psychological Stressor

Psychological stressor is a source of stress that affects the child’s psychological development. For example, victims of rape, natural disasters and parental violence suffer from psychological stress (Coon, 2006). The traumatic stress events cause them emotional imbalance; if not checked it can lead to serious social stress disorders. Children who have lost their parents or were abused, witnessed parental violence, ailing parents on their sick beds, or even those orphaned at a very early age experience intense emotional pain which is a stressor (Berger, 2005).
In the institutions there are those children who are grieving the loss of their parents hence emotionally unstable. Mr. Omondi is a single parent, with a pupil in class 1 in one of the city schools. He states that the instability is sometimes impelled by the constant reminder by other pupils in school who talk more often about their parents. They are traumatized by the stories of constant reminder that they don’t have parents, hence they become stressed.

Social Stressor

Children can be stressed by social issues as they try to learn how to relate to their peers, family and the community at large. The young scholar demonstrates signs of stress through aggression, use of physical force, fighting, name calling and bulling (Boyd & Bee, 2006). The child on the receiving end feels disgraced and humiliated among his peers hence leading to a stressed child. Every time the child sees the aggressive friend it creates feelings of distress.

Transition is another major stressor for a child. Having to transit from one family to another is a stressor. Some children have grown to see their parent being married or having to cohabit with a spouse in their homes. Every normal child would love to live with both parents together. Recurrent movement, change and interruption is traumatizing, complicated and stressful for a child to comprehend (Kassin, 1995).

At 3-5 years, a child has just changed environment by joining school where rules and regulations need to be followed. The transition in itself is stressful, and it takes time for the child to adapt to the new environment. Berk (1999) articulates that at this moment a child is not yet accustomed to school-like settings, having changed his normal setting to a new environment with strangers. It takes time for the child to accommodate the new physical settings, with new authority and schedules that are fixed. The separation of the young ones from their parents can bring a lot of anxiety upon the child, leading to a stressful moment.
There are other issues that stress children in any given day. The changing world values and lifestyles is a constant stress to many children. This is attributable to technology, sophisticated machines and toys that are being invented every day. Children are becoming more confused and overwhelmed with life issues, and also trying to comprehend the developmental aspects of life. It is necessary to help a child release excessive energy and tension from their bodies. If the pressure keeps mounting up, there is a very high possibility of the child sinking into depression.

Though the foregoing are the common stressors among children in institutional care, there are other stressors that are in relation to lack of play and they are in two categories: extrinsic and intrinsic stressors

Extrinsic Stressors

Teachers in early childhood education load pupils with a lot of assignments in class and homework as a way of causing the preschoolers to learn. This causes feelings of anxiety and fatigue hence low levels of concentration among the children. Riggio (2003) observes that in such moments the quality of work will decrease and absenteeism will increase. The pupil gets stressed by being overloaded by too much work at school and no time to refresh.

In addition to these, the pupils become so stressed by the school workload; they learn from morning to evening with no breaks or Physical Education (P.E.) lessons to allow them to reflect and refresh after the day’s activities. The day is congested with lessons and very little or no time to play. They become so fatigued and tension piles within, leading to stress.

Melgosa (2001) states that stress can be a combination of physiological and psychological reactions of the body when it’s subjected to heavy demands, the same is to children. Children become stressed by being exposed to heavy tasks or workloads that are not age appropriate, like having to be in class from 7 am till 4pm with no free time and yet go
home with assignments that need to be done before bedtime. On the other hand, on arrival home, they also have some household tasks that need to be accomplished. This stretches the child’s ability to function, hence straining them beyond measure.

Intrinsic Stressors

Intrinsic stressors are those situations that place a psychological demand on a child (Sue et al., 2006). Humiliation and shaming by teachers is cited as one of the factors. For instance, a teacher who chooses to humiliate a child before others (Mussen et al., 1989) in regard to their low grades, dress code or stuttering speech may place emotional pressure on the child. Bullying by other students in school can cause lots of stress upon the child as they may feel rejected, unwanted and less significant. Bullying intimidates and lowers the child’s self-esteem which may be emotionally damaging (Berk, 1999). Instances of school drop-outs and playing truant have a strong connection to a child being bullied or humiliated. Due to this, the child isolates himself and cannot freely play with others.

Intervention Methods for Managing Stress in Children

Whereas stress is part of life, if left unattended it can cause severe body damage. It is therefore important to administer intervention methods to the child. According to this study, play and exercise are the best intervention methods for stress management. It is through play that other methods also arise and are used to control, tolerate and reduce stress in children (Wade & Taurus, 2000). Some of these intervention methods that are related to play and help children in coping and managing stress on a day-to-day life are: social support, focus on the positive, offering affection and building confidence. Intervention methods minimize ineffective behaviours, help the child to be organized, balance work and relax (Coon, 2006).
Exercise and Play

Play and exercise are very healthy to a child’s body. They affect language, social, intellectual, emotional, academic and physical development. In each developmental stage a child needs to be taught and encouraged to engage in stress relieving play and exercises, so as to reduce excessive energy in their bodies. This is one of the most recommended methods of reducing stress in both children and adults. Glass (2009) asserts that play is the greatest way of releasing stress and especially team sports or games.

Myers (1998) just like Glass (2009) emphasizes that the best ways to prevent stress related illnesses and enhance health is through physical exercises. Some of these strategies are relaxation, aerobics and play; team games encourage team work and competitiveness, thus, improving social skills as well as relieving excessive energy. This promotes health and wellness of a child. These exercises increase heart and lung fitness, which Myers (1998) states elevate anxiety and tensions hence effectively coping with stressful events and thus exhibiting more self-confidence. Exercise is said to distract one from stressful thoughts and problems (Wade & Taurus, 2000). The players’ main focus is on play and the teammates rather than on their problem. If in any case one turns his focus on their problem rather than on the game, the team ends up losing. In early childhood, there is a lot of competitiveness (Berk, 1999); they will easily give up their personal problems for the sake of winning the game. In so doing the child releases excessive energy and tension during play.

Play is natural among children. It teaches them how to make friends and respond to their actions without hurting each other. During those moments, excessive energy is released from the body. Erickson in Developing a person through the life span (Berger, 2005) states, if the excessive energy is not released it causes external or internal problems to the child. As they play the excessive energy is released and the body is relieved of feelings of stress and boredom and connects the child to people in a positive way, stimulating creative thinking and
exploration hence regulating emotions and boosting one’s ego (Woolfolk, 1995). It is also fun-oriented hence enhancing one’s emotional state and enhances a child’s attitude.

Children learn to modify their emotional expressions in response to their playmates. Play should therefore be encouraged among children so as to enhance emotional development. There is need to encourage and give a child an opportunity to play to enable him release excessive energy and tension from his body. If the pressure keeps mounting up, there is a very high possibility that this may lead to depression.

Social Support

The child needs social support from peers and caregivers. As children play, in most times they play as teams; they seek and get moral support, sympathy and understanding from others in a network of peers and team mates. This is where peers and family help one to cope with friends and self. They encourage one another to be involved in play. The child is given care, attention and tolerance. He is even prompted to give ideas about play and play activities that he wants to engage in and at what position. This encourages him to open up and participate in the play and he ends up sharing his problems with the team mates. The more the child perceives that support is available to him the less likely he is to develop a disorder when he is experiencing a strain.

The primary caregivers also play a very great part in offering social support to the child. They should offer love, affection, encouragement and reassurance to the child. They also need to be involved in the child’s play so as to boost his sense of being and help him to effectively cope with stressful life events. The support from both the peers and primary caregivers revitalizes the child and clears his stressful thoughts. As this child gains a healthy support, he will become strong and in turn offer the same to his friends when stressed.
Focus on the Positive

Children need to be helped by being given avenues to discuss their concerns. They need to feel that their caregivers will respond with care and acceptance when they express themselves (Langone Medical Centre, 2010). They might say this is ‘too hard, too difficult’ or ‘I am scared, I am worried.’ Primary caregivers need always to be sensitive and able to discern when their children are under pressure. There are moments that the children may not talk unless provoked or prompted to do so. During such moments the primary caregiver and peers need to be involved and support the child to play as it enables him to open up and share. Unless the caregiver is in total touch with the child, he may not be aware of when to come in and help.

Offer Affection

In reality, it is not possible to protect a child from major traumatic events, such as death and natural disasters. In most cases they just happen. It is therefore, important to help a child focus on the positive rather than on the negative. The primary caregivers should offer love and warmth to the child by using words and phrases that give hope and inspiration, hug them, pat their shoulders, and let children lean on them as they talk (Atma, 2010). This shows concern, love and warmth to the child and becomes a good remedy for the child’s heart. The best way to do this is during play, encourage the child to play, commend him, appreciate him and affirm him as he plays. For example, one can use phrases like, ‘I know you can make it’ ‘we’re going to make it together.’ The primary caregiver should be available to offer love and warmth for the healing to occur.
Build Confidence

The preschoolers need someone to defend them and help them handle the tough situations that come their way. But as they grow, one needs to let them deal with issues head on as a way of inspiring and building confidence in their ability to solve problems on their own. As a caregiver, it is always good to know when to step in and when to stand back and let children deal with their issues (Atma, 2010).

