UNIVERSITY OF NAIROBI
Department of Sociology and Social Work

EFFECTS OF LACK OF PLAY/ LEISURE ACTIVITIES AND SPACES FOR CHILDREN IN URBAN SETTLEMENTS: A CASE OF CHILDREN IN MUKURU NYAYO LOCATION IN STAREHE SUB-COUNTY, NAIROBI COUNTY.

MARGARET NYAMBURA NGO Theo

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September 2016
DECLARATION

The research project is my original work. It has not been presented for a degree in any other university

MARGARET NGOTHO

C50/60634/2011

Signed…………………………………… Date………………………………………

The research project has been submitted for examination with my approval as the university supervisor

DR. BENEAH MUTSOTSO

UNIVERSITY OF NAIROBI

Signed……………………………………..Date……………………………………
DEDICATION

The work therein are dedicated to my son Michael whose presence brings so much joy and purpose to live.
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ABBREVIATIONS AND ACRONYMS

AC       Area Chief
CI       Confidence Level
ECDE     Early Childhood Development Education
FGD      Focus Group Discussion
IIED     International Institute for Environment and Development
HT       Head Teacher
KNBS     Kenya National Bureau of Standards
KHRC     Kenya Human Rights Commission
KI       Key Informant
KII      Key Informant Interview
MOE      Municipal Education Officer
MSE      Micro Soft Excel
NGO      Non-Governmental Organization
TV       Television Set
PE       Physical Education
RTI      Railway Training Institute
SPSS     Statistical Package for Social Sciences
UN       United Nations
UNCRC  United Nations Convection on the Rights of the Child
UNCHR  United High Commission for Human Rights
UNDP  United Nations Development Programme
UNESCO  United Nations Education, Science and Cultural Organisation
ABSTRACT

In the past 20 years, urban areas in Kenya have had dramatic growth due to increased population growth and rural urban migration. Despite the fact that urbanism is used many times as an indicator of development, it has also led to development and growth of slum leading to congestion and lack of play spaces for children. Most informal settlements in the world and indeed in Kenya are congested as every space is coveted by many to meet their needs. Informal settlements all over the world are characterized by congestion and lots of crime and insecurity. Parents and other care givers feel insecure to let their children engage in unstructured play outside and prefer to engage them in indoor games. However, indoor games do not have the same magnitude of invoking creativity and innovation, cognitive development and knowledge of general societal issues as outside unstructured play. This study focused on Mukuru Nyayo informal settlements of Starehe Sub County in Nairobi County. The study sought examine both positive and negative impacts of lack of place spaces on child development in Mukuru Nyayo location, Mukuru Slums, Nairobi County. The specific objectives were to establish the extent to which unavailability of play space affects school academic performance of children in Mukuru Nyayo Location of Nairobi County, To assess the extent to which play activities influence creativity and innovation for children in Mukuru Nyayo Location of Nairobi County; To determine the influence of play activities on children’s general knowledge about society in Mukuru Nyayo Location of Nairobi County. The findings from this study may provide a useful depository of relevant data which is important to the government policy makers in relevant ministries. It could also be useful to the Vision 2030 Secretariat especially under the social pillar. The ministry in charge of education will also benefit from the findings and perhaps open up some of its government sponsored schools in the informal settlements to become child friendly centres which can offer space to children over the weekend and during the long vacation break. The scope of this study was the children from Mukuru Mukuru Nyayo location of Nairobi County. This study took a look at theories of child development, socialization and the Montessori theory of normalization. The total population was 1492 children(class five to eight) drawn from three public primary schools whose catchment areas include formal and informal settlements of Mukuru Nyayo location of Starehe Sub-County of Nairobi County. The sample size was 202 respondents i.e 14% of school registered children as suggested by Cooper and Schindler, 2003. Primary data was collected using questionnaires. At the same time secondary data was captured from school records. The findings indicate that type of play activities and where play activities take place (indoor/outdoor) affects academic performance of the child, general knowledge of issues in the community and creativity/innovation of a child. According to this study, higher proportions of children who engage more in outside activities performed better in their academics compared to those who engaged in indoor activities. Majority of the children who played in the field and those who had indicated that they played outside the house on the corridors scored a mean average of above 300 marks in their examinations at 52.2% (n= 48) and 49.2%(n=29) respectively while the majority of those who played in the house 61.5 % (n=8) were either average performers (scored between 200-300 marks) or scored below 200 marks in their academic performance. The conclusion was that availability/lack of playing space has negative effect to academic performance, creativity
and general knowledge of a child. The government needs to enforce implementation of policies governing urbanization in Kenya. This will ensure that public land is not grabbed by private developers who have no interest in adhering to controlled development as advised by the urban policies. Development partners need to support the government efforts of slum upgrading in the informal settlements. Such will ensure that there is proper planning of dwellings in the informal settlements to allow for many social amenities such as play spaces for children that are lacking. The researcher suggested further research to investigate play activities children who engage in indoor games involve themselves in, specifically on what video/games and other programmes children watch and their effect to children’s behavior. A comparative study with similar objectives on lack of play spaces for rural versus urban children would shed more light on this important topic of child development.
CHAPTER ONE: INTRODUCTION

1.0 Introduction

The covers background information of study including the national and the global context of about the topic of the study and some information about the study area that is, Mukuru informal settlement in Nairobi County. The chapter also covers the issue proclamation, motivation behind the study, ponder goals, and investigate inquiries, importance and extent of the study. Advance, the part additionally highlights meaning of wordings utilized as a part of the study, restrictions of the study and the presumptions.

1.1 Background to the Study

The confirmation recommends that present day, urbanized ways of life frequently result in an example whereby kids are considerably more intensely planned amid their recreation time than was the situation in the later past. Lester and Russell (2010), in a noteworthy survey of research inspecting kids' contemporary play openings around the world, give an exceptionally helpful and convincing audit of the ecological "stressors" in cutting edge life, connected with expanding urbanization, which affect adversely on youngsters' play encounters. Inside this, they make the telling point that a large portion of the world's kids will soon be living in urban areas.

In the most recent 20 years, urban regions in Kenya have had expanded development as a consequence of quick populace development and provincial urban relocation (B. Cohen 2006). In demographic and financial writing, urbanization is much of the time utilized as a marker of improvement. Condition of the world report of 2009, demonstrates that the more created nations are exceedingly urbanized nations while the slightest created nations are all low on
urbanization. In any case, while the level of urbanism and development in created world is practically static, in the creating scene, urbanization is happening first and it is not arranged. The high populace is as an aftereffect of country urban movement and high fruitfulness in third world and additionally provincial to urban relocation. Ever, the year 2009 is uniquely stamped.

Investigations of urbanism in the less created nations, in this manner, negate that there is a decent relationship on urbanization and improvement and deliver the over urbanization proposition. As per this postulation the right away less created nations are more urbanized than the created nations were at a similar level of advancement and the nature of urban populace in the creating nations is exceptionally poor. In the less created nations, three things were checked to be specific; quick development of vast urban areas, division of city into two unique parts, one advanced and created, and alternate as conventional and poor, overpopulation in the urban zones, especially substantial urban areas, prompting to formation of huge squatter settlements and ghettos.

This marvel produces city power; and this is a circumstance in which substantial urban areas have lopsidedly more populace than the littler urban areas and towns, making them unmanageable by city organizers and requiring extensive ventures to keep them liveable.

Unplanned urbanization has been a great challenge and is characterized by among other things lack of drinking water that is safe and sanitation that is not wanting, pollution, diseases and congestion especially in urban slums.

According to the global annual report of 2003 on the challenges of informal settlements, almost one billion people or 32% of the global population lives in the informal settlements, many of them in third world countries and their population is bound to increase in future. Indeed, the poor person was lived in the rural areas but today, poor people live in the urban informal
settlements. Most of the urban growth is happening in the poor areas of the towns because of migration into urban areas and increased fertility among the poor people in towns. The trend has resulted in proliferation and wide spread growth in the informal settlements of the third world countries.

Kenya’s growth on informal settlements has increased over time. As brisk urbanization brings about critical damage, the progression and improvement of ghettos has in like manner extended. Around 34% of Kenya people lives in the urban districts and of this, more than 71% is limited in easygoing settlements (UN-Habitat, 2009). Kenya's yearly easygoing settlements improvement rate of 5% is the most dumbfounding on the planet and is likely going to twofold in the accompanying 30 years (UNDP, 2007). Nairobi Kenya, which is the capital city is one of the greatest in Africa, is a focal point of trade and business in the region. The city's people has gotten to be during the time from 11,500 occupants in 1906 to 3,690 097 million people in 2009 (KNBS, 2010) with the larger part the city's region and under 5% in neighborhood (Mitullah, 2003). As demonstrated by the United Nations Center for Human Settlement (UN Habitat), casual settlements in Nairobi are congested, having four to six individuals living in a solitary room. These houses are near each different as administrations are extremely fundamental. The rate of mortality and grimness are additionally very high. Reports from the city power express that 1.6 million (out of Nairobi’s evaluated populace of 3.5 million) live in ghettos. A report by UNICEF (2012) on kids in a urban world, Nairobi ghettos cover 5% of the land yet are home to more than 60% of the Nairobi city populace. The slums are characterized by insecurity, high population and unhygienic conditions, over crowding, insecurity of tenure among others yet; they are home to thousands of children. This has led to increased poverty and social exclusion. According to the International Institute for Environment and Development (IIED, 2001), the problem is unplanned growth and not growth.
As time progresses and 2030 approaches, it is estimated that 5 billion of the global 8.1 billion population will live in cities. Approximately 2 billion of these people will live in the informal settlements mostly in Africa and Asia and will lack safe drinking water and poor sanitation where crime and despair will be paramount.

Mukuru is one of the many fast growing informal settlements in Nairobi. The settlements are home to over 70,000 people, where majority remain unskilled, uneducated and thus unemployed (Alifya Noorani of press TV-Informal settlers in Nairobi slums). The situation is worse for children who do not get space to play. Although child’s play has many benefits, the child in the informal settlement is denied this right to development. Many children especially over the weekend and in the evening, when out of school do not have the privilege of enjoying free space to play and engage in out of school activities.

Researches done on play suggest a positive relationship amongst play and psychological improvement. Play has been seen to influence understudy learning and scholastic execution. Play is believed to enhance consideration and perception, states of mind, inventiveness, creative ability, memory, thus numerous different aptitudes basic for learning. Youngsters who play improve in school. Youngsters who play build up the subjective abilities that are emphatically connected to learning and scholastic execution (Sibley, Benjamin, Jennifer and Etnier 2003)

Space is the single most important resource in the informal settlements. Mukuru slums has many people living in tiny areas characterized by iron huts close to each other and separated by small paths. Every space id need by many people, small and great to do business, build a house, play or relief one self.
Children in the informal settlements do not fully enjoy their rights to development which also entails creativity and stimulation through play and recreation which are essential for holistic growth of an individual. However, these precious hours that are not noticed by policy makers and their disappearance is not felt by them. The absence are however noted and felt by young people. The public does not recognize their importance also and this is reflected by the fact that relevant data on the same is very limited. At the point when open assets are low, games, amusement and social projects and establishments are regularly among the main losses (World Youth Report 2003).

There are a host of development initiatives that are on-going in the slum areas in Mukuru. However as good as the services are, possibly the best gift the development partners could offer to children is space. This study seeks to examine how unplanned urban growth affects child development. Specifically, the present study will attempt to find out from the children, caregivers, stake holders and local community the effects of lack of play space on academic performance, creativity and innovation and general knowledge about society among children in Mukuru Nyayo Location of Nairobi County.

1.2 Statement of the Problem

Studies done on the importance of play activities in child development tend to indicate that where children have adequate space to engage in outdoor play activities, they perform well in school. Creativity and innovation have also been associated with unstructured play which allows children to try out new things through trial-and-error methods. Lack of outdoor play activities for children due to limited space has led to a state of idleness as children are not fully engaged in games and other activities. Where play spaces are inadequate or lacking, some
children may seek and or find refuge in cinema dens/videos or other venues where they get introduced into illegal or antisocial behaviour activities which impact negatively on their development.

However, some children who hail from the informal settlements have been found to perform very well in their studies despite growing up in environments that are characterised by many social ills including congestion. A number of children have also been found to be very creative and innovative having talents that are admirable while others have exhibited great knowledge of general societal issues. Most informal settlements areas in the world and indeed in Kenya are congested as every space is coveted by many to meet their needs. This study focused on Mukuru Nyayo informal settlements of Starehe Sub County in Nairobi County. The study aimed at finding out to what the extent to which availability or lack of play spaces affect a child’ development in as far as academic performance, creativity/ innovation and knowledge of societal issues are concerned.