During play there are times that strife might be okay because of unjust play. The child might feel very offended and he might decide to walk out of the game. It is important to encourage him to continue with the game and that he needs to go back and solve his issues. Once he is persuaded that he is able to handle his issues, he will trust himself and he will do it, hence developing problem solving skills.

Relating Types of Play to Stress Management

Different types of play manage a child’s stress in a different way. There are some types of play that are very vigorous and involves the use of a lot of energy, whereas there are those types of play in which a child uses less energy. For example, as child plays kalongolongo, he will be using less energy compared to the child playing hicho. But depending on his role, he is able to vent out his feelings during play. If a child has chosen or has been nominated to take the role of a father and he is stressed by the harsh treatment that he receives from his father, he will vent it out during play to the other players. Since it is time for play no child takes offence during play. This will help him to be refreshed and his ego will be boosted hence release of stress.

Brikicho and hicho on the other hand are very vigorous and require a lot of energy and attention. As the researcher discussed about the types of play with Mutheu, she stipulated that brikicho and hicho are games that are spirited requiring a lot of enthusiasm because of the
running, cheering and winning attitude that the players have. Most pupils love these types of play for they bring out the fervour which stimulates their minds and spirits releasing all feelings of fatigue and strain.

On the other hand there is blada and churumundu which are less vigorous but have their part in relieving stress. The main focus in blada and churumundu is counting of scores and winning. The players are very attentive to each move to note any player who bants. This helps the child to focus and concentrate on the task at hand forgetting his problems. The child ends up being stress free by the end of the game.

Tension causes mental stress. Among children of HFHCRC play is not the first priority; cognition seems to take the first priority (see Appendix C). The demand to develop cognition as a priority among children generates stress.

Cognition development in itself is not always a stressor. Myers (1998) quotes Piaget who notes that in solving mathematical problems one discharges some chemical substance in the mind which in return releases substantial amount of stress. Stress is created when the sum is not solved or when too many sums need to be done and no solution is imminent. However, when a child engages in play like ‘blada’ he learns how to construct sums by counting scores that are earned as he plays, which gradually helps his mental operation. The child’s focus changes from the stressing issues to winning and scores, hence a healthy body.

Fahey et al. (2001) say that exercise and play leave the body feeling more relaxed, energetic. This reduces anxiety and regulates blood pressure. When a child is exposed to regular exercise and play, his body’s well-being increases, he becomes fit. It is therefore important to expose a child to play at least every day to allow him relieve strain. In the early years of a child, play is very meaningful. As they chase each other, wrestle and dare themselves to attempt new tasks, they acquire new skills, ideas and values which are very
crucial for each milestone. Their playfulness causes them to be delightful and rejuvenated, hence release of excessive energy, anxiety and tension.

Play to a child comes naturally and whenever he interacts with his peers and the environment and he is able to come up with his own inventions, he feels a sense of accomplishment and empowerment which boost his self-worth, building positive emotions which alleviate feelings of anxiety. Otieno (2010) asserts that play and exercise release endorphins and other ‘happy hormones’ in one’s body hence promoting feelings of wellbeing. This allows one to be social, hence drawing one’s attention from all negative pressure thus focusing on the task at hand which is play. As a result of this, the child enhances his overall health and wellbeing.

Theoretical Framework

This study employed the Piaget’s cognitive theory of development together with Bronfenbrenner’s theory of social development in support of the theoretical framework. Piaget believed that a child passes through four stages of cognitive development: sensorimotor, preoperational, concrete-operational and formal-operational. The theory states that at the sensorimotor stage, infants explore the world through their senses and motor activity and work toward mastering objects permanence and performing goal-oriented thinking, while in preoperational stage symbolic thinking and logical operations begin. Children in the stage of concrete operations can think logically about tangible situations and can demonstrate conversation, reversibility, classification and seriation. The ability to perform hypothetico-deductive reasoning, coordinate a set of variables, and imagine other world’s marks the stage of formal operations (Woolfolk, p.59, 1995).

Piaget’s theory illustrates a child’s mental progression from one milestone to another. As the child interacts with the environment and people during play there is evident knowledge, construction knowledge and reasoning ability being developed. Children pursue to understand the world, the people and how they work. Play, as Piaget puts it, helps children to
learn and respect each other, develop intellectual skills, problem solving skills and language acquisition (Mena, 2008). In ‘kalongolongo’, there are times when a child acts out in an imaginary way when the required apparatus are not available; this increases the child’s ability think, talk and interact more with other team mates. Thus, a child’s clear understanding of work and how things are done promotes coordination of the mind and the hands and it eventually fosters intellectual growth and social skills which are well brought out by Bronfenbrenner’s model of social interaction. Their language is also enriched through constant communication, planning and negotiation of roles during play, which in turn, causes them to gain skills on how to handle and solve issues (Mena, 2008). Predominantly, this is achieved through play. Play is nature’s primary means for developing one’s brains. It offers brain exercise, sharpens skills, helps memory growth and provides emotions which encourage children to try out new things (Jonnes & Hooks, 2011).

Bronfenbrenner’s model illustrates a child’s interaction better with people and environment. The ecology of human development explains how everything in a child and his environment affects his growth. He labels different aspects of the environment that influence children’s development, including the microsystem, the mesosystem, the exosystem, and the macrosystem (www.mentalhelp.net).

Microsystem is the setting in which the individual lives. These contexts include the person’s family, peers, school, and neighborhood. It is in the microsystem that most direct interaction with parents, peers, and teachers occurs. The individual is given an active response of the experiences in the settings. Mesosystem refers to relations between microsystems or connections between contexts (Mussen et al., 1984). Examples are the relation of family experiences to school experiences, school experiences to church experiences, and family experiences to peer experiences. For example, children whose parents have abused them may have difficulty developing positive relations with teachers.
Exosystem involves relations between a social setting in which the individual does not have an active role and the individual's immediate context (Berk, 1999). For example, a child's experience at home may be influenced by a mother's experiences at work (Santrock, 2007). The mother might receive a promotion that requires more travel, which might increase conflict with the husband and change patterns of interaction with the child. Macrosystem refers to the culture in which individuals live. Cultural contexts include developing and industrialized countries, socioeconomic status, poverty and ethnicity (Mussen et al., 1984).

Each of these settings affects a child’s learning and ability to function effectively in life. They influence his culture, values system, social skills, communication and his play settings. Through interaction in play they also learn group norms and values; what their peers love, problem solving skills, creativity and how to deal with them too. This enhances learning how to respect and socialize with one another since they provide each other with opportunities to practice and receive feedback. This also affects a child’s personal development and how he relates with his peers; he learns to communicate his attitude and values on different issues and circumstances (Eggen & Kauchak, 2010). Play relieves feelings of stress and boredom among children and connects them to each other in a positive way by stimulating creative thinking and exploration. In so doing they regulate their emotions, and boost their ego.

Conceptual Framework

The researcher has formulated a conceptual framework which relates to this study.
Figure 6: Conceptual framework
(Developed by the Researcher)

Theories
- Piaget’s Theory of Cognition
- Bronfenbrenner’s Theory of Social Development

INPUT/ASSESSMENT
- Tensed programmes
- Noisy environment
- Traumatic events
- Societal expectations

OUTPUT
Stressed child

INTERVENTION
PLAY AND EXERCISE
- Offer affection
- Social support
- Focus on the positive
- Build confidence

EXPECTED OUTCOME
Holistic health and transformation
Figure 6 is a conceptual framework, which was developed by the researcher as a guide to this study. The independent variable in this study is child development; without which this study cannot take place. As the child grows his mental progression develops: gaining the ability to construct knowledge and to reason and think critically as he interacts with peers, primary caregiver and the environment. The child sometimes fails to develop fully socially and mental due to several factors, which lead to setbacks on a child. The dependent variables in this study are play and stress management. What is causing the problem (stress) is what this study refers to as the inputs. These variables include: tensed programs at HFHCRC, noise which includes trailers at Mlolongo, night clubs in the environs and pollution among others. Due to this the child is left stressed. This stress is what the researcher refers to as output. This therefore affects the child in all aspects of life (cognition, social, psychological, emotional and cultural development).

To mitigate the above, this study looked at the intervention methods recommended. The suggested interventions included reduction of academic workload, child positive motivation, offering affection to the child, social support confidence building and play. In general, play is the place where all these will be exercised and therefore this study focused on play as the main intervention. The expected outcome was a child who is holistically transformed; spiritually, psychologically, socially, emotionally and culturally.

Summary

This chapter dealt with play and stress management and their influence on child development; social, physical and cognitive development. It looked at different types of play practiced in the HFHCRC. The chapter also looked at stress; signs and levels of stress, types of stressors among children, and common ways of managing stress were also discussed with play being the center of all the intervention methods. The chapter finally dealt with the
theoretical framework, conceptual framework of the study and relating play to stress management.
CHAPTER THREE: METHODOLOGY

Introduction

This section describes the methods and procedures that were used in this study. It was evaluative and sought to discover the effectiveness of play in managing stress among children in Heritage of Faith and Hope Children rehabilitation Centre in Machakos.

Research Design

This study was essentially qualitative and utilized the descriptive design. Qualitative inquiry employs different knowledge claims, strategies of inquiry and methods in data collection and analysis as compared to quantitative inquiry. It relied more on text image data (Creswell, 2009) which means that the designs, techniques and measures that were used were not necessarily to produce discrete numerical data. Furthermore, this research took place in a natural setting and applied multiple methods that were interactive and humanistic. The researcher set this study in Heritage of Faith and Hope Children Rehabilitation Centre in Machakos. The researcher used varied methods; observation method of data collection, interviews and questionnaires, of inquiry depending on the age and level of education.

The case study method as one of the qualitative research approaches basically means in-depth exploration of a programme, an event, an activity, a process of one or more individuals. The cases were bound by time and activity the researcher collected detailed information using a number of collection procedures over a particular time span (Creswell, 2009).

Most case studies are based on the evidence that a case can be located that is representative of many other cases. The case under study was viewed as an example of the class
of events or a group of individuals (Mugenda & Mugenda, 2003). It was hoped that the role of play in managing stress in the said institution was a reflection of other similar institutions.

Population

Mugenda and Mugenda (2003) define population as a complete set of individuals or objects with same or common observable characteristics. The population of study consisted of pupils, teachers and support staff of HFHCRC, since they all had the same characteristics the researcher intended to use. The entire population consisted of approximately 200 pupils of school going age and one year old child.

Sample

The population sample of the study was 41.5% of the total population of the pupils. The sample was selected from total population of the lower primary. Mugenda and Mugenda (2003) cited Gay (1991) who suggests that 10% of the total population is good for a sample for any research.

Table 1: A tabulated population data of HFHCRC

<table>
<thead>
<tr>
<th>Population</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pupils</td>
<td>200</td>
</tr>
<tr>
<td>Teachers</td>
<td>13</td>
</tr>
<tr>
<td>Support staff</td>
<td>6</td>
</tr>
<tr>
<td>Leaders</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>221</td>
</tr>
</tbody>
</table>
Sampling Procedure

The study used stratified purposive sampling, whereby the researcher intentionally chose an element from the population that gives the desired data (Singleton & Straits, 2005). The population was divided into four stratus: strata 1 for the pupils, strata 2 for teachers, strata 3 for support staff and strata 4 for the school director. For the sake of this study pupils from nursery to class three which had a total population of eighty-three pupils were used, as indicated in Table 2.

Table 2: A tabulated population data lower primary in HFHCRC

<table>
<thead>
<tr>
<th>Class</th>
<th>No. of pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursery</td>
<td>15</td>
</tr>
<tr>
<td>Pre-unit</td>
<td>22</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
</tr>
</tbody>
</table>

All pupils in lower primary were purposively chosen since they gave the desired information. However, during the field research, three pupils from lower primary had transferred, which now reduced the sample to be 80 pupils. Likewise, all the teachers who teach lower
primary who were a total of 5. The support staff was composed of 6 members, but only the three were interviewed for they work very closely with the children unlike the rest who were involved with administrative issues. Similarly with the directors; the institution has 2 directors but only one who works closely with the children. This brought the total number the respondents to 89.

Data Collection Procedures

The commonly used method in qualitative research is interview and observational method. This helped in yielding rich data with in-depth information (Mugenda & Mugenda, 2003). Due to the nature of the study, interview and observational method were used in collecting data.

Interview can be structured and unstructured. In structured interview, Chandran (2004) states that questions are exact while in semi-structured interview the exercise is carried out with an interview schedule as guide to data collection. This study used both structured and semi-structured interviews due to the level of education of the respondents. The interview method was advantageous since it provided a comprehensive data which may not have been possible to get with the use a questionnaire. Interviews allowed control over the line of questioning. On the other hand, they were limited in that they provided indirect information that was filtered through the views of the interviewees. Creswell (2009), states that, the researcher’s presence brings biasness not to mention that all people are not equally articulate and perceptive. Two research assistants were trained for data collection.

Observation method was used; whereby field notes were taken on the behaviour and activities of the pupils on the research site, with an observational guide that was filled every time anything was noted during the day. The greatest advantage in this method was the first hand interaction with the pupils. Observational method had a limitation in that the researcher was
seen as intrusive to private institution. The respondents’ private information that observed was not reported due to its privacy (Creswell, 2009). The true identity of the pupils and workers of the institution had to be concealed to assure them of confidentiality.

The research assistants were trained for three days on data collection and were in the field for one month due to the nature of the study, which was observational. This helped the team to have quality time with the children in the field, as the team observed the children and their interaction with primary caregivers and the environment. The research assistants helped in distribution and administration of the questionnaires to the teachers and support staff, as well the director of the institution.

Observational guide were used on children while the semi-structured interviews were administered on children and support staff due to their level of education. However, for teachers and the leader of the institution the structured interview was used.

Observation was done in a total of seven days without using any other instrument. This helped in observing the child for a whole week, from morning till evening to ensure that the researcher got everything that happens to the child the whole week. The following weeks the researcher used semi-structured interviews for the children and support staff and structured ones for the support staff, teachers and leadership of the institution.

Data Analysis

The process for data analysis involved making sense out of written and visual data. It involved preparing that data, conducting different analyses, and moving deeper into understanding the data, hence making an interpretation of the data (Creswell, 2009). The researcher asked analytical questions and wrote memos throughout the study. The data analysis involved detailed description of the activities during sessions with pupils and the institution.
orders. Then it was followed by an analysis of data for themes or issues. Putting in mind the specific ways of interpreting data in a case study, some generic steps for qualitative research were used that include the following:

The organization of data included transcribing interviews, typing field notes, sorting and arranging the data into different types depending on the source of information and recordings that were done on cards for the available data. Since the researcher’s intention was to establish the role of play in managing stress among children at Heritage of Faith and Hope Children Rehabilitation Centre, the researcher endeavoured to describe the thoughts, ideas, and meanings contained in answers that were given in interviews. Different categories for the information that was given by coding and creating themes and patterns were used. Some the expected themes were from play, stress and stress management. This helped the researcher evaluate the role of play in managing stress among children.

Validity and Reliability of Instrument

Validity is the degree to which an instrument measures what is intended, while reliability is defined as the level of internal consistency or stability of a measuring device over time (Borg & Gall, 2007). With regard to these, interview questions and observational guide were cross-checked to make sure that they were reliable and valid. This minimized errors that could arise from a faulty instrument. To ensure that the questionnaires, interview questions and observational guide were valid and reliable, at-least two lecturers with experience in research (the researcher’s supervisors) cross checked the interview questions in the following areas: the clarity of the question, the level of difficulty, and the appropriateness of the question. This cross checking helped the researcher determine if the interviews and observation memos yielded reliable data. This process helped in uncovering some of the ambiguities that might have been
found in the instrument. Secondly, the researcher did a pretest at Gladwin Community Centre at Kawangware in order to check the effectiveness and viability of the instrument and its reliability in establishing the role of play in managing stress among children. The pre-testing involved 15 pupils from pre-unit to class three, one support staff, four teachers and the school director. This helped in modifying and clearing some concepts that were not clear. For example, pretesting in this study helped in translating the questionnaire into Swahili.

Ethical Consideration

Ethical issues or considerations are guiding principles which a researcher needs to work within, with an aim of protecting the right to privacy and self-determination of all respondents and ensuring that no one intentionally harms another person (Monette et al., 1994). This research was investigative in nature with set objectives and appropriate tools of collecting and analyzing data (Chandran, 2004), as one would have used it in a manipulative way to harm others. It is therefore important to adhere to the principles as stated below.

Owing to the fact that some information was personal, sensitive and confidential, the researcher assured the respondents of anonymity and confidentiality (Creswell, 2009). The real names of the respondents were concealed to protect their privacy and avoid victimization. For the small children, the researcher sought informed consent from the school administration, teachers and caregivers. This was to ensure that their rights were not infringed. The researcher’s name was presented to the respondent while conducting the related research.