1.3 Purpose of the Study

This study had the purpose of examining both positive and negative impacts of unplanned urbanisation on child development in Mukuru Nyayo location, Starehe Sub-County, Nairobi County. There has been insurgence of informal settlements in urban centres in many countries of the world. These informal settlements are characterised by limited space posing immense strain on available social amenities, among others. Playing spaces are some of the social amenities that have been sacrificed in the quest for limited land for dwellers in these informal settlements. This research wanted to examine the effects of unplanned urbanization which lead to lack of paly spaces on child development, with specific reference to Mukuru Nyayo location, Nairobi County.
1.4 Research Question

What are the main effects of Lack of Play/Leisure Activities and Spaces for Children in Urban Settlements?

1.4.1 Specific Research Questions

The study outlined three questions, namely;

i. What extent does availability/lack of play spaces affect children’s academic performance?

ii. How does availability of playing space influence a child’s creativity and innovation in Mukuru Nyayo Location, Nairobi County?

iii. What is the influence of play activities on children’s general knowledge about society in Mukuru Nyayo Location of Nairobi County?

1.5 Broad Objective of the Study

The major objective of this research was to assess the main effects of Lack of Play/Leisure Activities and Spaces for Children in Urban Settlements: a case of Nyayo Location Starehe Sub-County.

1.5.1 Specific Objectives of the Study

The study sought to pursue these objectives:

i. To establish the extent to which lack/availability of play activities affects academic performance of children in Mukuru Nyayo Location of Nairobi County;

ii. To assess the extent to which play activities influences creativity and innovation for children in Mukuru Nyayo Location of Nairobi County;
To determine the influence of play activities on children’s general knowledge about society in Mukuru Nyayo Location of Nairobi County.

1.6 Significance of the Study

Planned urbanization restricts the mushrooming of informal settlements and ensures that there is space for children to exercise outdoor play activities. Consequently, in the absence of adequate play space, children confine themselves in indoor activities like excessive watching of the television or visiting video dens/play stations which affects their academic performance, creativity and innovativeness as well as their general knowledge about society.

The findings from this research provide a useful depository of relevant data which is important to the government policy makers in relevant ministries. It is also useful to the Vision 2030 Secretariat especially under the social pillar whose vision. The ministry of education will also benefit from the findings and perhaps open up some of its government sponsored schools in the informal settlements to become child friendly centres which can offer space to children over the weekend and during the long vocation break.

The research also provides useful data for both academicians, researchers and development practitioners in the field of child and urban development. It also identifies other research gaps to be pursued.

1.7 Scope and Limitations of the study

The study was conducted in Mukuru villages of Mukuru Nyayo location of Nairobi County. The respondents were drawn from three public primary schools whose catchment areas include informal settlements of Mukuru Nyayo location and surrounding formal settlements. This
ensured that children from both the estates (formal settlements) and informal settlement are interviewed by the researcher. The study focused on primary school level children between the ages 10-15 years old and in upper primary school. Since child development has many facets, the researcher focused on three critical facets of child development; namely academic performance, creativity and innovation and their general knowledge about society.

The limitation of the study is the fact that people in Mukuru area are so used to their environment such that they may not view availability/lack of play space as a primary need for their children. This is because pressing issues are meeting their basic need i.e. food, shelter, and clothing which are viewed more important than children right to play and engage in other leisure activities which is useful to their holistic development.

1.8 Assumption of the Study

The following assumptions were made in relation to the study: The teachers would cooperate and allow data collection to be carried out in their schools. It was also assumed that the children targeted by the study would be available to participate throughout the study process. Specifically, it was hoped that not many children staying in the slums had just moved into the slums but that most of them had been born and raised up in the slums.

1.9 Definition of Terminologies

The following is a highlight of meaning of terminologies as used in this study:

**Child**: any person below the age of 18. For the purpose of this study, a child is specifically those attending some schooling and is below 18 years of age.

**Care givers**: persons responsible for the maintenance and wellbeing of children in all contexts.
**Child development**: change in the child that happens after some time. Change takes after an efficient illustration that moves towards more conspicuous multifaceted design and updates survival. With the end goal of this study, tyke development indicators are school academic performance, creativity, innovation and level of knowledge of general societal issues.

**Play Space**: is an area that is free where children can engage in outdoor unstructured play activities

**Socialization**: implies by which human infant youngsters begin to pick up the aptitudes critical to execute as working people from their overall population and are the most convincing learning process one can involvement.

**Normalization**: As per Montessori, the wonders of standardization alludes to the procedure of solid advancement whereby youngsters consistently and uninhibitedly pick valuable exercises based upon their interests, which then prompts to their improvement of the limit focus.

**Slum**: Also known as informal settlements are temporary housing in urban areas; usually not build up on formally acquired land. Slums are characterized by insecurity, high population and unhygienic conditions, overcrowding, insecurity of tenure among others yet; they are home to thousands of children.

**Urbanization**: Urbanization is the procedure by which substantial quantities of individuals turn out to be for all time moved in moderately little regions, framing urban areas.

**Unplanned urbanization**: Unintended process, unsupervised and sudden emergence of concentration of people in a given place especially due to some perceived pull or push factors in such areas or areas of origin respectively. Unplanned urbanization is usually caused by the poor, who appear to lean toward urban lack of sanitization to provincial sadness and relocate to the downtown areas and urban periphery making ghettos. For the purpose of this study,
unplanned urbanization is used to mean, mushrooming of informal settlements resulting to lack of designated play spaces for children.

**Unstructured play activities:** These are performances / games and activities that are not adult directed. They are initiated by children who come up with rules of the games if in group play activities.

### 1.10 Organization of the Study

The study is dealt with into five sections. Section one contains the establishment information, the declaration of the issue, the objectives of the study and research addresses, the giganticness of the study, degree of the study, restrictions and the relationship of the study. Section two has the hypothetical edge work, experimental writing survey and the expository audit that shows the crevices to be filled by the study discoveries. Part three is the technique, which subtle elements the exploration plan, the objective populace, the specimen size and choice, the information gathering strategies and instruments, and the information examination and presentation strategy. Section 4 contains the examination of information gathered through the polls, key witnesses’ meets and centered gathering discourses in light of the exploration questions. Part five is the conclusions, outline of the discoveries, reaction to the examination inquiries, proposals and recommendations for further research.
CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Introduction

This chapter covers importance of play to human beings, accessibility of play space on youngsters’ school execution, accessibility/absence of play exercises on inventiveness and development, impact of play exercises and space on kid's general information on societal issues. Additionally this section covers the hypothetical casing work. It additionally clarify the basic ideas inside the examination theme.

2.2 Importance of Play to Human Beings

Play is vital to tyke advancement since it adds to the intellectual, physical, social and enthusiastic prosperity of youngsters and youth. Play is so vital to ideal youngster advancement that it has been perceived by the United High Commission for Human Rights as a privilege of each kid. The study looked at both theoretical and empirical literature in the review of literature.

Progressively, the accessible writing affirms that play is basic to both human advancement and to our survival as an animal varieties. Play has for some time been known to have a noteworthy part in building correspondence and social aptitudes, tasteful, thankfulness, innovativeness and critical thinking, and researchers have additionally highlighted its part in the improvement of the adaptable and non-particular conduct vital for our species’ survival as biological and different conditions change.

Be that as it may, later concentrates, likewise affirm that play is a critical consider mind and muscle improvement, in the creation and advancement of our awareness and our capacity to
think brilliantly and in the production of our subjective association. It is crucial to the improvement of lack of care, social charitableness and the ownership of a rundown of social practices that empower the individuals who play to handle stretch, especially embarrassment and feebleness and have the capacity to move with punches connected with every day associations.

2.3 Availability of Play Space on Children School Academic Performance

As indicated by Sattelmair and Ratey (2009), there is developing confirmation that strenuous physical movement is solid for understudies as well as enhances their scholarly execution. There is much dialog both in the developing assortment of play writing and openly talk with respect to the part of physical action in the sound advancement of youngsters. Learning, memory, center and slant all have a vital bearing on understudy's scholarly execution. In addition, since kids and youths take part in physical movement principally through physically strenuous play, an appraisal of the association between physical activity, insight, and academic execution helps us better esteem the piece of play in solid tyke advancement.

This holistic development however cannot take place in a vacuum. Any physical and strenuous activity requires space to mingle and move around. In Nairobi informal settlements, space is simply not there. Houses are congested and the only free spaces are walk-away which also serve as drainage systems directing all waste to rivers. For smaller children who have not attained the school going age, the situation is worse for them as the only space they have is inside their houses which by standard measure 10x10 metres. Many of the day care centres and nursery schools in the slum (which most parents prefer due to their proximity from their homes) have no space to play or conduct any physical activities with the children.
Physical movement and physical wellness have been specifically related with enhanced scholarly execution. A cross-sectional investigation of school-age kids in Iceland revealed that, joined, body mass rundown and physical development uncover up to 24 for each penny of progress in academic achievement (Sigfusdottir, 2007). A cross-sectional study coordinated in 2002 by the California Department of Education demonstrated a strong relationship between physical wellbeing and insightful execution.

2.4 Physical Education and Academic Performance

Physical instruction in schools shows a profitable chance to advance physical action among populaces of school-matured kids. A few studies have surveyed the connection between physical instruction and scholastic execution. Ahamed et al. (2002) found that a sixteen-month, Canadian, in-school physical movement mediation neither expanded nor diminished state administered test scores contrasted with control schools. Adding physical training to class educational program has beforehand been associated with unassuming upgrades in scholarly execution (Dwyer 1983; Sallis 1999; Dishman 2000). Shephard et al. (1997) found that decrease of 240 minutes for each week of scholarly time, supplanted with expanded time for physical instruction, prompted to higher scores on institutionalized math examinations.

Then again, a late center school mediation consider observed that adding physical instruction to class educational programs did not enhance reviews or state administered test scores. Rather, it was incredible practice performed outside of school that emphatically anticipated evaluations. Strangely, the physical instruction classes under scrutiny included, by and large, just nineteen minutes of enough incredible physical action in a fifty-five moment class (Coe, 2006). The creators recommended that accomplishing movement gauges for youngsters will
emphatically influence scholastics, though bring down level, for example, those in this study, if little advantage.

Plainly, the nature of physical instruction is fundamentally imperative to psychological and scholarly results. Physical action predicts higher scholastic execution, however physical training with deficient levels of movement does not. This recommends confirm relating physical instruction to scholarly results has been constrained by the nature of the projects under scrutiny. Hence, it is likely that the potential scholarly advantage of every day, quality physical training has been thought little of. Creature and human research principally underpins the significance of oxygen consuming movement to upgrade subjective capacity. Those physical-instruction classes that neglect to empower adequate span and force of high-impact action are probably not going to make prominent upgrades in wellness, wellbeing, weight control, or scholastic accomplishment.

Physical movement shows a mental worry to the cerebrum that, when adjusted with recuperation, advances adjustment and development, jam mind work, and empowers the cerebrum to react to future difficulties (Mattson, 2004). Physical movement has been appeared to improve learning and memory in creatures (Vaynman, 2004) and to defer or counteract intellectual decrease in elderly people (Kramer 2004). Contemplates demonstrate that practice benefits learning, memory and intellectual capacity from numerous points of view. Prove from creature examine proposes that practice causes net basic and vascular pliancy (or versatile cerebrum adjustments), improves mind movement, and balances critical neurotransmitter frameworks.
Physical action and physical wellness have been straightforwardly corresponded with enhanced scholastic execution. Another cross sectional study including eight thousand school youngsters found that scholarly evaluations were fundamentally corresponded with practice levels and with execution on physical wellness tests (Dwyer, 2001). Recreational exercises for Children are an imperative part of the instructive experience for some kids. After-school programs and extracurricular exercises can offer our childhood a protected and directed shelter and in addition an opportunity to learn new abilities, for example, struggle determination, get ready for an effective profession, enhance evaluations, and help them to develop to be better grown-ups. It's additionally an incredible approach to make companions. Recreational Activities can be extraordinary for learning collaboration and how to regard others, which are some life abilities that all children and grown-ups utilize day by day.

In spite of the fact that younger play is accommodated as a strategy for learning and that learning organizations need satisfactory play ground to empower students to effectively take part, amusement and relaxation exercises are for the most part missing particularly in numerous group schools in Mukuru Kayaba Slums because of clog.. Promote, amid school occasions, at night and on ends of the week, youngsters in the ghettos particularly those in lower elementary school need space for play and recreational exercises. For this situation, they end up taking part in inside relaxation exercises like staring at the TV and recordings. This has prompted to mushrooming of video booths and "play stations" which assume the part of keeping youngsters occupied at night, throughout the end of the week and when kids are on school occasions. In any case, the data got to in these spots is not rebuffed and may contain scenes which are not appropriate for youngsters. Advance, a web hunt down "gamming compulsion" yield arrangements of physical and mental manifestations from dry eyes and carpal passage disorder
to "issues with school or work" offered as characteristic of issue use behaviour (French, 2002; Orzack, 2004).