A consent from the director of HFHCRC was sought, so as to carry out research among pupils, teachers, and support staff of the institution. The researcher also requested for a letter of introduction from the office of the Dean of the School of Social Sciences at Daystar University, and from the Research office in the National Council for Science and Technology.
Summary

This chapter dealt with the methodology that was used in this research. It focused on the research design, the population, population sample and the sampling procedure that was considered in collecting data. Data collection procedures were interviews and observational guides, which led to analysis and organization of data through creation of codes, patterns, categories and themes. The chapter also states the ethical issues that considered by the researcher while doing this research.
CHAPTER 4: FINDINGS, DATA ANALYSIS AND INTERPRETATION

Introduction

This chapter presents the analysis of the research findings and the interpretation done. The data is presented in tables, graph and charts. A total of 89 questionnaires were administered to pupils, teachers, support staff and school director: 53 questionnaires were administered to pupils in class 1 - 3, 5 questionnaires administered to teachers, 3 to support staff and 1 to the school director. Semi-structured interviews were used on 27 pupils in nursery and pre-unit at HFHCR. From a total number of 89 questionnaires, four got spoilt. According to Mugenda and Mugenda (2003), on data collection, analysis and interpretation, a result of 50% is fair, 60% good and 61% and above is excellent. Since this data was 96.6%, the researcher was satisfied that it could yielded the desired data.

Analysis of Research Instrument 1

Research instrument 1 had four questionnaires: from pupils, teachers, support staff and the school director. The gathered data from each instrument was analyzed separately and its findings indicated below:

Analysis of Pupils’ Questionnaire

The following is the analysis from Questionnaire 1, Appendix D, as analyzed in the order of the questions:
1. What do you like most at school?

In Figure 7 above, the following findings were indicated in regard to what pupils like most about school. 44% said learning, 34% playing, 8% teachers, 5% food, 4% classes, 4% friends and 1% School garden. This implies most pupils (44%) like learning, which is followed significantly closely by playing (34%). This finding signifies that as learning increases with less play the pupils become stressed.
2. Do you like to play?

The pupils were asked if they liked to play, and they all responded yes to the question. This implies that all children like to play. According to Berk (1999), children are explorers by nature and play is inherent to their makeup. This means that children have their own self initiative to play and making their own world interesting.

3. For how long do you play?

![Figure 8: Length of play time](image)

Figure 8 shows the responses given by the respondents: fifty-four percent indicated that the time was limited; thirty-seven percent indicated it was long while nine percent indicated moderate timings. The respondents gave varying answers in regard to the questions above. Examples of the responses were limited, two minutes, one minute, two hours and so forth. Having received the responses, the researcher classified the feedback in three different
categories: moderate, long and limited. The categories under moderate were the ones that were around the normal session of a lesson, which is 40 minutes. The responses that indicated below 40 minutes were ordered under the category of limited, whereas the ones that were ranging from 50 minutes to 2 hours were classified in the category of long.

Berk (1999) asserts that small children do not have the concept of time this probably explains is why some of the pupils could not quantify the time spent during play but gave responses such as limited or long. It is interesting to note that two respondents indicated two hours as the time they play, whereas the normal allocated time for P.E lessons is forty minutes. This explains more about the time the children play, which the researcher deduces it is after classes. This implies that the children are not given substantial time for play, though some responded that they are given a lot of time.

4. Who plays with you at school?

This question was enquiring about the people who play with the pupils at school.
In Figure 9, 86% indicated that they play with friends, while 14% plays with their teachers. This signifies that the pupils in school mostly play with their peers. According to Mussen, et. al, (1984), children relate and form relationships more easily with their peers than with their teacher or parents. This is why it would be easier for them to play more with peers than with teachers or any other group of people. Eggen and Kanchak (2010) quote Bronfenbrenner who states that a child learning ability is largely affected by peers. This is by influencing his culture, value system, social skills, communications skills, problem-solving skills, group norms and values. As a result they learn to esteem each other as they socialize, giving each other an opportunity to practice and receive feedback. As the pupils interact and socialize with peers, they appreciate and affirm each other hence releasing stress.
5. Who plays with you most?

Who plays most with the pupils

![Pie chart showing the percentage of responses for different playmates: Friends (91%), Teachers (4%), Siblings (3%), Neighbours (2%)](image)

In Figure 10, the respondents gave the following responses: the highest percentage (91%) indicated that they play with friends, 3% with siblings, 4% with teachers and the rest 2% with children in the neighbourhood. This implies that the best playmate for the pupil is his friends.

The findings are convergent with the views of Eggen and Kanchak (2010), in that peers are the best playmates and they learn more through social interaction. This is also supported by Bronfenbrenner’s theory which illustrates that a child’s interaction becomes better with people and environment. In microsystem, which includes settings of a family, peers, school, and neighborhood, the child’s experiences with the peers develop a positive and a nurturing effect which affects his learning and ability to do his tasks well.
6. What games do you play?

The Types of Games Played the Pupils

![Pie chart showing the types of games played by pupils]

Figure 11: The Types of Games Played by Pupils

In Figure 11, 32% of the respondents play ball games while 30% play brikicho, 15% play hicho, 14% singing games, kalongolongo and kati has 3% each, churumundu 2% and athletics 1%. This implies that the majority of the respondents play ball games and brikicho.
7. What time do you play?

![Time for Play](image)

Figure 12: Time for Play

Figure 12, shows responses of the time when the pupils play. 50% indicated after school, 35% play after tea break, 7% during P.E lessons, 5% during class time, 2% during lunch time and 1% during games time. This finding signifies that most pupils (50%) play after classes.

The researcher observed that the pupils in nursery and pre-unit play before 10 o’clock tea as they wait to be served snacks, while for pupils in class one to three play on their way back to school (snacks are served at the home, which is almost 500m away from the school). The researcher’s finding during the observation is that children play after classes for about 30 minutes in an open space outside the school and on their way home. This implies that the children are not given adequate time for play.
8. Where do you play?

![Figure 13: Place of Play](image)

In Figure 13, the respondents play mostly (60%) in the field, 21% at home, 16% outside the classes and 9% inside the class. The significant difference between the four variables: that is, field, home, outside and inside class signify that pupils mostly (60%) play in the field. The minority, 9% of the respondents, indicated that they play inside the class. This is relatively important in that there are teachers who integrate play with teaching. The teacher in nursery class seems to understand the importance of play among children. Though her schedule does not have P.E. lesson allocation (see Appendix A), she utilizes her teaching time by incorporating play. It is worth noting that the time of play is greatly affected by the place of play. Observation shows that pupils engage more in play after classes since the most spacious play for play is the open ground outside school and on the wayside.
9. Does your teacher play with you?

In Figure 14, the highest percentage (60%) of the respondents indicated that their teachers do not play with them, while 40% said their teachers are involved in their play. This implies that teachers are not always involved in pupils’ play.

**Analysis of Teachers’ Questionnaire**

The following is the analysis from questionnaire 2; Appendix F, as analyzed in the order of the questions:
1. What types of play games do your pupils play?

Types of play

- Singing games: 27%
- Ball games: 27%
- Brikicho: 27%
- Kalongolongo: 10%
- P.E.: 9%

Figure 15: Types of Play

In Figure 15, the respondents indicated that pupils play brikicho, ball games and singing games, the three variables tied at 27% each, while 10% play kalongolongo and 9% P.E. This finding concurs with the ones cited earlier in Figure 11, where 30% of the pupils play brikicho. This means that the common type of play among the pupils is brikicho.

2. Where do the pupils play?

Table 3: Place of Play

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the play ground</td>
<td>5</td>
<td>83</td>
</tr>
<tr>
<td>In the class</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>
In Table 3 above, 83% of the respondents indicated that the pupils play outside in the field, while 17% indicated that they play in the class.

3. What role does play have on the pupils’ performance?

The respondents believed that play has a positive effect to a pupil’s performance. A number of them said: *It stimulates their thinking and reasoning*, while another said: *Play improves the performance of the pupils because as the children play, they share and learn more from each other especially in language development*. This implies that all the teachers of lower primary are in agreement that play enhances good performance. According to Erickson (Berger, 2005), when a child plays, excessive energy in the body is released, body tension relieved thus stimulating creative thinking and reasoning.

4. Do sick pupils play?

*Table 4: Do Sick Children Play?*

<table>
<thead>
<tr>
<th>Item</th>
<th>No. of Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Yes</td>
<td>4</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>

In Table 4 above, eighty percent of the respondents said that sick children do play, while twenty percent said they do not. This implies that according to the respondent some sick pupils play while others do not play. A child can be sick, downtrodden or stressed but he also has a
self-drive to play; he needs no encouragement to do so. This is why Berk (1999) states that play to a child is natural; it comes automatically.

5. In your opinion what stresses children?

*Figure 16: Types of Stressors*

In Figure 16, forty percent of the respondents felt that the cognitive stressors are the most common among pupils. Apart from cognitive stressors, the respondents also indicated that other stressors were psychological stressors, physical and social stressors each with twenty percent. This implies that the greatest stressor at HFHCRC were cognitive stressors which are related to academic issues. According to Riggio (2003), demand and pressure to perform brings
nervousness and exhaustion which results into poor quality of work. As the demand to perform 
mounts, the pupil becomes stressed.

6. How do you handle stressed children?

![Diagram showing intervention methods]

Figure 17: Intervention Methods

Figure 17, indicates the findings on stress management: 50% of the respondents use 
social support, 37.5% use guidance and counseling and the rest, 12.5%, offer affection. This 
implies the respondents mostly (50%) offer social support to the pupils when they are stressed. 
Teachers have very good listening skills and are patient in their practice (Mena, 2008). This 
helps them listen to the grievances of the pupils and offer them with encouragement and 
reassurance in life.
This finding tally with Atma (2010) who states that, when children are offered social support, encouragement and reassurance, it empowers them to develop a sense of being and boosts their self-worth and thus being able to cope with the stressful life events. Though, when a child is stressed by cognitive issues, for example low grades, heavy work load and no time to play, he needs the workload reduced, encouraged to reschedule his day and be given time to play. According to the stress management tips (2010), it is important to talk to the child about how he feels and the overloading or over-scheduling of activities. If he complains about it, it is important to discuss the pros and cons of quitting one activity. If quitting is not an option, it’s important to help him to reschedule and minimize his tasks.

Analysis of Support Staff’s Questionnaire

The following is the analysis from Questionnaire 3, Appendix G, as analyzed in the order of the questions:

1. Does the child have time to play? When do they play?

The respondents were in agreement that the children do have time to play. The child plays during the weekends in the afternoon. This implies that when the children go home they are not motivated or even given time to play until during the weekends. This finding contradicts Santrock (1994). According to him, children need to be stimulated and offered opportunities to play for it fosters cognitive, emotional, social and physical development of a child. But according to the respondents, the pupils do not play any other day apart from afternoon.
weekends. The researcher presumes that children are given afternoon weekends off so as to play, after they have finished their house duties.

2. What types of play games do your pupils play?

![Types of Play](image)

In Figure 18, the respondents indicated that pupils mostly (50%) play ball games. The other types of play are *brikicho*, singing games, P.E and athletics which tied at 12.5%. This denotes that according to the support staff, pupils mostly play ball games, though they also play *brikicho* and singing games.

3. Where do the children play?

All the respondents answered in agreement that the pupils play in the playground. This finding concurs with the findings from pupils (60%) and teachers (83 %). This implies that the children play mostly in the field.
4. After they have played, do they perform house duties better?

The respondents indicated that play enhances a child’s performance since the child is able to do his house duties in a much better way than when he has not played and has to work all day. This implies that play heightens and advances a child’s ability to perform his tasks. According to Mussen et al, (1984), a child improves his performance ability every time he engages in play.

5. Does play affect their relationships? Explain.

The support staff responded in support of the above question. Sixty-seven percent of the respondents said ‘play causes them to be friendly and good to each other’ while 33% said, ‘it refreshes and makes them relaxed and be able to cooperate with each other’.

This implies that all the support staffs are in agreement that play affects their friends positively. This finding concurs with Roopnarine et al. (2009), that a child develops emotional intelligence through play by building social skills. The child relates and respects his peers by behaving and conducting himself in a self-regulatory manner.

6. Do the children play when they are sick?

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>Yes</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5: Do Sick Children Play?
In the Table 5, above, sixty-seven percent of the respondents said that sick children do play, while thirty-three percent said no. This finding concurs with the ones cited earlier in Table 4 for teachers who said that eighty percent (80%) of sick pupils do play. However, 33% of the respondents believe that sick children do not play. The researcher presumes that the respondents being support staff, are most likely to respond no because they have observed that some children do sleep whenever they are sick.

7. In your opinion what stresses children?

***Figure 19: Types of Stressors***

Figure 19 above gives responses on the types of stressors found among children. The respondents believed that 50% of the stressors are due to psychological issues, and physical and cognitive having 25% each. The cognitive stressors that were indicated are poor performance in...
school and assignments, while the physical stressors are inadequate supply of the basic needs. The psychological stressors were bullying, heckling and harsh treatment. This implies that the common stressors at HFHCRC according to the support staff are psychological in nature. Though the respondents alleged that the children have cognitive and physical stressors, the magnitude is not relatively high in comparison to psychological stressors.

8. How do you handle stressed children?

From the findings the respondents were in agreement indicated that they offer social support to the pupils whenever they are stressed. This implies that the most preferred intervention method among the respondents was offering social support. According to Atma (2010), children develop self-worth and self-confidence by being offered love and reassurance. This concurs with the findings in Figure 19: since the common stressors are psychological; they need social support from the primary caregivers: someone to listen and encourage them.

Analysis of Leader’s Questionnaire

The following is the analysis from Questionnaire 4, Appendix I, as analyzed in the order of the questions:

1. What types of play games do your pupils play?

The respondent indicated that the pupils play ball games. This implies that according to the school director, pupils play ball games. The respondent gave this response since she only got involved in ball games, by purchasing the balls and hiring coaches. She appeared not to notice the unstructured play that children were involved in.
2. Where do the pupils play?

The respondent said that the pupils play in the field. This finding concurs with the ones cited earlier from the pupils (60%), teachers (83%) and all support staff who responded that they play in the field. This implies that according to the primary caregivers children play in the field. The researcher presumes that according to most primary caregivers, pupils play in the field.

3. What role does play have on the pupils’ performance?

The respondent pointed out that play activates a child’s mind and creates oneness among the pupils. This finding concurs with the ones for teachers as reported on page 62 and the support staff on page 67 who say that play foster social and cognitive development. This implies that the school director, teachers and support staff are in agreement with the idea that play enhances.

4. Do sick pupils play?

The respondent indicated that sick children do play. This finding concurs with the findings cited by the teachers (see Table 4) and the support staff (see Table 5). This implies that according to the school director and other primary caregivers sick children do play, but only a few that do not play. Play is part of a child’s world and he does it with a personal self-drive.

5. In your opinion what stresses children?

The respondent believed that children are stressed by psychological issues because she said ‘Children are stressed by being shouted at and pointing out their negative side publicly’.
This implies that according to the management of HFHCRC, children in the institution are stressed by psychological issues.

6. How do you handle stressed children?

The respondent believes that stressed children can be managed by offering social support. This implies that according to the administration, stressed children need to be encouraged by offering reassurance in life so as to overcome stressful life events. This finding is in agreement with the ones from the other primary caregivers. It seemed that at HFHCRC, the primary caregivers manage stress through offering social support.

7. In your view, would you suggest more time for play? Explain.

According to the HFHCRC administrator, she believes that the time allocated for play is enough. Below is a sample of her response:

“No! The playing time set aside for them is enough as they need to do other things involving their life.”

This implies that according to the administrator the stipulated time for play in the school as per the government’s directives is adequate. The guidelines from the government stipulate that each child has a right and needs to be offered time for play: during P.E. and games (Laws of Kenya; the Children Act, 2002). This finding explains the results in Figure 7, where the highest percent (44%) indicated that what they like most about school is learning. In normal circumstances, children like playing more than learning. The pupils are being made to understand that playing is not very important, but other things like learning are.

8. How do you facilitate play in your institution?
The respondent indicated that she facilitates play by purchasing play kits and providing coaches for the games. This implies that the administration provides for the balls and coaches for the ball games, but seems not to notice the unstructured play games by the children. This finding now confirms the results in Question 1 of the same questionnaire; that pupils play ball games.

Analysis of Research Instrument 2

Instrument 2 is the observational guide for pupils, Appendix J. This instrument was meant to observe the empirical behaviour of the pupils in regard to play and stress management and come up with interpretations in regard to the pupils and primary caregivers’ behaviours. The observation was done in seven days without use of any other instrument.

The following is the analysis from the observational guide as analyzed in the order of the questions:

1. Do the pupils have time to play?

From the observation made by the researcher and the research assistants, the pupils in most cases create their time for play. All timetables from class 1 to class 3 have allocation for P.E. lessons but the pupils hardly go out for them. The pupils play shortly after tea break and after lunch as they wait for their teachers to also come back. The researcher observed that immediately the teachers return from their breaks, the pupils rush back to class and learning continues.
2. Where do they play?

![Place of Play Diagram]

Figure 20: Place of Play

Figure 20, indicates that pupils mostly play outside the classes (87%), while 13% of the pupils play in the class. The researcher observed that pupils played outside the classes apart from the fifth day when nursery class pupils played in the class. Their lessons were integrated with play. This finding concurs with the ones cited on page 66 by the support staff, on page 70 by the school director and Table 3 by the teachers. This implies that pupils play mostly outside the class.