Fine-engine and control aptitudes are produced while a youngster assembles and hues a sign for a terrace tree house. Whenever tossing and getting a ball, a kid hones deftness and the capacity to get a handle on. The tyke's subjective limit is upgraded in amusements by experimentation, critical thinking, and work on separating amongst important and immaterial data. Play requires the youngster to settle on decisions and direct exercises and regularly includes procedure, or arranging, to achieve an objective. Youngsters hone and create dialect abilities amid play. An a piece of cake with words, including tiresome diversions and rhymes that go with recreations of tag, can help youngsters ace semantics, rehearse unconstrained rhyming, and encourage word play. For a kid in ghetto, imagination and advancement abilities could be available, however the apace to practice the technique, to give it a shot through experimentation is deficient. Spaces for sing melody diversions, for tag of wars and numerous different exercises are not accessible for these kids.

Stuart (2009) notes in concentrating on what happen in the cerebrum amid play; analysts into creature play have given confirmation of play-mind connections that likewise apply to people. They have found that play emerges from ranges of the "antiquated" mind (that all warm blooded animals have) that are sorted out for survival, and they stream "upward" into higher concentrations, activating collaboration with nature. This stream is similar in individuals and incorporates our hands, which are so lavishly connected with our brains, and a basic way we interface with the world. In puberty play, it is a shielded assumption that youngsters require more than a two-dimensional screen to get competency. Kids require free, hands-on play that is youngster dealt with, to help their potential. Nothing lights up a child's mind like play.
Play is crucial to the educational environment. It ensures that the school setting deals with the social and enthusiastic change of adolescents and moreover their scholarly headway. It has been seemed to help adolescents adapt to the school setting and even to redesign children's learning status, learning hones and basic intuition capacities. Have regarded effect of youth that offers adolescents fundamental developmental points of interest and watchmen the opportunity to totally attract with their children.

Kids grow mentally through play. For instance, they may hit a versatile thing making it move. In this they find out about circumstances and end results, in posting boxes, they find out about space and size, astounds empower them to find out about shapes, sizes, number and sorting toys empowers kids to find out about number and groupings and making up their own particular recreations which is imagination. Youngsters likewise create engine aptitudes (Physical) abilities when they get little things, when they push and force toys, when they utilize colored pencils or paint, hit balls, compose and play PC recreations.

In any case, numerous strengths are interfacing to viably diminish many kids' capacity to receive the rewards of play. As we endeavor to make the ideal improvement milieu for kids, it stays basic that play is incorporated alongside scholarly and social-enhancement openings and those protected situations be made accessible to all kids. Casual settlements require acknowledgment as lawful parts of the city so as to pick up support and far reaching projects and activities to provide food for the necessities of kids. These ghetto overhauling projects ought to agree to government's commitment in connection to play as tamed in the Children's Act of 2001 and in the UNCRC Article 31 which perceive the privilege of a tyke to play and relaxation.
2.5 Availability/Lack of Play Activity on Creativity and Innovation

According to Olfaman 2006 in his writing on “The wisdom of play: How kids comprehend the world”, play is crucial method of learning. A newborn child fun loving chattering shows them to make every one of the sounds expected to talk their local tongue or whatever other dialect. At the point when youngsters play amusements of their own creation or even sound diversions like find the stowaway, they regularly make up their own standards with respect to who is to be. Along these lines, youngsters realize what Jean Piaget called "common regard". Common regard implies when one tyke's makes a govern, the others take after. Be that as it may, the run should thusly take after the principles made later by another youngster. Its lone when kids take part in self-started play of this kind that they procure a strong feeling of common regard.

Play for youngsters is an approach to find out about self and the world through self-made encounters. When we value the imperative pretend serves in a youngster's finding out about self and the world, we give kids time and opportunity to take an interest in the self-began play that is the surest way for them to completely understand the majority of their learned person, passionate and social potential.

2.5.1 Importance of playing outside

Outside play likewise empowers innovativeness and creative energy and gives chances to coordinated effort and critical thinking with associates. The outside environment can turn into a critical part of the everyday educational programs, supporting engine ability advancement as well as proficiency, dialect, culture, math and science learning. Keeping youngsters inside for the vast majority of the day prompts to less dynamic play, and more organized, grown-up coordinated action. Outside play gives imperative chances to investigate the characteristic world through their faculties and the outside present another universe of sights, sounds, smells,
and material encounters. Whenever outside, kids are more able to take part in incredible play, reinforcing their muscles, hearts and lungs.

Lamentably, there is minimal distributed direction accessible to early care and training programs about how to outline compelling open air spaces more so in the informal settlements areas where free space is limited. A survey of current writing and formatively fitting practices for youthful kids uncover constrained direction for guardians and guardians in giving satisfactory open air exercises to exceptionally youthful kids.

2.5.2 The Value of Boredom

Incidentally, it is an absence of outside incitement and isolation that encourages imaginative play. Frequently, a youngster will at first see this as "fatigue." The kid looks for structure and association from guardians or instructors — "I'm exhausted. I don't have anything to do." And very regularly we bounce in too early and commit the error of making the tyke's exercises for him. We have to figure out how to give youngsters a chance to end up exhausted, in light of the fact that it is through this transient time of under-incitement that their interior world can wake up. This procedure is encouraged by isolation, the chance to be separated from everyone else and without an excessive number of outside boosts.

At the point when a kid can't sit in front of the TV, play computer games, and is not taking part in a planned "remotely engaged" action, she will turn out to be all the more inside centered. Her creative energy and imagination assumes control. She will discover and make "toys" from what is accessible, sticks get to be dolls, dolls get to be sovereignty, and these individuals from "eminence" get to be performers in the a piece of cake, rocks get to be squares, pieces get to be dividers, and dividers make manors.
2.5.3 Playtime Inhibitors

The essential inhibitor of play for American youngsters is TV. Sitting in front of the TV is a latent, non-innovative time. All things considered, the kids watch 28 hours of TV every week all taking time from social cooperations, unique considering, imagination, and play. The utilization of this latent medium in the classroom ought to be extremely restricted. A hour of "instructive" TV does not have an indistinguishable power from a hour of innovative play.

The second significant inhibitors of play are grown-ups. The kids are overtired and overscheduled. We wake them before the sun rises and regularly keep them booked in school, after-school projects and lessons, and games well into the night. They have little uninterrupted alone time, and excessively couple of chances for non-organized play.

For youthful youngsters, play is a major method of learning. A baby fun loving prattling shows them to make every one of the sounds expected to talk their local tongue or any lingo. A child finds that when you impact the metal spoon or a wooden spoon, you get two through and through various sounds. A tyke's learns through hair-raising play that a couple children are bossy, others shy. At the point when kids play amusements of their own development or even customary diversions like find the stowaway, they regularly make up their own particular standards in the matter of who can be "it" and what the breaking points of the amusement are. At the point when individuals welcome the critical pretend serves in a kid's finding out about self and the world, we give adolescents the time and opportunity to take an interest in the self-began play that is the surest course for them to completely understand the majority of their educated person, passionate and social potential (Elkind 2009).
As per Lewis (2009), in his distribution on the knowledge of play, play is a demonstration of creative energy. At the point when kids go outside to play, what is initiated is an alternate type of knowing. In a more single types of play-be it a child playing in a sandbox, sprucing up, or having a talk with a doll-the innovative vitality is right now, through its own specific resources, at play. It is making, envisioning, performing and bringing youths into space of their one of a kind knowing and comprehension. For the kid, both play and envisioning are instinctual limits. They are significant to kid's feeling of prosperity, as well as, if empowered and bolstered, the way to imagining potential outcomes, finding new thoughts, augmenting encounters, and addressing and communicating the fragile limits of the known and the cloud. Possibly it is a bit of the virtuoso of youth to consolidate play and imagining into one reliable development a course in which the life of our minds and our bodies are in return with each other.

The open-completed characteristics of the consistent world stimulate play far wealthier than what children will ever find in made toys that require them just to push gets or take after pre-set principles. In like manner, the gross motor play youths need to twist up physically able ascents all of a sudden and joyfully in the outside. The typical world offers space to run, convincing opportunities to climb, and uneven scene to be arranged. Unfortunately, adults want to guide children in their play activities. Creativity and innovation is lost when we buy toys for children, instruct them on where to be, what to do and how to behave, and what game is appropriate or inappropriate. For children in the informal settlements, the care givers are even stricter due to the nature of their settlements, the congestion, the drainage spillages, the dirt and many more ills associated with the areas.

In innovative play, youngsters utilize questions and toys to make stories, fabricate developments, and participate in a dreamland. The utilization of materials in adaptable and
innovative ways instructs youngsters to be adaptable and inventive scholars with theoretical thoughts and ideas (Wardle, 2009). The estimation of open-finished and imaginative play is that it empowers youngsters to investigate an assortment of innovative employments of regular materials and situations, challenges routine approaches to utilize materials, and gives kids a feeling of force, control, and authority of their own learning. Intellectual, emotional, and interpersonal process in play are identified with and encourage versatile capacities, for example, inventive considering, critical thinking, adapting and social conduct. These versatile mediations are critical in the general modification of the tyke.

The abatement in free play can likewise be clarified by kids being latently engaged through the TV or PC/computer games. In sharp complexity to medical advantages of dynamic play, imaginative play and the known formative advantages of a fitting level of sorted out exercises, there is abundant confirmation that this detached diversion is not defensive and, indeed, has some unsafe impacts. In a few groups, kids can't play securely outside of the home unless they are under close grown-up supervision and insurance. This is especially valid in regions that are hazardous due to expanded savagery or other ecological danger (Browne and Giachristics, 2005). Informal settlements all over the world are characterized by congestion and lots of crime and insecurity. Parents and other care givers feel insecure to let their children engage in unstructured play outside and prefer to engage them in indoor games. Unfortunately, indoor games do not have the same magnitude of invoking creativity and innovation as outside unstructured play.
2.5.4 Play and Creativity

According to Erikson (1994), one noteworthy capacity of play is innovative expression. A moment capacity is to determine issues. Large portions of the procedures that happen in play are included in inventiveness. This timeframe permits kids the chance to settle on decisions, arrange, and extend their inventiveness. Subjective and full of feeling procedures that are communicated and created in play are vital in imagination. The inventive procedure alludes to the many procedures that are included in the innovative demonstration. Subjective, full of feeling, and identity process are altogether required in an inventive demonstration. People who are high on some of these imaginative procedures will have a higher probability of delivering an inventive item.

People contrasts in this procedure can be distinguished in kids and huge numbers of these procedures are communicates and created in imagine play. Artist and Singer (1990) recommended territories of psychological improvement that are encouraged by imagine play exercises. Play helps the kid to grow vocabulary and connection objects with activities, create protest consistency, shape occasion patterns and scripts, learn procedures for critical thinking, create unique deduction capacity and build up an adaptability in moving between various sorts of thought. Examine has upheld a relationship amongst play and some of these inventive procedures. J. Vocalist and D. Artist (1976) reasoned that the limit with respect to inventive play is emphatically identified with unique considering, verbal familiarity and intellectual working when all is said in done.

2.5.5 Benefits of Play

Play grants youths to use their ingenuity while developing their imaginative vitality, smoothness, and physical, mental and energetic quality. Play is fundamental to sound
psychological wellness (Shonkoff and Phillips, 2000). It is through play that youths at an early age attract and interface in their general environment. Play grants children to make and examine a world they can expert, vanquishing their anxieties while sharpening grown-up parts, rarely in conjunction with different youths or adult parental figures. As they expert their world, play helps youths develop new capacities that provoke to enhanced conviction and the quality they ought to go up against future challenges (Hurwitz, 2002). Undirected play licenses children to make sense of how to work in social affairs, to share, to organize, to decide conflicts and to learn self-advancement aptitudes.

Exactly when play is allowed to be tyke driven, youths sharpen essential initiative aptitudes, move at their own specific pace, locate their own locales of interest, and finally associate with totally in the interests they wish to look for after. Ideally, a lot of play incorporates adults' benchmarks and concerns and loses a bit of the points of interest play offers them, particularly in making ingenuity activity, and get-together capacities. Instead of reserved fervor, play amasses alterable, sound bodies. Honestly, it has been suggested that enabling unstructured play may be an unprecedented way to deal with addition physical development levels in adolescents, which is one indispensable strategy in the assurance of the heaviness pandemic. Possibly above all, play is an essential joy that is an esteemed bit of immaturity.

2.6 Influence of Play activities and space on Child’s General Knowledge on Societal issues

A couple thinks about have studied the association between physical direction and educational execution. Ahamed et al. (2002) found that a sixteen-month, Canadian, in-school physical development mediation neither extended nor reduced state directed test scores appeared differently in relation to control schools. Adding physical guideline to class instructive module
has as of now been connected with humble overhauls in educational execution (Dwyer 1983; Sallis 1999; Dishman 2000). Shephard et al. (1997) found that decreasing of 240 minutes for every week of insightful time, supplanted with extended time for physical preparing, provoked to higher scores on regulated math examinations. Dwyer, 2001 found in another cross sectional study including eight thousand school kids that insightful assessments were by and large related with practice levels and with execution on physical wellbeing tests.

A part of the most dependable research on Montessori guideline happened in Head Start programs in the 1960s (Karnes, Shwedel, and Williams 1983; Miller and Bizzell 1983; Miller and Bizzell 1984; Miller and Dyer 1975). In the Miller examination of the Louisville understudies, the Montessori program did not at first obscuration interchange ventures, yet rather there were sleeper impacts. By second grade, Montessori young fellows would be savvy to comes about than some other get-together. They kept up this predominance through ninth and tenth grades, however by then unfa ltering misfortune had made for a little example. In the Karnes examination of the understudies in Urbana, there were couple of unmistakable results at to begin with, however Montessori kids had the most raised optional school graduation rate and scored most vital on a composite rating of their accomplishment in school.

Lillard and Else-Quest (2006) pondered youths' outcomes at age five and again at age twelve, after three and nine years in a high-commitment Montessori government supported school serving low-pay kids. The study revealed that Montessori five-year-olds scored higher on various mental and academic measures, including scrutinizing, math, official limit, and social perception; these young people scored cut down that the control bundle on none of the measures. At age twelve, Montessori kids scored higher on creating (sentence eccentrics and story creative energy).
The focus similarly reported social results for understudies developed five and twelve years. It found that, at five, Montessori children were basically more disinclined to be possessed with ambiguous cruel and-tumble play on the play region and in a general sense more slanted to be involved with positive, shared sidekick play than were adolescents in the control pack. The focus furthermore demonstrated more raised measures of perspective taking when children were asked how they would resolve social conflicts. It found that, at age twelve, Montessori children were in a general sense more slanted to pick a positive, certain response to a troublesome social condition, by particularly and without ill will tending to a social issue. In aggregate, kids in high-commitment Montessori programs do well in educational and subjective and furthermore social spaces appeared differently in relation to those in routine undertakings. In this way there is awesome support for Montessori preparing’s style of vivacious learning for helping human change.

On the other hand, a late focus school intervention mull over watched that adding physical guideline to class instructive modules did not improve surveys or state directed test scores. Or maybe, it was red hot practice performed outside of school that determinedly foreseen assessments. Strikingly, the physical guideline classes under investigation included, by and large, only nineteen minutes of adequately vivacious physical activity in a fifty-five minute class (Coe, 2006). The maker recommended that finishing activity rules for adolescents will insistently impact scholastics, however cut down level, for instance, those in this study, if little favorable position.

Physical development and physical health have been clearly connected with upgraded educational execution. Another cross-sectional survey of school-age kids in Iceland revealed
that, solidified, body mass document and physical activity uncover up to 24 for each penny of variance in educational achievement (Sigfusdottir, 2007). A cross-sectional study coordinated in 2002 by the California Department of Education showed a strong relationship between physical health and academic execution.

Stuart, 2009 notes in considering what happens in the cerebrum in the midst of play; examiners into animal play have given proof of play-mind associations that moreover apply to individuals. They have found that play rises up out of zones of the "old" personality (that all around advanced animals have) that are dealt with for survival, and they stream "upward" into higher concentrations, starting collaboration with nature. This stream is near in individuals and incorporates our hands, which are so richly connected with our brains, and a fundamental way we work together with the world. In immaturity play, it is a shielded doubt that children require more than a two-dimensional screen to get competency. Kids require free, hands-on play that is kid dealt with, to open up their potential.

2.7 Theoretical Framework

This study took a brief look at theories of child development, socialization and the Montessori theory of normalization. Each individual is a result of science, society, and individual encounters, or heredity and environment. Social environment is a significant part of an individual's socialization; individuals require social contact with each other to grow legitimately.
2.7.1 Child Development Theories

Child development can be defined as change in the adolescent that happens after some time. Change takes after a precise illustration that moves towards more vital multifaceted nature and updates survival. Times of change start from beginning to birth, most punctual stages to toddlerhood, and early childhood to middle into adolescence. Different scholars have developed various theories of child development. The study will look more into cognitive domain which tries to describe how children learn; the manner of thinking and scholarly capacities including consideration memory, critical thinking, and creative energy, imagination, scholastic and consistently learning.

2.7.1.1 Cognitive Development theories

Youngsters build their comprehension of the world through their dynamic association and connections. Piaget formative stages incorporate tangible engine which begins from birth to two years and babies utilizes their faculties and engine capacities to comprehend the world. Preoperational stage starts at ages 2-7 and the child is able to use symbolic thought and language. The child begins to represent the world with words and images. At age 11, the kid utilizes legitimate operations or standards when taking care of issues. At age 12 going up, the utilization of legitimate operations in a deliberate manner and with the capacity to utilize reflections is utilized. The theory supports the study by positing that children cannot learn new things in a vacuum. They need to interact with others in order to learn their language, understand images and contract their environments to solve problems.

2.7.1.2 Social Cultural theory

Lev Vygotsky expanded the hypothesis by concurring that kids are dynamic learners, yet their insight is socially developed. For example, youngsters in the casual settlements of Mukuru learning of contemporarily issues are not quite the same as a kid who hails in the adjacent
South B domain. This is a direct result of the social qualities and customs that oversee what is basic to figure it out. Kids pick up from ace people from the overall population and as indicated by Vygotsky, the zone of proximal improvement is the place the learning happens.

2.7.1.3 Systems theory
The hypothesis has the conviction that improvement can't be clarified by a solitary idea, yet rather by a mind boggling framework. As indicated by Urie Bronfenbrenner in his Ecological Systems hypothesis, the shifted frameworks of the earth and the interrelationships among the frameworks shape a youngster's advancement. Both nature and science impact the youngster's improvement. The earth influences the kid and the kid impacts nature. He posits that activities and the interactions in the child immediate surroundings, parents, friends and schools have a relationship among the entities. In view of the above explanation, Children in Mukuru informal settlements and those in the neighbourhoods living in formal settlements are likely to have similar life experiences as they school together, play together and share the similar environments. Their cognitive and social knowledge may not vary as much.

2.7.2 Socialization Theories of Human Development
Socialization is the techniques by which human children begin to secure the aptitudes imperative to execute as working people from their overall population and is the most influential learning process one can understanding. Not at all like other living species, whose conduct is organically set, have people required social encounters to take in their way of life and to survive. Sociologists are occupied with how people get to be individuals from their general public and take in the way of life to which they have a place. Through the socialization procedure, people realize what is normal in their general public. At the small scale level, most guardians show kids legitimate conduct to be effective in life, and associates impact kids to
"fit in" and have some good times. Singular advancement and conduct happen in social settings.

Charles Horton Cooley in 1902, in a mirror self-social mental idea expressed that a man's self gets to be out of society's interpersonal associations and the perspective of others. The term suggests people framing themselves in light of other individuals' discernment, which drives individuals to strengthen other individuals' points of view on themselves. Individuals shape themselves in light of what other individuals see and affirm other individuals' assessment on themselves. Many informal settlements are characterized by high levels of anti-social behaviour like crime, vulgar language, and lack of respect among others. As such, children grow up observing such behaviour, taking it in, and accepting it as normal behaviour.

Children in the informal settlements are socialised into slum culture. According to Tylor (1871), "culture is that perplexing entire which incorporates learning, convictions, craftsmanship, ethics laws traditions and different capacities and propensities gained by man as an individual from society". Culture has an arrangement of social standards and children raised in the informal settlements learn the social norms of their society including acceptable and unacceptable behaviour. The children learn the lifestyles which they observe in their locality and incorporate the social norms that are accepted. As has been seen from the studied literature, most informal settlements are congested. As a result, families have socialised their children to fit in such lifestyles.

The theory relates with the study by portraying how lack of play spaces in Mukuru informal settlements has led to children being confined indoors thus engaging in indoors games like watching the television and visiting the video dens where they get introduced to anti-social
behavior. Others hardly have any space to do their school home work as the rooms in the slums areas are by standard quite small measuring 10x10ft (Nairobi Inventory, 2009). And although the literature available shows there is some value in boredom which results in a child becoming more internally focused resulting to creativity; it is external outdoor play in a natural environment that leads to greater creativity and innovation.

2.7.3 Maria Montessori Theory of Normalization

The Montessori theory believes in making a youngster free and have the capacity to get things done for himself. This is accomplished by giving youngsters openings; chances to move, to dress themselves, to pick what they need to do, and to help the grown-ups with errands. At the point when the youngsters can get things done for themselves there is an expansion in their self-conviction, fearlessness and regard that they may bear on for the duration of their life.

As indicated by Montessori (1907), kids ought to be lined up and gave situations and materials to would whatever they like to do. In the event that they need to climb, give them the chance to move in a protected way, don't be overprotective. Taking after the tyke likewise means being non-order, don't let them know what to do constantly. Give kids the flexibility to pick what they need or needs to do and to follow up on their own. Try not to let them know what they need to do, yet rather give them decisions of various materials in an indigenous habitat.

Youngsters learning shapes, for instance, handle objects of various structures, maybe following the structures with their fingers notwithstanding observing them. Along these lines, fun loving learning epitomizes insight. An abundance of confirmation recommends that learning is overhauled when it is encapsulated across over modalities (Barsalou et al. 2003; Lillard, 2005);
and there are specific focal points when hands are incorporated (Beilock and Goldin-Meadow 2010; Sobel and Kushnir 2006; Wagner Cook, Kuangyi Yip, and Goldin-Meadow 2010). Montessori offers various segments of exuberant learning, including general structure, the use of little inquiries for learning, individualized lessons, free choice, peer commitment, fun, and nonattendance of unessential prizes. It differentiates by having a specific course of action of materials, less free choice in connecting with materials, in calling children's development "work," and, especially, in its with no envision play.

Logically, we see posterity of ages three to five foreseen that would sit and listen to lessons without interfacing (Hamre and Pianta 2007). Such an approach to manage learning gives a bogus representation of the norms of constructivism that much research on human learning shows to be capable. Honestly, various instructors now call for one constructivist approach particularly, exuberant learning, as a developmentally legitimate differentiating alternative to educational rule (Fisher et al. 2011)— as a way to deal with help pre-schoolers learn in the ways they typically learn.

Perky learning is kid focused, constructivist, affectively positive, and hands-on. It can include dream yet does not really do as such. Late meta-examinations recommends that more coordinated types of "disclosure learning" are ideal (in respect to immaculate revelation learning and pedantic guideline) and reliable with the possibility that fun loving learning is a magnificent approach for helping youngsters (Alfieri et al. 2010). Montessori watched how youngsters took in the dialect without anybody showing them. This started her thought for the "spongy personality".
Kids less than three years old don't need lessons with a specific end goal to learn, they just retain everything in nature by encountering it, being a piece of it. It is thusly vital that nature set up is great, pleasant and positive since this is the thing that the kid will assimilate whether he decides to or not. Montessori trusted that youngsters instruct themselves: "It might be said that we get learning by utilizing our brains; however the kid retains information specifically into his psychic life. Basically by keeping on living, the kid figures out how to talk his local tongue" (Montessori, 1966).

The theory aligns well with the idea of this study which advocates for unstructured play activities for children in their natural environment. However, the challenge of slum communities is lack of space in a natural environment which would allow children to explore and engage in their own activities, games and in unstructured play. Montessori school of thought posits that youngsters basically ingest everything in the earth by encountering it, being a piece of it. It is subsequently critical that the earth set up is great, decent and positive since this is the thing that the kid will assimilate whether he decides to or not.

The informal settlements in Nairobi are very overcrowded and it is not possible to follow children and observe the areas where they get challenged. As such they do not develop the inner life which according to Montessori theory must be recognized and developed. In a natural environment, children would be allowed to climb and are given opportunity to do so in a safe manner without being over protective, non-directive and without telling them what to do. The choice in Nairobi informal settlements cannot be possible due to lack of natural and many social ills which children must be protected against.
2.8 The Conceptual Framework

The conceptual framework is a schematic presentation of the relationship of the variables in the study. A reasonable system is a system or "plane" of interlinked ideas that together give an extensive comprehension of a marvel or wonders (Jabareen, 2009). The theoretical structure for this study is impacts of need/accessibility of play/relaxation exercises and spaces for kids in urban settlements.

**Figure 1: Conceptual Framework**

In Figure 2.1, the independent variable consisted of challenges posed by unplanned urbanisation in Mukuru Nyayo Location which had one main area of focus; lack of playing space for children. Any change on this variable lead to a change in the dependent variable, which in this case was child development whose indicators are school performance, creativity and innovativeness and children’s general knowledge of societal issues.
The independent variable in the conceptual framework is unplanned urbanization. This has resulted to unavailability of playing space in most urban areas as rural urban migration escalates in search of better livelihoods. Unplanned urbanization has resulted to mushrooming of slums in Nairobi as these are the only places where the house rent is cheap for majority of Kenyan poor people who form the largest population in most cities. Unfortunately, this is where majority of children are found. The result has been negative effects to child development. The topic on child development is wide and only aspects of it will be considered namely; the effects on school academic performance, on innovation and creativity and effects on children’s knowledge of general societal issues.