3. Do the pupils have the self-initiative to play? Explain

From the observation made by the researcher, she observed that though the pupils are rarely given time to play, they are self-driven when it comes to play. Whenever the pupils got
time to play they leapt with joy into the game. For example, one day the nursery class teacher was going on with her lessons as usual, only to realize that the pupils had turned out to be gloomy and withdrawn, with their heads placed on the table. She looked at their faces and sighed and said, “I think I have to change my strategy.” She was teaching on the clothes people wear. She decided to introduce kalongolongo, and have the pupils choose their character. At once all the faces beamed with joy and shouts of happiness filled the class. Every pupil was up and about calling the teacher for participation. This implies that a child can be down, stressed or even sick, but at the mention of play they have their own self-initiative.

4. What types of games do they play?

![Figure 21: Types of Play](image)

Figure 21; shows the types of play that the pupils engage in. Forty percent played brikicho, thirty-three percent hicho, twenty percent singing games and seven percent played ball games. This implies that most of the respondents (40%) play brikicho, though pupils engage in other
types of play. This finding concurs with the responses cited earlier about teachers (27%), in Figure 15, support staff (12.5%) in Figure 18, and pupils (30%), Figure 11.

5. What tools do they use for play?

The researcher observed that the pupils had no tools or apparatus for play from day one to day three. Day four was the only day when the pupils were observed using balls during games time. The ones who were not in the team, collected used plastic bags and old strings and made their own balls. This means the pupils were creative enough to improvise apparatus when it comes to play.

6. Observe how they play with one another, how are they relating, note every time they relate well, every time they fight, every time they solve their issues, every time they comfort each other in case one is hurt, and take note of any innovation or creativity that comes up during play.
Interaction During Play

![Bar chart showing interaction during play over seven days.]

**Figure 22: Interaction during Play**

Figure 22, displays how the pupils interacted during play for the seven days of observation. Below is Table 6 which indicates the observable behaviour of the pupils. The following observable evidences were rated as follows:
Table 6: Interactions during Play

<table>
<thead>
<tr>
<th>Interaction activities for the whole week</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Empirical Observable Evidence</td>
</tr>
<tr>
<td>Relating well <em>(playing fairly, respecting each other)</em></td>
<td>96</td>
</tr>
<tr>
<td>Fighting</td>
<td>16</td>
</tr>
<tr>
<td>Solving issues</td>
<td>80</td>
</tr>
<tr>
<td>Comforting each other</td>
<td>82</td>
</tr>
<tr>
<td>Creativity</td>
<td>93</td>
</tr>
</tbody>
</table>

Figure 22 and Table 6 portray the pupils’ interaction during play. Figure 22 shows the empirical observable evidence: no fights, respect to one another, playing fairly and accepting defeat. The observable evidence was 10 on day 1, day 2; the rate went to 12 and by the fourth day it had increased to 20. This implies that each time the pupils played their interaction level went higher unlike the previous day. The level of relating well, comforting one another and being in a position to solve issues together as peers also increased by the end of the week. As the pupils related well and became more empathetic, fights reduced drastically.

The researcher observed that towards the end of the seven days the pupils engaged more in play than in the beginning. This was due to the fact that the pupils did not have a lot of class engagements as it were in the beginning. This clearly indicates that academic – cognitive issues
are stressors and can partly be managed through play. During the exam time the pupils were
tensed and nervous about the schedules and the demand to perform well. This finding clarifies
why the pupils were aggressive and fought frequently, unlike the days when the exams were
over. The pupils became friendlier and could solve issues in an amicable manner.

According to Fahey et al. (2001) play leaves a child feeling relaxed with reduced
nervousness. Exposing a child to play regularly contributes to his body’s well-being and his
playfulness causing him to be more charming and re-energized after releasing the body strain and
tension.

Play raises one’s level of intelligence as stipulated by Eggen and Kanchak (2010). This is
well illustrated by the findings observed during the pupils’ play. The pupils came up with great
innovations with materials they found. For example, when some children could not be in the
team to play ball, they could not just give up. They collected used plastic bags and old strings
and made balls. When playing brikicho, it was easily noticeable how the pupils started being
creative. They tried to camouflage every time during play not to be noticed. Every round a child
had to think of new ways of hiding and tricking the opponent for their friend not to be found. For
the one who is searching for the playmates, he has to come up with ways that are not easily
identifiable by the ones who are hiding; by changing his voice, hiding or even tiptoeing. This
made play interesting and exciting for the players.

Play to a child comes naturally and whenever he interacts with his peers and the
environment, he is able to come up with his own inventions so as to enjoy the game. He feels a
sense of accomplishment and empowerment which boosts his self-worth, building positive
emotions which alleviate feelings of anxiety (Berk, 1999).
7. What words were they using?

The researcher observed that the pupils used vulgar language and harsh tone for the first two days. The words that were used are such as, *mjinga*, *kwenda huko*, others were words describing body parts. On the third day the language was a mixture of coarse and polite, the pupils were abusive to their peers, but they would apologize. Other instances, the pupils would use cautious and courteous words like, ‘excuse me, it is my turn to play *umebant*.’ This implies that the pupils were trying to vent out the excessive energy that is engraved within their bodies and the only possible way was by being verbal and other times they went to the extreme of fighting each other. The tension and the excessive energy were released each day as they interacted with their peers and the environment through play.

8. Observe the involvement of the teachers, support staff and the leadership.

![Teachers' Involvement in Pupils' Play](image)

*Figure 23: Teachers' Involvement in Play*
Figure 23, shows the how the teachers were involved with pupils’ play. An overwhelming majority of teachers (80%) were not involved in pupils’ play, while the rest 20% were involved. This finding concurs with the ones cited earlier in Figure 14, where the pupils responded that 60% of the teachers were not involved in their play. Though the percentages differ, they all portray the same image. The rest of the primary caregivers are hardly involved in the pupils’ play. The school director indicated that she facilitates the pupils play by buying balls, but the balls are only used once a week during games time. This implies that teachers were the only ones who were involved in the pupils play but on very rare occasions.


The researcher observed that most teachers do not incorporate play in teaching, exclusive of nursery class. In a few instances, the teacher incorporates teaching with some play activities which make teaching and learning stimulating for both the pupils and the teacher too. Excitement was evident on the face of the pupils whenever they integrate play with learning. The pupils were refreshed and could recall easily the things that they had been taught during that particular session. As the pupils came back to class the pupils who were gloomy lightened up and got involved in the class activities. Whenever the teacher reviewed what they had learnt before then, the pupils would easily remember since their minds and bodies were already refreshed.

During the field study, the researcher observed that the school and home were in two separate plots each surrounded by commercial buildings. The institutions did not have a playground, but there was an open ground next to the school, which belonged to another developer. This was the ground that the pupils used for play. The school administration informed the researcher that they have made plans with one of the developers who had not utilized his plot to rent it out to the
school for use during games time. The researcher also observed that the small children did not
go the field since it is almost a kilometre away. The researcher deduces that this might be the
reason why the teachers are rarely engaged in pupils’ play.

Summary

Pupils of HFHCRC are involved in minimal play due to the time allocation and support
that they are offered by the administration of the institution. The common types of play are ball
games and *brikicho* which are normally from a pupil’s initiative except during games time when
the games captain requests for balls. As observed by the researcher, the teachers are rarely
involved in the pupils’ play. This may explain why the pupils play after classes on their way
home. From the findings the pupils seem to have moderate or mild stress, as indicated by the
primary caregivers who assert that pupils do get stressed mostly by poor performance and
psychological issues. The primary caregivers seemed to be aware of the pupils stress and they
took deliberate measures to combat it. They managed stress by means of offering social support,
guiding and counselling.
CHAPTER 5: DISCUSSIONS, RECOMMENDATIONS AND CONCLUSIONS

Introduction

In this chapter, the findings of the data are discussed and subsequently, a summary and conclusion of the study is done. Recommendations are proposed and areas of further research are suggested.

Discussions of the results

The main aim of this study was to establish play and stress management among children at Heritage of Faith and Hope Children Rehabilitation Centre (HFHCRC). The questionnaires, interviews and the observational guides were to establish that the pupils of HFHCRC were stressed and which intervention methods were used to manage the stress. The information gathered has been used in the following discussions of play and stress management among children of HFHCRC.