There are intervening variables which may also affect child development. These variables will be looked at in terms of how much the home environment is conducive for children. Parentage and home environment will focus on issues of domestic violence, food availability, and good role modelling among others. The other intervening variable is in the school environment. This has to do with availability of learning materials, classroom environment, pupil to teacher ratio, bullying from other children and among others.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This section depicts the examination outline, the objective populace, the inspecting systems, information gathering and information investigation strategies and methods and additionally the moral contemplations for the study.

3.2 Research Design

The research study used mixed method approach of study designs. Blended strategies look into speaks to research that includes gathering, examination, and elucidation of both quantitative and subjective information in a solitary study or in a progression of studies that explore the same fundamental marvel (Kothari, 2004). Bogden and Biklen (1992) watch that a key purpose of utilizing blended techniques, in any case, is to triangulate information sources in order to check the legitimacy of one instrument against another. As per Hanson et al. (2005) if the intention is to triangulate or unite the outcomes, then the information might be gathered simultaneously. In this study, the reason for utilizing blended research was more for triangulation than whatever other reasons and thusly simultaneous triangulation configuration was utilized.

The study was unmistakable in nature. As per Bless and Higson-Smith (1995) the essential point of engaging exploration was to portray (as opposed to clarify) a specific wonder. As indicated by Orodho and Kombo (2002), expressive research can be utilized when gathering data about individuals' states of mind, suppositions, propensities or some other assortment of training or social issues. For this situation, information was gathered on propensities for youngsters amid relaxation/spare time, accessibility of play space and their significance thereof.
lastly their perspectives on significance of play which was to illuminate future techniques in kid advancement activities and arrangement choices.

Subjective information was additionally gathered utilizing set up subjective techniques (Bogden and Biklen, 1992). This permitted subjective information to rise up out of watched occasions amid cooperation with kids by the meeting plan, observational agendas, Key Informant Interviews (KII) and Focus Group Discussions (FGD's). The scientist utilized both essential and auxiliary information. Essential information was gotten utilizing polls and meeting plans, Key witness meetings, FGDs and perceptions while optional information was be acquired through the school participation registers, school execution sheets and mid and end term assessment tests.

3.3 Study Site Description

The study was carried out in Mukuru Nyayo Location of Starehe Sub-County of Nairobi County. Mukuru is situated about 10km from the city centre, Nairobi, Kenya. Mukuru informal settlement is approximately 37 years old. It comprises of three locations namely; Mukuru Nyayo, Mukuru Kwa Reuben and Mukuru Kwa Njenga with a population of over 70,000 and an average of 14,640 Households (KHRC, 2009). Many of the inhabitants in Mukuru work as casual labourers in the manufacturing industries situated close to the settlements. Others especially women are casual labourers and small scale business operators. According to KHRC (2009) earnings are pitifully low and inadequate to meet the needs of their families or afford them decent living conditions. Families live in corrugated iron shacks measuring 10 x 10ft (Nairobi Inventory, 2009).
As such, families live in congested areas where houses are very close to each other and only narrow walk away exist which act as drainage exits to the nearest Ngong river. Without security of tenure, the slum dwellers are unable to demand their rights and those of their children. The people of Mukuru are squatters on land which they have no legal right. For this reason, the dwellings are congested and there hardly exist any free space for children to engage in outdoor play activity.

The site was selected due to its characteristics which like all urban informal settlements in Africa is high in population and levels of poverty are very high (KHRC, 2009). According to Kenya Human Rights Commission 2009, the high level of poverty puts basic education beyond the reach of many families.

Mukuru has seven public government sponsored primary schools (Mukuru, St Bahkita, Mariakani, St Catherine, Plains view, Nairobi South and Our lady of Mercy Primary school). Four of the primary schools namely; Mariakani, St Catherine, St Bhakita and Mukuru predominantly admit 99% of children from Mukuru Nyayo informal settlements. The remaining three schools (Plains view, Nairobi South and Our lady of Mercy Primary school) have children both from the informal settlements and from the estates.

Other participants for the study included teachers from public schools and parents raising their children in the Mukuru informal and formal settlements within Mukuru Nyayo Location. Key informants included the area chief, area voluntary children officer, sub-county Education Officer and sub county children’s officer and head teachers of selected public schools. An
observational checklist as a data collection tool was also used to collect information on child’s ability to be creative and innovative.

### 3.4 Sampling Procedure

Sampling procedure decides the degree to which the specialist can make factual or potentially logical speculations (Onwuegbuzie and Leech, 2004). As per Bartlett, Kotrlik and Higgins (2001) a shared objective of review research is to gather information illustrative of a populace. The study thus employed purposive sampling technique to select the three public schools with an almost equal representation of children from both the informal settlement and the formal estates in order to study if there are any differences in their academic performance, their creativity and innovation and their knowledge on general societal issues.

The study further employed the stratified random sampling technique where by clusters of children who hail from the informal settlements were separated from those who came from the estates and a proportion of sample picked from each category.

### 3.5 Sample Size

 Depending on the population of the school, a sample size of more than 5% of the population was considered acceptable (Cooper and Schindler, 2003). The sampling frames were the school registers of children from class five to eight in the selected schools. Using the school records, children were divided into sub-populations or strata; those who hailed from the informal settlements and those who came from the estates. In total the study had a target population of 1492 from class five to Eight. A proportionate sample size of 14% of children from either category was then selected and questionnaires administered to each category.
Table 3.1: Stratification of children by residence

<table>
<thead>
<tr>
<th>Name of the target school</th>
<th>Total population of children</th>
<th>14% Sample size</th>
<th>Residence Type</th>
<th>Strata by residence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi South Primary school</td>
<td>514</td>
<td>69</td>
<td>Informal</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Estates</td>
<td>36</td>
</tr>
<tr>
<td>Plains view Primary school</td>
<td>458</td>
<td>63</td>
<td>Informal</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Estates</td>
<td>41</td>
</tr>
<tr>
<td>Our lady of Mercy Primary school</td>
<td>520</td>
<td>70</td>
<td>Informal</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Estates</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>1492</td>
<td>202</td>
<td></td>
<td>202</td>
</tr>
</tbody>
</table>

3.6 Methods of Data Collection

According to Koul (1984), strategies for information gathering are the approaches to acquire applicable subjective and quantitative information or data for a specific study from the pertinent sources. The study gathered information using a number of research methods as shown below:
3.6.1 Reading method

Secondary data was collected by reading, analysing, collating and recording data contained in readily prepared materials. For this particular study, data was collected from the children school registers and end term examinations results on their report books.

3.6.2 Survey method

Survey method was used to collect desired information in an organized and methodical manner. A sample of 202 children was used to collect information about children’s knowledge on which play activities children preferred most, where they preferred to play from (indoor or out-door) and general societal issues which utilized a questionnaire administered through interview schedules. Brief interviews and discussions with children about their creativity and innovation was also used. Survey method was therefore utilized and it involved interviewing the respondents in order to gather required data and responses were recorded and scores computed.

3.6.3 Direct Observation method

Direct observation method which provides information about actual situation (Kombo and Tromp, 2006) was also used in collecting data. Direct observation involves seeking the ability of the children to portray different skills in innovation and creativity. The children were provided with different materials and asked to make items like balls, kites, boxes, ropes and mend cloth. The researcher observed children creativity and innovation in making the above items and recorded the scores on the observation checklist.
3.6.4 Key Informant Interviews

A key informant interview is a special form of interview in which the respondent takes full participation in the area of study. The researcher took part in involving the respondent with the aim of gaining in-depth information on the subject matter of study. The researcher involved the respondent through face to face interview. The researcher employed the use of key informant in order to elicit information that was useful in supplementing other methods of data collection. Key Informants (KI) included, Area Chief (AC), Volunteer Children Officers (VCOs) in the location, Municipal Education Officer (MEO), Sub-County Children’s Officer (SCCO) and Head Teachers (HT) from Public Government sponsored School in the Mukuru Nyayo Location. Other key informants who were interviewed included the key development partners in the area and also other stake holders who were implementing projects that touch on children in the slums. The tool gathered information on effects of unplanned urbanization leading to congestion hence lack of play spaces and how children right to play and engage in leisure activities is affected.

3.6.5 Focus Group Discussions

The researcher conducted two Focus Group Discussions (FGD’s). The FGD targeted the care givers and /or community members i.e. men and women from the community who had children they were raising from the slums of Mukuru. These were mostly parents who had lived in Mukuru Nyayo location for a period of not less than a year and were thus conversant with the problems of living in congested areas in the informal settlements. The second FGD targeted community members form he formal settlements whose children interacted with their peers form the informal settlements. Their views were sought on which play activities their children engaged in, challenges faced by children in the informal settlements and views on what
communities can do to create play spaces for their children. The FGDs had a minimum of 12 members (6 male and 6 female).

3.7 Data collection tools

The study collected data using a number of research instruments as shown below;

3.7.1 Questionnaires

In the survey method the researcher used questionnaires. The questionnaires used both closed and open-ended questions. The tool was structured in such a manner that the three core objectives in the study were captured. This research preferred the use of questionnaires as it is an instrument that affords respondents with a relatively simple task of picking one or more answers that are spelt, thus, avoiding potential errors from variations in the wording as variables are clearly spelt out. In addition, questionnaires are low cost even when the population is large and widely spread geographically. The study utilized the interview schedules which contained similar structured questions which were subjected to children in order to get their views on which play activities they preferred, where they preferred to play from (outside or inside), which play/games and leisure activities they preferred more than others. The questionnaire was also used to gauge children knowledge on general society issues. Responses provide by children were recorded and scores recorded for each child to compute the overall determinants for school performance and on children general knowledge of societal issues.

3.7.2 Observation Checklist

In direct observation the researcher used an observation check list. An observation check list was used to gauge children creativity and innovation. The tool sought the ability of the children
to portray different skills in innovation and creativity. The children were provided with different materials and asked to make items like balls, kites, boxes, ropes and mend cloth and embroidery. The research observed children creativity and innovation in making the above items and recorded the scores on the observation checklist which had scores portraying ability of lack of it.

3.7.3 Key Informant Guide

This tool was used to get information from Key Informants (KI). The KI included the Area Chief (AC), Voluntary Children Officers (VCOs) in the location, Municipal Education Officer (MEO), Sub-County Children’s Officer (SCCO) and Head Teachers (HT) from Public Government sponsored Schools in the Mukuru Nyayo Location. Other KIs who were interviewed included the key development partners in the area and also other stake holders who were implementing projects that touch on children in the slums. The tool gathered information on effects of unplanned urbanization leading to congestion and how children’s right to play and engage in leisure activities was affected. The tool also sought opinions on what the governments and communities could do to ensure children have play and leisure spaces in their communities and what policies may need to be put in place or enforced to reclaim grabbed land or ensure proper urban planning.

3.7.4 FGD Guide

The study conducted two FGDs. The FGDs utilized the FGD guide to seek views from community members from the two target communities in Mukuru Nyayo Location on the importance of play activities for their children. One FGD comprised residents from the informal settlements while the other comprised residents from the formal settlements. Each in either of the settlements FGDs had six women and six men. Their views were sought on which
play activities their children engaged in, challenges faced by children in the informal and formal settlements and views on what communities can do to create play spaces for their children. The community members were mostly parents who had lived in Mukuru Nyayo Location for a period of not less than a year.

3.8 Ethical Considerations

It is of the utmost importance that one complies with proficient morals when directing exploration. Strydom (2002) characterizes morals as an arrangement of good standards which is proposed by an individual or assemble, and is broadly acknowledged and offers tenets and conduct that is normal about the right direct towards the respondents. In this study moral contemplations, for example, educated assent, classification and willful investment were clung to. Given the nature of the research which involved children written consent was sought for children from the school management. Consent for all interviewed children was given by the Head Teachers of the three selected schools in Mukuru Nyayo Location.

To ensure confidentiality, participants were assured that the collected data would only be used for the stated purpose of the research study and that no other person was to have access to the given information. Assuring the participants that information would be kept confidential resulted in the participants giving honest and complete information.

3.9 Data analysis

Data analysis was done in two phases: data entry and data cleaning. Descriptive statistics was used to describe the basic features of the data in the study. Data analysis of the quantitative information was done using Statistical Package for Social Sciences (SPSS) version 17.0 and Micro Soft Excel (MSE). The study looked at the characteristics of variables namely: the
distribution and the central tendency. The organization of the data also entailed conversion into percentage, averages and ratios. These were analysed and presented in tables which formed a significant part of the research report.

Information obtained from observation schedules was coded against the set parameters of the research objectives and appropriately organized for analysis. Views from Key Informants Interviews (KII) and FGDS and were recorded as their views through direct quotes. These type of analysis was mostly necessary to triangulate information collected through the quantitative means in order to establish whether there was any association or relationship with the data collected.
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter presents the findings of collected data from the respondents by school, children’s gender, residence as per the study objectives. Further the chapter presents a summary of the findings and conclusion of the chapter.

4.2: Demographic information

The study sought to understand the demographic information of the respondents. The information included respondents by school, children’s gender, respondents’ residence, age of respondent, current class attended by respondents and most prevalent play/leisure activities of the respondents.

4.2.1 Respondents’ by school

The study sought to establish the number of children whose data was collected from the three schools that were sampled for the study. The results are shown in Table 4.1 below.

<table>
<thead>
<tr>
<th>School</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plains view primary school</td>
<td>63</td>
<td>31</td>
</tr>
<tr>
<td>Nairobi south primary school</td>
<td>69</td>
<td>34</td>
</tr>
<tr>
<td>Our lady of mercy primary school</td>
<td>70</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>

Key:  n=Frequency    %=Percentage
Table 4.1 above shows sample size distribution per school as follows: 31.1% (63) were from Plains view primary school, 34.2% (n=69) interviewed were from Nairobi South Primary School while the remaining 34.7% (n=70) were from Our Lady of Mercy Primary School.

The study involved three schools whose pupils were both from formal and informal settlement. The population of pupils in the three schools was almost the same with plains view having 458 (31%), Nairobi South with 514 (34%) and Our lady of Mercy at 520 (35%) since all the three school have high population of pupils.

4.2.2 Children’s Gender

The study interested in establishing the Gender of the respondents. The results are shown in Table 4.2 below.

Table 4.2: Sex of the respondents

<table>
<thead>
<tr>
<th>Sex</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>89</td>
<td>44</td>
</tr>
<tr>
<td>Girls</td>
<td>113</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: n=Frequency %=Percentage

Table 4.2 above shows the gender of the respondents. Out of the 202 children surveyed, 55.9% (n=113) were female while 44.1% (n=89) were male.

Sex of the pupils plays an important role in determination of the types of play activities children engage in. The current phenomena shows there are more girls than boys in selected schools.
The portrayed trend is normal and is further supported by the Kenya population census carried out in 2009.

4.2.3 Respondents’ residence

The study sought to know the respondents’ residence; whether formal (Estate) or Informal (Slums). The results are shown in Table 4.3 below.

Table 4.3: Cross tabulation of the school of respondents and type of residence

<table>
<thead>
<tr>
<th>Name of the school</th>
<th>Type of residence</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Formal</td>
<td>Informal</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Name of the school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plains view primary</td>
<td>41</td>
<td>20</td>
</tr>
<tr>
<td>Nairobi south primary</td>
<td>36</td>
<td>18</td>
</tr>
<tr>
<td>Our lady of mercy primary</td>
<td>52</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>64</td>
</tr>
</tbody>
</table>

Key: n=Frequency   %=Percentage

The Table 4.3 above indicates that the majority (63.9%) of the respondents came from estates within South B formal (South B, South C, South C- Akilla Estate, South C- Mugoya Estate, South C- Beta Estate, Syokimau, Zanzibar Estate, River bank Estate, RTI, Sadi Road Estate, Shimo la Tewa Estate, Sabaki, Prison, Police Band estate, Plains View Estate, Mlangoni, Mater Hospital, Mariakani, KPA, Golden gate, Bellevue, Balozi estate) while the remaining 36.1%
were from Mukuru informal settlement (Commercial Village, Fuata Nyayo estate, Hazina Village, Industrial area, Kayaba, Kisii Village, Land Mawe, Mariguini, Vietnam).

The data indicated that more children came from the formal settlement given the three schools were all situated inside the formal estates thus making it easier for children from the estates to access them more easily that children from the informal settlements

4.2.4 Age of Respondents

The study sought to establish the age respondents as derived from the three sampled schools. The results are shown in Table 4.4 below.

Table 4.4: Age of Respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-11 years</td>
<td>44</td>
<td>22</td>
</tr>
<tr>
<td>12-13 years</td>
<td>109</td>
<td>54</td>
</tr>
<tr>
<td>14-15 years</td>
<td>49</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: n=Frequency  %=Percentage

Table 4.4 above showed that the majority of the respondents, 54.0% (n=109) of the respondents were between the ages 12-13 years old. Otherwise the rest were as follows; Age 14-15 at 24.3% (n=49) and 10-11 at 21.8% (n=44).

The study indicated that majority of the pupils were from ages 12-13 thus in class five, six and seven. The minority were in ages 14 to 15 and in class eight. This shows a normal trend whereby as pupils advance in classes, they become less as some repeat classes due to filtering.
by schools to have best candidates for the final primary examination results. Others transfer to other schools in the rural areas to enhance their chances of securing better placements for secondary school placements.

4.2.5 Current class attended by the Respondents

The study sought to establish the current class attended by the respondents. The results are shown in Table 4.5 below.

Table 4.5: Relationship between age of the respondent and current class attending

<table>
<thead>
<tr>
<th>Age cohort</th>
<th>Class 5</th>
<th>Class 6</th>
<th>Class 7</th>
<th>Class 8</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-11 years</td>
<td>34</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>44</td>
<td>22</td>
</tr>
<tr>
<td>12-13 years</td>
<td>23</td>
<td>46</td>
<td>34</td>
<td>6</td>
<td>109</td>
<td>54</td>
</tr>
<tr>
<td>14-15 years</td>
<td>2</td>
<td>3</td>
<td>11</td>
<td>33</td>
<td>49</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>59</td>
<td>59</td>
<td>45</td>
<td>39</td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: n=Frequency %=Percentage

Table 4.5 above indicates that 29.2 % (n=59) of the children interviewed were in class 5, 29.2 % (n=59) were in class 6, 22.2% (n=45) were in class 7 while the remaining 19.3 % (n=39) were in class 8

Level of education of the respondents was useful in order to ensure that the respondents are able to understand the questions posed to them. As such, the study interviewed children who were in the upper classes from class 5 to 8. The table also showed that the age of the
respondents was not a determinant of what class the children were as some children might have either started schooling later than their counterparts or repeated some class due to various reasons.

**4.2.6 Most prevalent Play/Leisure activity among the respondents**

The study sought to establish the most prevalent play/leisure activity among the respondents. The results are shown in Table 4.6 below.

### Table 4.6: Prevalent play activity among the respondents

<table>
<thead>
<tr>
<th>Play activity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>136</td>
<td>67</td>
</tr>
<tr>
<td>Skipping rope</td>
<td>42</td>
<td>21</td>
</tr>
<tr>
<td>Watching TV/Video games/play station</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>

**Key:** n=Frequency  %=Percentage

Table 4.6 above indicates that football is the most prevalent play activity among children at 67.3% (n=136) followed by rope skipping at 20.8 % (n=42). The least were those who preferred watching TV/videos games at 8.9% (n=18) and those who indicated that they preferred other games such as art, hide and seek, ‘mateke’ and ‘kati’ at 3.0% (n=6).

This can be inferred to mean that children engage in both indoor and outdoor activities regardless of whether their residence has a designated space for playing or not. Also among the children, football cut across for both boys and girls. It’s easy to access local made materials
and make balls as opposed to other activities. Outdoor play activities are also preferred by more children than indoor games. The table shows that football and rope skipping are the most preferred leisure activities as they involve large number of children who get involved in group play.

From qualitative data the findings show that knowing the most preferred play activity among children is an important factor in child development work. The study sort to determine which play activities were most preferred by children in their daily social interaction whether at school or in the community.

A municipal education officer familiar with education in the area indicated that;

> A child will always create space to play. I have seen children from the nearby Mukuru slums coming all the way to the Railway Training Institute (RTI) fields to play with our children. Others have created space at the police band estate and marked it as their play area and they always welcome their friends especially in the informal settlements to come over the weekend and during school holidays to play together.

This implies that children even those who we do not have playing space due to congestion in the informal settlement scan search and create their own spaces in their environments and practice play. Children will get information from their peers on the available space for play and because most outdoor play is group play, children will be willing to walk to far places in search of playing space and also to meet their peers so that they could practice group play together.
4.2.6.1 Relationship between Residence of a child and play activities children engage in.

The study sought to establish the relationships between residences of a child and play activities children engage in. The results are shown in Table 4.7 below.

Table 4.7: Relationship between Residence of the respondent and play activities children engage in

<table>
<thead>
<tr>
<th>Type of residence</th>
<th>Football</th>
<th>skipping rope</th>
<th>watching TV/Video games</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estate</td>
<td>86</td>
<td>67</td>
<td>24</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>slum</td>
<td>50</td>
<td>69</td>
<td>18</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>136</td>
<td>135</td>
<td>42</td>
<td>43</td>
<td>18</td>
</tr>
</tbody>
</table>

Key: n=Frequency  %=Percentage

Table 4.7 above indicates that respondents prefer football to other play activities irrespective of their area of residence at 66.7 % (n=86) for formal settlement and 68.5 % (n=50) for non-formal settlement. In both settlement football is the most preferred play activity followed by skipping rope, TV/video watching and the others follows. Watching TV/Video games/play station is also preferred among estate children compared to the slum children.

Regardless of type of residence football is most preferred activity. This is preferred more for boys than girls since football is taken as male game. More children in the formal estates are seen to practice more indoor leisure activities that children from the informal settlements
because they have more ample place and space for watching TV and practice other games like bike riding. Children in the informal settlements are not presented with many alternatives in choosing the type of games and most boys play football while girls skip the ropes which are easily available in their residence.

The above finding was supported by qualitative data where a volunteer children’s officer as a key informant stated that:

*Playing different games is a talent. Children from informal and formal settlement have the same capacity to play games where majority prefer playing football regardless of their residence. These they learn from school because as peers, they are continuously competing with each other. It is clear that those from informal settlement may not afford to engage in indoor games which demand for extra money like to watch a movie or pay a video game.*

An administrative officer from the local Government in the location reiterated that:

*All children prefer outdoor more than indoor activities. Whether they live in the kijiji (informal settlements) or the up market places, children will always find space to throw their feet as they interact with other children. All children regardless of their sex will always find something to do with a ball. For boys, football will suffice whereas for girls, they may take up other activities so long as they are throwing the ball around and chasing it. Watching TV and other video tapes is not play for children.*

The luxury to participate in certain games is determined by income levels of the care givers. Parents of children from the informal settlements have more priority needs of meeting the basic needs for their children i.e. food, shelter, clothing and education and may not afford extra coins.
to offer their children to enjoy play and leisure activities that demand they dig deep in their pocket like play stations and video games.

4.3 Places where play activities took place

The study was interested in establishing where play activities took place. The results are shown in table 4.8 below.

Table 4.8: Places where play activities take place

<table>
<thead>
<tr>
<th>Places where play activities take place</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the road side</td>
<td>34</td>
<td>17</td>
</tr>
<tr>
<td>Outside the house on the corridors</td>
<td>59</td>
<td>29</td>
</tr>
<tr>
<td>In the field designated for play</td>
<td>92</td>
<td>46</td>
</tr>
<tr>
<td>House</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>202</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Key: n=Frequency  %=Percentage

Table 4.8 above indicates that most play activities took place in the field designated for playing at 45.5% (n=92). This was followed by 29.2% (n=59) of those play activities that took place outside the house on the corridors. Play and leisure activities that took place along the road side accounted for 16.8% (n=34). Least were those that took place inside the house 6.4% (n=13) and those that took place on other places at 2.0% (n=4).

This shows that children from both informal and formal settlement prefer outdoor play activities as opposed to indoor games. As a result, children look for any available space within their neighborhood to play with their peers. This implies that despite the availability of indoor playing spaces, indoor games are not preferred by majority of the children therefore they
should not be a replacement to outdoor games. Children are most at ease when they practice play activities in open field and will actually search for designated play spaces where they meet their peer for group play that is not adult directed like watching TV, bike riding and others which the adults are always giving instructions and monitoring.

An understanding of the nature of play activities and where they take place in the community is necessary for any meaningful engagement in child development aspects.

A Head teacher in one of the schools said that;

*A child will always prefer an outdoor more that an indoor game. Outdoor games entail a child going out in the natural environment to explore and fascinate about the environment and that’s how they learn new things.*

The outdoor play and leisure activities provide for the children freedom to interact with others without adult supervision, control and monitoring as opposed in indoor games.

These views were further supported by FGD from the formal settlement which indicted that:

*If the child is not allowed to play outside he/she will create a field inside a classroom or inside a house and have characters for play. Further, confining children inside the house as some of the parents are doing is wrong as this hampers proper development of children. I have seen children who are way above the walking stage and they aren’t even crawling because they hardly see the sun. Some have been diagnosed with rickets.*

Children will play whether they have space or not. Although most would prefer to play with others in outdoor group activities, when such is not available, they will any way play with toys
around them including talking to themselves and finding characters of play using the surrounding items in the household environment.