One of the major findings in this study is the major types of play among pupils at HFHCRC. The types are: churumundu, kalongolongo, kati, ball games, singing games and brikicho (see Figure 11, 15, 18 and 21), but most pupils play brikicho. Brikicho stimulates a child’s body and mind by triggering enthusiasm and vigour that is generated during play. The vigorous exercise, focus on the game and desire to win causes the pupil to produce happy hormones which regenerates a child’s wellbeing hence relieving stress. This agrees with Woolfolk (1995) in that brikicho revitalizes, refreshes and excites one’s mind and spirit, thus relieving all body tensions and strains in a child. The children’s greatest focus is the task at hand -winning the game and not on the stressful circumstances.
The other major finding is about the play environment, which involves the place, self-initiative, time and people involved in the play. Pupils like to play, despite their present condition; whether sick or healthy. From the findings, all the pupils were in agreement that they like to play, while 80% of teachers, 67% of support staff and the school director also agree that sick pupils like to play. This clearly indicates that play to a pupil is natural and that he has his personal initiative to play. This finding concurs with Vygotsky (Berk, 1999), that children are explorers by nature and their play is intrinsically driven and personally directed, despite the circumstances surrounding him.

The pupils mostly play with their peers and rarely do they play with their teachers, support staff or the school director. This view is divergent from Mussen et al. (1989) who state that all caregivers need to be involved in child’s play, but it agrees with Bronfenbrenners’ theory (Woolfolk, 1995), which states that children interact better with peers and the environment during play. This is said to promote a positive and a nurturing effect for learning and capacity to perform different responsibilities much better.

Pupils at HFHCRC had to fix their own time to play in the midst of the tight schedule. The pupils play during tea break; the faster a pupil finishes his tea, the faster he goes to play. If one happens to be the last in the queue, he will have no time to play and has to go back to class. This explains why a child would respond that the time allocated for play is limited. After classes, the researcher observed that the pupils were expected to go home directly, without wasting time by the wayside. But since they missed play time, they sometimes played by the roadside, cautiously avoiding being noticed by the teachers.

It is worth noting that the responses from the school director, teachers and support staff in relation to play and performance and relationships were positive. The respondents said that play
helps children to relate well, become creative and perform assignments much better than when they have not played. As the leader said, ‘it activates the mind,’ meaning it rejuvenates the mind and the body, hence feelings of ease and freshness.

These observations tally with those of Roopnarine et al. (2009) in that during play a child develops intellectually; his mind is revitalized, reasoning capacity enhanced and thus he is balanced and relaxed physically. As each day comes by, he gets a grip of his everyday world socially and intellectually. As observed by the researcher, the child during play perceives what is best for himself and his peers and how to resolve emerging issues and is able to communicate with others as they learn together. The researcher observed a correlation between play and decrease in aggression. Children developed social skills during play; related well, respected each other and were empathetic whenever one was hurt. They also developed mechanisms of solving their own issues.

According to Eggen and Kanchak (2010), Vygotsky stipulates that pupils’ knowledge construction is greatly contributed by the social interaction with peers at play. Every time they interact with peers their intellectual capacity increases causing him to reason more critically during play. That is why he becomes empathetic and his reasoning allows him to appreciate and treat others better than when play time was limited. From the findings, the researcher observed that fights were too common at the beginning because of being stressed by exams, but as the week ended the pupils were not fighting repeated. The end of the examination allowed the pupils had more time to play. Secondly, this was a clear indication that the levels of stress were reducing as the children engaged more in play.

This study established that the more children play, the better their relationships become, learning how to respect one another and solving conflicts among themselves. This agrees with
Roopnarine et al. (2009) who note that a child develops emotional intelligence and social skills; helping them to behave and conduct themselves in a self-regulatory and confident manner. The more pupils play, the more they relate better with peers and the more creative they become.

Most pupils played after school sessions on their way home (see Figure 12 & 13). The researcher observed that the pupils were only given few minutes to play as they waited for their snacks to be delivered to school by pupils in upper primary. The pupils mostly played at the end of the day as they went home by the roadside or any open field that they found along the way. This implies that the pupils are not offered ample time to play and that a large percentage of them play after classes.

The key stressors among most pupils in HFHCRC were psychological and cognitive issues. The psychological stressors observed and reported were mistreatment, bullying, heckling and shaming pupils in public, while the cognitive stressor was poor performance. The desire to perform well causes distress and fear of failure leads to anxiety, hence causing a child to be stressed. This agrees with Melgosa (2001), who note that when a child is subjected to heavy demands he becomes stressed, since psychologically and physically he cannot cope. In any institution, due to the demand to perform well and change the vicious cycle of dependency, most pupils were made to believe that the best thing in life is learning. This is why when pupils were asked what they liked about school they said learning, but in reality it might not be so. From the findings of this study, though 44% mentioned learning (Figure 11), during observation, the researcher and the research assistants noted that the pupils loved play more than learning.

From the findings the researcher noted that the primary caregivers used several techniques of managing stress among pupils at HFHCRC. The techniques were: offering affection, guidance and counselling and social support. The preferred technique for managing
stress among the primary caregivers was social support. According to Kosslyn and Rosenberg (2004), social support from peers and other primary caregivers helps to manage stress and boost ones ego and self-esteem. The findings from the primary caregivers are divergent from Myers (1998) and Glass (2009) in that play relieves and prevents stress related issues. The findings show that the only preferred method that the primary caregivers at HFHCRC use was social support; offer love and reassurance. The above mentioned intervention methods is good but, they concentrate so much on the child by critically analyzing and probing him, causing him to always remember his stressful events or circumstances. This is unlike play where the child is free to express himself without being put on the spot. In so doing play releases anxiety and tensions hence effectively coping with stressful events and thus exhibiting more self-confidence.

Play to a child comes naturally and whenever he interacts with his peers and the environment and is able to come up with his own inventions, he feels a sense of accomplishment and empowerment which boost his self-worth, building positive emotions which alleviate feelings of anxiety.

Conclusion

Pupils need to be exposed more to play while on the other hand primary caregivers need to offer opportunities of play to the pupils. Play does not only foster holistic growth to a child, but it also contributes in stress management in children. According to Woolfolk (1995), play stimulates creative thinking, social skills and regulates one’s emotions, but it also eliminates dullness and connects a child in a beneficial way causing him to cope with his feelings and create new solving skills through play. For that reason, play relieves a child’s feeling of anxiety, tension and strain that might be engraved within. The study recommends maximum play and exercise to all pupils as a way of managing stress.
Recommendations

Recommendations for Teachers

1. Teachers have a very noble task of nurturing the young children. Their role is great in child development; they are role models and influence pupils by their lives and being available. Each direction that they take in teaching and nurturing the pupils should be deliberate and constructive.

2. Teachers need to be involved in the pupils’ play by motivating and offering playing opportunities to them. They need to take a deliberate action of integrating learning and playing as a way of relieving stress in classes.

Recommendations for Support Staff

The support staff need to intentionally choose to be involved in children’s play. It is important to expose a child to play at least every day to allow him relieve strain. In the early years of a child, play is very meaningful. As they chase each other, wrestle and dare themselves to attempt new tasks, they acquire new skills, ideas and values which are very crucial for each milestone. Their playfulness causes them to be delightful and rejuvenated, hence release of excessive energy, anxiety and tension.

Recommendations for School Administration

1. It is important for the school administration to ensure that the teachers adhere to the timetable, not only in teaching but also in playing. This helps the pupils to have breaks in between and the allotted time for P.E. and games is utilized in helping the pupils refresh before they engage in the next class session.
2. There is need for putting deliberate efforts in planning for a school playground, for child to use during play. As part of supporting children’s play the playground is very essential.

Recommendations for Ministry of Education

1. The Ministry needs to reduce some subjects from the curriculum of the lower primary; 8-4-4 system; to allow pupils have more time to play.

2. The Ministry of Education needs to formulate and enforce policies related to play. As discussed earlier, play is very important for children, especially lower primary, they need more time to play so as to allow them have feelings of renewal and low levels of strain each day. This can be possible if the Ministry allows the nursery and pre-unit pupils’ day in school to begin at 8:00am and end at 12noon, and that for lower primary to begin at 8:00am till 1:00pm.

3. Ministry of Education needs to enforce policies that govern the establishment of schools, to ensure that each school has a playground before the certificate of commencement is issued.

Recommendations for Further Research

The present study focused on play and stress management among children. The researcher recommends that the same study be done in the same locality of Mlolongo Town, Mavoko Municipality. The respondents should be from the same level; lower primary; but in a different institution. This will help in generalizing the findings to all lower primary pupils in private institutions.
REFERENCES


M’mbane, G. M., & Mwaniki, G. High flyers series: Nursery class and pre unit encyclopaedia. Nairobi: High Flyer Service & Publisher.