One head teacher from the public schools indicated that:

*In our school, the playing fields space is quite big because experts in child development understand the importance of play for all children. The ministry of education will not allow anyone to start a school if there isn’t enough space for children to play.*

Proper child development demands for certain parameters to be met to enhance holistic development. Allowing children to enjoy the natural environment is one way of enhancing their development. Open fields outside allow social interaction with peers which improves their learning skills. This is because children learn more by doing then by hearing.

**4.3.1 Relationship between play activities, age and gender of the respondents**

The study sought to establish the relationship between play activities, age and gender of the respondents. The results are shown in Table 4.9 below.
Table 4.9: Relationship between Play activities, age and gender of the respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Play activities children engage in</th>
<th>10-11 years</th>
<th>Age of the respondent</th>
<th>12-13 years</th>
<th>14-15 years</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>MALE</td>
<td>Football</td>
<td>15</td>
<td>94</td>
<td>47</td>
<td>89</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>skipping rope</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>TV/Video games/play station</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>9</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>16</td>
<td>100</td>
<td>53</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>FEMALE</td>
<td>Football</td>
<td>11</td>
<td>39</td>
<td>30</td>
<td>54</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>skipping rope</td>
<td>14</td>
<td>50</td>
<td>21</td>
<td>38</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>TV/Video games/play station</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>28</td>
<td>100</td>
<td>56</td>
<td>100</td>
<td>29</td>
</tr>
</tbody>
</table>

Key: n=Frequency  %=Percentage
Table 4.9 findings shows that football remains the most preferred game among the boys regardless of the age cohort with 90% (n=80) of respondents from all age cohorts identifying football as the most preferred play activity. This is a different case with the girls where skipping the ropes remains the most preferred activity among the younger girls of ages 10-12 while the trend changes with the older girls who indicate that they prefer football at 51.7% (n=15) followed by watching TV/video games and rope skipping.

From the qualitative data it implies that as girls mature, they prefer more activities that are conducted in the house due to societal expectation and also socialization which expects girls approaching adolescents to be more composed and start to take up adult roles. Girls are also tasked with more adult house-hold roles as they grow and mature in age.

A key informant from the NGO sector noted that;

Girls approaching adulthood are taught by their mothers’ womanhood chores and because some are starting their menstrual cycle, they are told some games like football may be inappropriate for them. Parents also give more house hold task to girls more than boys of the same age and the expectation for girls is much greater compared to boys of the same age.

This conforms to cultural norms of African society where the gender roles are differentiated and as girls approach adulthood, they are restricted from playing certain games such football and skipping ropes which are seen as play activities for younger girls of certain age category.

### 4.3.2 Relationship between play activities and school performance

The study sought to establish relationship between play activities and school performance. The results are shown in Table 4.10 below.
Table 4.10: Relationship between play activities and school performance

<table>
<thead>
<tr>
<th>Play activities children in the area engage in</th>
<th>Average scores term 1-3</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below 200</td>
<td>Between 201-300</td>
<td>Between 300-500</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Football</td>
<td>5</td>
<td>3</td>
<td>61</td>
<td>30</td>
<td>70</td>
<td>35</td>
<td>136</td>
</tr>
<tr>
<td>skipping rope</td>
<td>5</td>
<td>3</td>
<td>21</td>
<td>10</td>
<td>16</td>
<td>8</td>
<td>42</td>
</tr>
<tr>
<td>watching TV/Video games</td>
<td>2</td>
<td>1</td>
<td>12</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>6</td>
<td>95</td>
<td>47</td>
<td>95</td>
<td>47</td>
<td>202</td>
</tr>
</tbody>
</table>

Key  n=Frequency  %=Percentage

From table 4.10 above, the findings showed that that higher proportions of children who engage more in outside play activities performed better in their academics at n=136 (67.3%) preferring football and n=42 (20.8%) preferring skipping rope compared to n=18 (8.8%) preferring watching TV/video and n=6 (3.0%) playing others.

Outdoor play activities mostly involve group play. During group play activities, children get a chance to practice what they see their peers doing hence picking best practices from them. The outdoor games enable children to interact with others from different environment and skills set and in the process they learn more ideas which enable them to shine even in their studies.
The data from qualitative showed that higher proportions of children who engage more in outside play and leisure activities performed better in their academics compared to those who engaged in indoor activities.

A FGD from members of the informal settlements said the following:

*Children who practice outdoor play activities perform better in academics because during play different categories of children interact in games and competition trying to outshine each other whereby they learn and exchange ideas from each other which improve their social and skills including academic performances.*

The outdoor game make children physically fit and in the process enhance cognitive development because it increases blood circulation in the body including the brain. This can not to be compared to indoor games which are largely less strenuous, less physical therefore requiring less energy. When children are idle, they may become obese and lazy thus blood circulation in the body system is poor hindering proper mental alertness and cognition.

### 4.3.2 Relationship between where the respondents play and their scores during examination

The study was interested to know whether there was any relationship between where children play and their school academic performance. The research picked and reviewed an average score from children academic performance in the last three examinations undertaken. The results are shown in Table 4.11 below.
Table 4.11: Relationship between where the respondents play and their scores during examination

<table>
<thead>
<tr>
<th>Where do these play activities take place</th>
<th>Below 200</th>
<th>Between 201-300</th>
<th>Between 300-500</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>On the road side</td>
<td>3</td>
<td>9</td>
<td>18</td>
<td>53</td>
</tr>
<tr>
<td>Outside the house along corridors</td>
<td>4</td>
<td>7</td>
<td>26</td>
<td>44</td>
</tr>
<tr>
<td>In the field designated for play</td>
<td>3</td>
<td>3</td>
<td>41</td>
<td>45</td>
</tr>
<tr>
<td>House</td>
<td>2</td>
<td>15</td>
<td>8</td>
<td>62</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>6</strong></td>
<td><strong>95</strong></td>
<td><strong>47</strong></td>
</tr>
</tbody>
</table>

Key  n=Frequency   %=Percentage
Table 4.11 indicated that children who played in the field and those who had said that they played outside the house on the corridors scored a mean average of above 300 marks in their examinations at 52.2% (n=48) and 49.2% (n=29) respectively. The findings also showed that the majority of those who played in the house 61.5% (n=8) were either average performers (scored between 200-300 marks) or scored below 200 marks in their academic performance.

Unlike indoor play activities, outdoor play have positive implications on cognitive development. This implies that higher proportions of children who engage more in outdoor play and leisure activities perform better in their class work compared to those who engaged more in indoor activities.

A head teacher in one of the schools indicted;

*Children work is play. When children play, they interact with other children; they make mistakes and are corrected by their peers. I have seen children practicing language and mathematics as they play. I have seen them recite the mathematical table and practice pronunciations and so on and those that are weak learn and excel in some of the areas they were weak on.*

The best methods for use in making children learn and understand more is through sports and learning games which have more practical and immediate understanding. Children learn more from seeing or watching and doing. The more children play, the more they interact hence the more they are likely to make mistakes. Mistakes attracts corrections from peers which enhances learning.
A FGD comprising members from the informal settlements noted that;

*Children learn from each other as they engage in competitive games. Competition is very common when it comes to children playing. Some children are good in extra curriculum activities, while others are best academic performers in class work.*

When children meet to play, they cause envy amongst each other and that create a give and take phenomena where the children endeavor to give or take whatever they don’t have. This sharing assists those children who interact with others and not those who confine themselves in the houses.

Another FGD from the formal settlements said that;

*Children need to move around and meet other children from different backgrounds including those that they think are less superior to them. This way, they will learn some aspects of life which they may not have like art and music. One member of the FGD indicated that mtoto ambaye hatebei hufikiria mama yake ndio tu mpishi shupafu (a child who does not visit others thinks that her mother is the only woman who can make a delicious meal).*

Competition is a natural thing for the children who always want to out shine others and in the process the winner takes credit and creates envy among peers causing the urge in others to perform better in future.

**4.4 Children knowledge of general societal issues**

The study was interested to know children knowledge of general societal issues. The results are shown in Table 4.12 below.
Table 4.12: Children knowledge of general societal issues

<table>
<thead>
<tr>
<th>Scores in general knowledge questions (out of 12)</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above 8</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Between 5-7</td>
<td>133</td>
<td>66</td>
</tr>
<tr>
<td>Less than 5</td>
<td>52</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: \( n = \text{Frequency} \quad \% = \text{Percentage} \)

Table 4.12 above indicates that the majority 65.8% \((n=133)\) of the respondents scored between 5-7 out of a total of 12 points in a quiz meant to gauge their knowledge of general societal issues. This was followed by 25.7% \((n=52)\) of those who scored less than 5. Only 8.4% \((n=17)\) scored 8 and above in the quiz.

In normal situation majority of children in school are above average performers. Poor and high performers are considerably few .This portrays a normal knowledge curve in the society.

A key informant from the NGO sector working in the area indicated that;

*Children always learn general knowledge on society issues wherever they are. This is because such issues are always circulating in the news or in their locality. Therefore children who engaged in outdoor play activities and games are more knowledgeable on general societal issues than those who preferred indoor games. This is because outdoors play activities allows children to exchange ideas through interaction.*
Irrespective of where children reside they are likely to exhibit similar knowledge of general societal issues because they interact in school and outside the school in same locality. This is because they play together in schools and outside schools in designated play grounds.

4.4.1 Relationship between place where (indoor and outdoor) play activities took place and respondents’ general knowledge of societal issues

The study was interested to know whether there was any relationship between where play activities took place and respondents’ general knowledge of societal issues. The results are shown in Table 4.13 below.

Table 4.13: Relationship between where the respondents play (outdoors and indoors games) and their general knowledge of societal issues

<table>
<thead>
<tr>
<th>Of the outdoors and indoors games which you like most</th>
<th>Scores in the general knowledge(out of 12 )</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 5 marks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>indoors games</td>
<td>18</td>
<td>43</td>
</tr>
<tr>
<td>outdoors games</td>
<td>76</td>
<td>48</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>93</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Between 5-7 marks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>indoors games</td>
<td>21</td>
<td>50</td>
</tr>
<tr>
<td>outdoors games</td>
<td>70</td>
<td>44</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>91</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Between 8-12 marks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>indoors games</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>outdoors games</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>202</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: \( n= \)Frequency \( \%= \)Percentage
From table 4.13 the study showed that slightly more respondents who indicated that they played outdoors 8.8% (n=14) scored the higher (between 8-12 marks) in general knowledge about societal issues compared with 7.1% (n=3) had indicated that they preferred indoor games. It also showed that the majority of those who preferred indoor games 50% (n=21) scored between 5-7 marks compared with 43.3% (n=70) who had indicated that they preferred outdoor games. Of the total sampled children however, best knowledgeable on general societal issues were from those who practiced outdoor play and leisure activities at 79.2% (n=160) compared to those who preferred indoor activities at 20.8% (n=42).

The interaction power for outdoor play activities is high compared to that indoor. There is more exposure in outdoor play activities since the activities involves more exchange of new ideas and in the process there is more sharing of new information through interaction.. Outdoor play and leisure activities ensures that children are always talking to each other, questioning their words and moves and getting clarifications for whatever they do. This questioning and seeking clarifications is part of learning and enhances knowledge of societal issues.

The area chief for Mukuru Nyayo location indicated that;

Regardless of where the children resided, children always practiced play and other leisure activities be they indoor or outdoor. Some of the children would walk for distances to find areas designated for child playing. Children always intend to move out to play with others. Even if their parents want them to be indoors they always find a way to go outside to play with others and in the place they mingle with others from different background and in the process they share a lot and get new information about society.
Both indoor and outdoor play activities assist children to know about their society however children who practice outdoor play activities portray more knowledge of their society than those who engage indoor games.

4.4.2 Relationship between where play activities took place and children creativity and innovation

Creativity and innovation at different stages is one of key child development indicators. The respondents were asked whether they know how to make various play items. To verify the responses provided, the children were provided with various materials (papers, strings, old clothes, old newspapers and printing papers, embroidery kit, cloth sewing kit and strings) and observed to gauge their ability to producing a creative product. Majority of the boys and girls who indicated that they liked outdoor games demonstrated creativity in various aspects.

A FGD from community members in estates indicated that;

Children need space to express their creativity, learn new things and develop natural skills in a fun way and release pent up energy. Children should also be provided with various materials to create and learn new ideas. Further they need open areas for recreational and play spaces in urban areas.

Although open space for children is pre-requisite for holistic child development urban open spaces are far in distance and are not always safe therefore requiring a care giver to accompany the child. This is expensive and unaffordable especially for low income earners.

The study was interested to know Relationship between where play activities took place and children creativity and innovation. The results are shown in Table 4.14 below
Table 4.14: Relationship between where play activities take place and children creativity and innovation

<table>
<thead>
<tr>
<th>Do you know how to make the following materials</th>
<th>Indoor</th>
<th></th>
<th></th>
<th>Outdoor</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>Yes</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Ball (boys)</td>
<td>8</td>
<td>50</td>
<td>8</td>
<td>50</td>
<td>52</td>
<td>72</td>
<td>20</td>
</tr>
<tr>
<td>Kites (Boys and Girls)</td>
<td>21</td>
<td>50</td>
<td>21</td>
<td>50</td>
<td>107</td>
<td>67</td>
<td>53</td>
</tr>
<tr>
<td>Knitting/embroidery (girls only)</td>
<td>12</td>
<td>48</td>
<td>13</td>
<td>52</td>
<td>31</td>
<td>35</td>
<td>57</td>
</tr>
<tr>
<td>Skipping rope (girls only)</td>
<td>3</td>
<td>13</td>
<td>21</td>
<td>88</td>
<td>67</td>
<td>76</td>
<td>21</td>
</tr>
</tbody>
</table>

Key: \( n \) = Frequency  \( \% \) = Percentage
From the table 4.14 reveals that the majority of the respondents demonstrated the ability to make box from paper (both boys and girls) at 72.2% (n=20) among the respondents who had indicated that they preferred playing outdoor compared to 50% (n=16) of those who preferred playing indoor; The ability to make a kite (both boys and girls) was also demonstrated among 66.9% (n=107) of those who preferred playing outside while only 50% (n=8) of those who played inside could make a kite. Slightly higher proportion of girls who played outdoor 35.2% (n=31) indicated that they could knit/embroider compared with only 29.3% (n=12). Higher proportions of the girls who played outdoors 23.9% indicated that they could make skipping ropes while only 12.5% of those who indicated that they preferred playing indoors could make skipping rope. From this finding, it can be deduced that the respondents who play outdoor activities demonstrated greater creativity and in various aspects compared with those who played indoors.

Outdoor play activities allow children to interact with others in the open spaces which allow mingling, free learning and competition. As they interact, they practice many things and learn new skills and ideas from their peers. These make children to be creative and innovative oriented.
CHAPTER FIVE: SUMMARY, CONCLUSSION AND RECOMMENDATIONS

5.1 Introduction

This chapter details the summary of the major findings, response to the research questions, conclusion, recommendations and suggestions for further research.

5.2 Summary of Findings

The objectives of this study were to examine both the positive and negative impacts of lack of play spaces for children in child development unplanned in Mukuru Nyayo location, Starehe Sub-County, Nairobi County.

The study showed that higher proportions of children who engage more in outside activities performed better in their academics compared to those who are engaged in indoor activities. Majority of the children who played in the field and those who had indicated that they played outside the house on the corridors scored a mean average of above 300 marks in their examinations.

There was a positive relationship between availability/lack of playing space and type play activities that would take place and the type of games the children engaged in. All these affect the type of play activity and hence academic performance and creativity of a child.

This study shows that most of the children prefer outdoor activities such as football, followed by rope skipping and watching TV/video games. Majority of the boys indicated that they engage in football followed by skipping rope, watching Television/video games. The study showed that children who accessed and utilized outdoor playing
spaces were more creative and innovative compared to those who preferred indoor games.

Availability or lack of play space is a great contributor to type of activities children in Mukuru Nyayo informal settlement engage in. The study showed that that higher proportions of children who indicated that they played in the field and those who had indicated that they played outside the house on the corridors scored a mean average of above 300 marks in their examinations. It also showed that the majority of those who played in the house were either average performers or poor performers. This implies that higher proportions of children who engage more in outside activities performed better in school academics compared to those who engaged in indoor play activities.

The ability of children to engage in outdoor games affected their Innovation and Creativity. According to this study, children who engaged in outdoor activities could make a kite, make a ball, could knit/embroidery or make a skipping rope compared to those who engaged in indoor play activities.

The study indicates that there is a positive relationship between availability or lack of play space and respondents ability to make various play items such as skipping ropes, kites, and box from paper, and balls.

The study showed that there was a positive relationship between where play activities took place and respondents’ general knowledge of societal issues. Comparatively, more respondents who played outdoors scored the higher points in general knowledge about societal issues compared with those who played indoor games. It also showed that the
majority of those who preferred indoor games scored between 5-7 points compared with those who had indicated that they preferred outdoor games. It can therefore be deduced that children who engaged in outdoor play activities and games were more knowledgeable on general societal issues than those who preferred indoor games.
5.3 Conclusion

According to the findings, lack of play spaces for children as an indicator has influence on the children’s school academic performance, creativity/innovation and general knowledge of societal issues. In addition there, is a positive relationship between availability or lack of playing space and children school performance, creativity and general knowledge about societal issues from the analysis done.

Regardless of where the children resided, children always practiced play and other leisure activities be they indoor or outdoor. Some of the children walk for long distances to find areas designated for child playing. Others chose to play along the road or along the corridors, the road side or create space inside the house for play. Children preferred to play outdoors games regardless of their area of residence.

Finally, children need space to express their creativity, learn new things and develop natural skills in a fun way and release pent up energy. In order to have fun children need open areas. However, many recreational and open play spaces in urban areas are unavailable, parents over schedule their children and most urban settlements have inadequate facilities and spaces for play due insurgence of informal settlement. This shows that children play activities have not been given adequate attention by governments’ urban planners and communities.
5.4 Recommendations

The study recommends the following:

i. The communities need to come together and negotiate with developers on the need to identify areas within their locality suitable for children playing.

ii. Development partners and NGOs intervening in informal settlements on education outcomes need to support the government efforts of slum upgrading in the informal settlements.

iii. There is need to create awareness to parents/caregivers on the importance of play activities for holistic child development especially for children who are living in estates.

iv. The community need to also raise their voice on closure of all video dens/play stations which display videos that are not suitable to the children.

v. The ministry in charge of urban planning need to enforce the implementation of the policy on planned urbanization that considers setting aside safe areas designated for child playing.

vi. The children department and policy makers must also ensure that the areas designated for children playing are safe and accessible so that children are confident to use such areas and spaces to play.
5.4 Suggestions for Further Research

Further research to investigate indoor play activities specifically on video/games and other programmes children watch during their free time and their effect on children’s behavior.

A comparative study with similar objectives on lack of play spaces for rural versus urban children would shed more light on this important topic of child development.
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Appendices

Appendix I: Consent Letter for Children

VERBAL CONSENT FORM
I am ___ (STATE YOUR NAMES) from the University of Nairobi and I am doing a study on unplanned urbanization and child development. This study is being conducted to gather information and to better understand the situation of children in this area and how their development and particularly their school performance, innovativeness and creativity and also their molarity is being affected by lack of playing space. I will be asking you some questions about yourself or your area. All information you will be sharing with me will be held in confidence and will only be disclosed within the survey team, upon your permission. Participation to this survey is voluntary. You have the right to withdraw from it anytime you want, and you can refuse to answer any question you may feel uncomfortable answering.

Do I have your permission to continue?
1. Yes (proceed with interview) 2. No (end the interview)

Children Questionnaire-
Date:………………………… Name of data Collector…………………………

Name of the school………………………………………………
## Appendix II: Questionnaire for Children

### UNPLANNED URBANIZATION AND CHILD DEVELOPMENT

#### CHILDREN QUESTIONNAIRE

<table>
<thead>
<tr>
<th>SECTION A</th>
<th>BACKGROUND</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name of the school</strong></td>
<td>Estate 01</td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td>Informal settlements 02</td>
</tr>
<tr>
<td><strong>Date</strong></td>
<td>(DD/MM/YYYY)</td>
</tr>
</tbody>
</table>

1. **How old are you?**
   - 10 - 11 Years 01
   - 12 - 13 Years 02
   - 14 - 15 Years 03
   - Other (specify) 04

2. **Sex**
   - Male 01
   - Female 02
   - Other (specify) 03

3. **What is your current class?**
   - Class 5 01
   - Class 6 02
   - Class 7 03
   - Class 8 04

4. **What did you score during the last three end of term exams?**
   - First Term
     - Below 200 01
     - Between 201 - 300 02
     - Above 300 03
   - Second Term
     - Below 200 01
     - Between 201 - 300 02
     - Above 300 03
   - Third Term
     - Below 200 01
     - Between 201 - 300 02
     - Above 300 03

5. **What play activities do children in your area engage in?**
   - Football 01
   - Skipping Rope 02
   - Watching TV/Video games/ Play stations 03
   - Other (specify) 04

6. **Where do these play activities take place?**
   - On the road side 01
   - Outside the house on corridors 02
   - In the field designated for play games to know which field 03
   - In the house 04
   - Other (specify) 05

7. **Of the indoor and outdoor games, which one do you like most?**
   - Indoor games 01
   - Outdoor games 02
   - Other (specify) 03

7b. **Do you know how to make the following materials?**
   - Y 01
   - N 02
   - A Ball 01
   - A skipping rope 02
   - A kite 03
   - A box 04
   - Mending clothes 05
   - Knitting or embroidery 06
   - Other (specify) 07

   Please make for me the following items using the materials provided

<table>
<thead>
<tr>
<th>OBSERVATION CHECK LIST</th>
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<tbody>
<tr>
<td>Scale - Tick what you observe and label as appropriate</td>
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<tr>
<td>1</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Total Scored</strong></th>
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### SECTION B

#### KNOWLEDGE ON GENERAL SOCIETAL ISSUES

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<table>
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<tr>
<th><strong>Incorrect</strong></th>
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<td>1</td>
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</tbody>
</table>

8. **Please give me the name of the former President of the USA.**

9. **What is the name of the Education Minister/Cabinet Secretary in Kenya?**

10. **Which is the National language in Kenya?**

11. **Who is the coach for Arsenal football team?**

12. **Who is the secretary general of the United Nations?**

13. **Which is the smallest County in Kenya?**

14. **Who is the Secretary General of the USA?**

15. **Which is the title of the person who heads a county?**
Appendix III: Key Informant Interview Guide

My name is ____________________________ I am conducting a research study on unplanned urbanization and child development. The purpose of the project is to gather information on how unplanned urbanization leads to congestion in the informal settlements leading to lack of space for children to engage in outdoor play activities. The information gathered will help the policy makers to rethink interventions in the future which will benefit all children who are brought up in the informal settlements. You were purposely selected as a key informant member and all your responses will be kept confidential. If you agree to participate, the exercise will last for 30 minutes. Your participation is voluntarily.

Guidelines
The tool is important in gathering in depth qualitative knowledge and understanding of problems encountered by children who are being raised in the informal settlements and how such affect their holistic development. Respondents who will use the FGD guide will include the SCCO’s, MEO’s, VCO’s, Area Chiefs and their assistants, Opinion leaders, Staff of development partners implementing projects in the area and Head teachers of formal schools.

Name/ Title/ Ministry/ Organization _________________________________

List of Key informers
• Head teachers
• Area chief
• Area sub chief
• 3 opinion leaders of the area
• Municipal Education Officers
• Sub-County Children’s Officer

Key informant interview schedules
1. What are some of the problems that children in this area face regarding right to play?
2. Where do children in this area play from?
3. What is your opinion on the right of children to play
4. What are some of the problems that can be experienced by children who do not get space and time to play

5. What do you think the community can do to create play spaces for children

6. Do you think lack of play has any effects on the following variables? Please explain your answer
   ✓ School performance
   ✓ Innovation and creativity
   ✓ General societal issues

What do you think the community and government can do to create more play space for children who are being raised in Mukuru Nyayo location, especially those in the informal settlements?
Appendix IV: FGD Guide

Questions for community members (Formal and Informal settlements)
My name is ______________________________. I am student. I am conducting a research study on importance of play for children. I would like to ask you questions related to the above issue and how unplanned urbanization affects child development. You were randomly selected as community members who live in this area and have some knowledge of how children spend their free time while out of school. I will use the shortest time possible. Whatever information you provide will be kept in confidentiality and will not be shown to other persons.

1. Do you think it is important for children play? Explain
2. What are some of the benefits that children get from playing?
3. Do you think outdoor play activities help children to improve their school performance? Please explain your answer
4. Do you think outdoor play helps children to be creative and innovative? Please explain
5. Do you think play assist children to understand contemporary issues affecting the society? Explain?
6. What are some of the challenges faced by children in slum areas when they want to engage in outdoor play activities and games?
7. What play activities do children engage in during their free time? Please give example of such play activities
8. Where do these play activities take place?
9. What is your opinion about these play places in terms of space, safety and cleanliness and negative effects on child growth
   - Space
   - Safety
   - Cleanliness
   - Negative effects on growth
10. Given a choice, where would you want children in this area to play from
11. What do you think the community and government can do to create more play space for children who are being raised in informal settlements as well as those who are being raised in the estates