### APPENDICS

**APPENDIX A: TOOL FOR HFHCRC - TIME TABLE**

<table>
<thead>
<tr>
<th>Day</th>
<th>Morning 7:00-8:00</th>
<th>1st Lesson 8:00-10:30</th>
<th>10:30-11:00</th>
<th>2nd Lesson 11:00-12:45</th>
<th>12:45-2:00</th>
<th>3rd Lesson 2:00-3:30</th>
</tr>
</thead>
<tbody>
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<td>Monday</td>
<td></td>
<td>Language</td>
<td></td>
<td>Number work</td>
<td>Environmental</td>
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<tr>
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<td>Reading</td>
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<td>Teachings</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: HFHCRC Timetable for Nursery, 2010)
APPENDIX B: MAP OF ATHI RIVER
APPENDIX C: A SCALE ON LEVELS OF STRESS AMONG CHILDREN

This is a scale on levels of stress among children developed by the researcher. This scale helped in determining the level of stress among children at Heritage of Faith and Hope Children Rehabilitation Centre.

<table>
<thead>
<tr>
<th>Level</th>
<th>Signs</th>
</tr>
</thead>
</table>
| Level 1: Low | • Annoyed  
• Low concentration in class  
• Fights  
• New misbehavours in class  
• Feelings of being down  
• Verbal abuse  |
| Level 2: Mild | • Looking disturbed  
• Aggressive  
• Fights  
• Dizziness  
• Low concentration in class  
• Bullying  
• Tense on the muscles between shoulders  
• Quarrels  
• Frequent verbal abuse  
• Unruly behaviours  
• Disturbed nights  |
| Level 3: Strong | • Very aggressive  
• Frequent fights and quarrels  
• Agitated  
• No concentration in class  
• Pain on the muscles between shoulders  
• Frequent verbal abuse  
• Dizziness  
• Disturbed nights  
• Bed wetting  
• Thumb sucking  
• Repeated unruly behaviours |
APPENDIX D: QUESTIONNAIRE FOR PUPILS

My name is Rachel M. Muteti a student at Daystar University studying Master of Arts in Child Development. I am doing research on play and stress management among children. I would like to request you to take a few minutes to fill in this questionnaire. I here seek your consent to interview you. Thank you.

1. What do you like most about school?
   ………………………………………………………………………………………………

2. Do you like to play? …………………

3. For how long do you play?
   ………………………………………………………………………………………………

4. Who plays with you at school?
   ………………………………………………………………………………………………

5. Who is plays with you most?
   ………………………………………………………………………………………………

6. What games do you play?
   ………………………………………………………………………………………………

7. What time do you play?
   ………………………………………………………………………………………………

8. Where do you play?
   ………………………………………………………………………………………………

9. Does your teacher play with you?
   ………………………………………………………………………………………………
APPENDIX E: MASWALI KWA WANAFUNZI


1. Nini unachokipenda zaidi shuleni?

2. Unapenda kucheza?

3. Unacheza kwa muda kiasi kipi?

4. Nina hucheza nawe shuleni?

5. Ni nani hucheza nawe mara nyingi zaidi?

6. Ni michezo ipi unayoipenda?

7. Wewe hucheza wakati upi?

8. Wewe huchezea wapi?

9. Je, Mwalimu wako hucheza nawe?

……………………………………………………………………………………………
…………………………………………………………………………………………….
APPENDIX F: QUESTIONNAIRE FOR TEACHERS

My name is Rachel M. Muteti a student at Daystar University studying Master of Arts in Child Development. I am doing research on play and stress management among children. I would like to request you to take a few minutes to fill in this questionnaire. I here seek your consent to interview you. Thank you.

1. What are types of play games do your pupils play?
   ……………………………………………………………………………………………………
   ……………………………………………………………………………………………………

2. Where do the pupils play?
   ……………………………………………………………………………………………………
   ……………………………………………………………………………………………………

3. What role does play have on the pupils’ performance?
   ……………………………………………………………………………………………………
   ……………………………………………………………………………………………………

4. Do sick pupils play?
   ……………………………………………………………………………………………………

5. In your opinion what stresses children?
   ……………………………………………………………………………………………………
   ……………………………………………………………………………………………………

6. How do you handle stressed pupils?
   ……………………………………………………………………………………………………
   ……………………………………………………………………………………………………
APPENDIX G: QUESTIONNAIRE FOR SUPPORT STAFF

My name is Rachel M. Muteti a student at Daystar University studying Master of Arts in Child Development. I am doing research on play and stress management among children. I would like to request you to take a few minutes to fill in this questionnaire. I here seek your consent to interview you. Thank you.

1. Does the child have time to play? -------- When do they play?

2. What types of play do they engage in?

3. Where do the children play?

4. After they have played do they perform house duties better?

5. Does play affect their relationships? Explain

6. Do the children play when they are sick?

7. In your opinion what stresses children?

8. How do you handle stressed children?
APPENDIX H: MASWALI KWA WAFANYIKAZI


1. Je, watoto wana wakati wakucheza? …………… Wanacheza wakati upi?

2. Ni michezo ipi ambayo watoto hucheza?

3. Watoto hucheza wapi?

4. Je, wao huzitenda kazi zao za nyumbani vipi, baada ya kucheza?


6. Je, watoto hucheza wanapokuwa wangojwa?

7. Kwa maoni yako, ni kitu gani kunachowataabisha watoto?

8. Unawashungulikia vipi watoto walio na shinda?

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APPENDIX I: QUESTIONNAIRE FOR LEADERS

My name is Rachel M. Muteti a student at Daystar University studying Master of Arts in Child Development. I am doing research on play and stress management among children. I would like to request you to take a few minutes to fill in this questionnaire. I here seek your consent to interview you. Thank you.

1. What types of games do your pupils play?
                                                                                    ........................................................................................................................................
                                                                                    ........................................................................................................................................

2. Where do the pupils play?
                                                                                    ........................................................................................................................................

3. What role does play have on the pupils’ performance and relationships?
                                                                                    ........................................................................................................................................
                                                                                    ........................................................................................................................................

4. Do sick pupils play?
                                                                                    ........................................................................................................................................

5. In your opinion, what stresses children?
                                                                                    ........................................................................................................................................

6. How do you handle stressed pupils?
                                                                                    ........................................................................................................................................

7. In your own view, would you suggest more time for play for children? Explain.
                                                                                    ........................................................................................................................................

8. How do you facilitate play in your institution?
                                                                                    ........................................................................................................................................
                                                                                    ........................................................................................................................................
APPENDIX J: OBSERVATIONAL GUIDE FOR PUPILS

1. Do the pupils have time to play? .................................................................

2. Where do they play? ..................................................................................................

3. Do the pupils have the self-initiative to play? Explain

..............................................................................................................................

4. What types of games do they play .................................................................

5. What tools do they use for play?

..............................................................................................................................

6. Observe how they play with one another, how are they relating, note every time they relate well, ............every time they fight, ............. Every time they solve their issues...........

7. Note every time they comfort each other, in case one is hurt ..............................................

8. Take note of any innovation or creativity that comes up during play..........................

..............................................................................................................................

9. What words were they using?

..............................................................................................................................

10. Observe the involvement of the teachers.......... / support staff........ / leadership

..............................................................................................................................

11. Do teachers integrate teaching with play? Explain.

..............................................................................................................................
APPENDIX K: APPROVAL LETTER FOR FIELD RESEARCH FROM DAYSTAR

Date: March 24, 2011,

To Whom It May Concern

RE: Rachel M. Muteti
Dear Sir/Madam,

The above named is our student in the MA Child development programme. She has been in the programme since January 2009 and has successfully completed her course work. She is undertaking a field research on a topic, “The Role of Play in Stress Management Among Children at Heritage of Faith and Hope Children Rehabilitation Centre, Machakos”
As a School of Human and Social Sciences, we would be grateful if you will grant Rachel an opportunity to do this very important project for both her completion of her studies and for the future consumption of this project by the Kenyan public.

With thanks,

Yours faithfully,

Dr. Kimani Chege
HOD, Psychology, Counseling and Child Development

DAYSTAR UNIVERSITY
P. O. Box 44000 - 00108, NAIROBI.

24 MAR 2011
APPENDIX L: AUTHORIZATION LETTER FROM NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

REPUBLIC OF KENYA

NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telegram: “SCIENCE TECH”, Nairobi
Telephone: 254-020-241349, 2213102
254-020-310571, 2213123.
Fax: 254-020-2213215, 318245, 318249
When replying please quote

Our Ref: NCST/RRI/12/1/SS-011/389

Date: 13th April, 2011

Rachel Muteti
Daystar University
P. O. Box 44400-00100
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “The role of play in stress management among children at Heritage of Faith and Hope Children Rehabilitation Centre, Machakos” I am pleased to inform you that you have been authorized to undertake research in Machakos District for a period ending 31st December, 2011.

You are advised to report to the District Commissioner and the District Education Officer, of Machakos District before embarking on the research project.

On completion of the research, you are expected to submit one hard copy and one soft copy of the research report/thesis to our office.

P. N. NYAKUNDI
FOR: SECRETARY/CEO

Copy to:

The District Commissioner
Machakos District

The District Education Officer
Machakos District