

**INFLUENCE OF HOME BACKGROUND ON PRE-SCHOOL
CHILDREN'S ACADEMIC PERFORMANCE IN MATHEMATICS,
MUKURU KWA NJENGA PRE- SCHOOL, EMBAKASI NAIROBI,
COUNTY**

BY

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UNIVERSITY OF NAIROBI*
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**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT
AND THE REQUIREMENT FOR THE MASTER OF EDUCATION IN
EARLY CHILDHOOD EDUCATION,
THE UNIVERSITY OF NAIROBI**

2012

DECLARATION

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This research report has been submitted for examination with my approval as the University of Nairobi supervisor.

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DEDICATION

I dedicate this work to my beloved husband, my children, teachers and children of Mukuru kwa Njenga primary school who gave me their support tirelessly. They gave me moral support throughout the study. May God shower you with the blessings of the Holy Spirit that he may protect, provide, guide and abide in you. I can't forget my supervisor Mr. Nobert Were who gave me a lot of assistance, may the almighty God bless you.

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My innermost gratitude goes to my beloved husband, my children, my parents and siblings who continued to support me morally and materially. May God cover you all with his love, bless you and reward you accordingly.

ABSTRACT

Pre-school is the preparatory stage for the young children. They need proper attention at home and outside the home for good academic performance and for the development of the nation. This research entitled influence of home background on academic performance in mathematics in Mukuri; kwa Njenga pre-school in Embakasi, Nairobi County investigates how home background influences academic performance.

The world conference on Education for all (EFA) which took place in Jomtiem Thailand in March 1990 articulated the significance of the early years as foundation for the life of an individual. These deliberations have been corroborated by recent study by Shore Rima (1997) on brain development. This emphasizes that the first years of life are extremely important.

The objectives of the study was to find out if home background influences pre-school children's academic performance in number work. The respondents of the study were twenty pre-school children, two pre-school teachers, one head teacher, twenty parents of the pre-school children who were also respondents. All these were drawn from Mukuru kwa Njenga pre-school in Embakasi Nairobi County. The instruments used were questionnaires for the head teacher and the pre-school teachers, interview guide for the pre-school parents and documentary analysis forms for the pre-school children. The findings were organized in relation to the factors in the home which influence pre-school children's academic performance in mathematics and interpretation of

data was done in form of pie charts, bar graphs and tables. The study came up with various recommendations among them: The parents/guardians in Mukuru kwa Njenga pre-school should ensure that their children do not cover too long distances to and from school by residing near the school. Parents/guardians in Mukuru kwa Njenga pre-school should always have a positive attitude towards their children's work in mathematics. Parents/guardians should be willing to provide resources necessary for their children's academic work to equip the pre-school children with necessary skills and knowledge relevant to their level.

TABLE OF CONTENTS

Content	Page
Title	
Declaration	
Dedication	
Acknowledgement	
Abstract	
Table of contents	
List of figures	
List of tables	

CHAPTER ONE: INTRODUCTION

1.1	Background to the problem	1
1.2	Statement of the problem.....	2
1.3	Purpose of the study.....	3
1.4	Research objectives.....	3
1.5	Research questions.....	4
1.6	Significance of the study.....	4
1.7	Limitations of the study.....	5
1.8	Delimitations of the study.....	6
1.9	Basic assumptions.....	6
1.10	Definitions of key terms.....	~
1.11	Organization of the study.....	8

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CHAPTER TWO: LITERATURE REVIEW

2.0	Introduction	9
2.1	Residential area and p ^h e-school children's academic performance in mathematics	9
2.2	Size of household and pre-school children's academic performance in mathematics	11
2.3	Family attitudes towards attainment and pre-school children's academic performance in mathematics	13
2.4	Parent/Guardian education level and pre-school children's academic performance in mathematics	17
2.5	Distance to and from school and pre-school children's academic performance in mathematics	20
2.6	Theoretical Framework	21
2.7	Conceptual framework	23

CHAPTER THREE: RESEARCH METHODOLOGY

3.0	Introduction	25
3.1	Research design	
3.2	Population	25
3.3	Sampling procedure and Sample size	26
3.4	Instruments	27
3.5	Validity and reliability	28
3.6	Procedure for data collection	29
3.7	Methods data analysis	1

**CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND
INTERPRETATION**

4.0	Introduction	32
4.1	Influence of residential area on pre-school children's academic performance in mathematics	32
4.2	Influence of size of household and pre-school children's academic performance in mathematics	34
4.3	Influence of family attitude towards attainment and pre-school children's academic performance in mathematics	37
4.4	Influence of parent/guardian's education level and pre-school children's academic performance in mathematics	40
4.5	Influence of the distance to and from school on the pre-school children's academic performance in mathematics	43

**CHAPTER FIVE: SUMMARY, CONCLUSION AND
RECOMMENDATIONS**

5.0	Introduction	46
5.1	Summary	46
5.2	Conclusion	48
5.3	Recommendations	49

APPENDICES

Appendix I	Questionnaire for the Head Teacher	51
Appendix II	Questionnaire for the pre-school teacher	
Appendix III	Interview guide for the parents	53
Appendix IV	Documentary analysis forms	54
	References	56

LIST OF FIGURES

2.1	Theoretical framework.....	23
2.7	Conceptual framework.....	24
4.1	Distance to and from school.....	33
4.2	Percentage of pre-school children's performance in mathematics..	34
4.3	Income level as a source of attitude towards performance in mathematics.....	39
4.4	Parent/guardian's education level and its influence in their children's performance in mathematics.....	41
4.5	Regularity in supervision of pre-school children's work by the parent.....	42
4.6	Regularity of assessment of pre-school children's progress by parents.....	44

LIST OF TABLES

3.1	Sample size	27
4.2	Number of people in the household	35
4.3	Levels of appreciation and prize giving to pre-school children..	38
4.4	Influence of parent/guardian's education level and pre-school children's academic performance in mathematics...	40
4.5	The distance covered by pre-school children to and from school...	43
4.6	Signing of report forms by parents/guardians	45

CHAPTER ONE

INTRODUCTION

1.1. Background to the problem

Academic performance is usually influenced by many conditions or characteristics in the home and outside the home which need to be manipulated in order to ascertain their relationship with children's academic performance. Among the variables that are significant in their interrelationship with academic achievement are: distance of the school from the pre-school children's homes, place of residence, number of people in the household, fathers/guardian's level of education and attitude towards attainment in pre-school children's academic performance.

Education becomes a joint family venture, and siblings reside with older brothers and sisters and other family members who are often better educated than them in order to be more successful at school. The influence of the family in the socialization process, family interests and support and the psychological stimulation of the child's academic development by parents and other significant persons in the home environment are important influence on academic achievement and motivation (Circere 11, 1978; Marjori-banks; 1979, Walberg and Marjoribanks, 1976). This is true for this study: the better achieving children usually reside with the better educated family members.

There are factors that are outside (the school's control like the children's home background and socio-economic status, parent's/guardian's level of education and the family member's attitude towards achievement. The importance of home

background has been cited as a major factor which influences performance Talcott (1972), Rank (1976), Mirthungu (1983). Moola (1990) in Nyandarua District asserted that there is a positive relationship between students' academic performance and home background. These are home environmental factors that have been seen for years as serious handicap to good school progress. One of them is poverty, due to factors like low wage, large families, retrenchment and loss of family breadwinner which exert pressure on children's academic performance. Wavveru (1982) asserts that malnutrition and poor living conditions are bound to have an influence on the health of the child and directly or indirectly; affect his/her ability to learn. This shows that home background directly influences children's academic performance.

1.2. Statement of the Problem

Academic performance in mathematics in Mukuru Kwa Njenga pre-school in Embakasi District Nairobi County is of great concern. Information obtained from the school administration indicates that there is evidence to show that children's performance in mathematics is influenced by different factors in and out of school. Among the factors influencing performance in mathematics is the home background of the children. Academic performance in pre-school children indicates the relationship between children's residential area, number of people in the household, distance of the school from the children's homes, parent/guardian level of education and attitude towards educational achievement and help for homework. Information obtained indicates that children in Mukuru Kwa Nienga perform poorly in mathematics pre-school as compared to when in class one.

This research aimed at studying how home background influences children's academic performance especially in number work in Mukunj Kwa Njenga pre-school in Embakasi Nairobi County

1.3. Purpose of the Study

The purpose of this study was to investigate the influence of home background on pre-school children's academic performance in mathematics, Mukjru Kwa Njenga pre-school in Embakasi Nairobi County. The study was also to establish the relationship of the home background on children's performance in mathematics and its impact in the society as whole.

1.4. Research objectives

The specific objectives of the study were:-

1. To find out how the residential area influences pre-school children's academic performance in mathematics.
2. To establish the relationship between the number of people in the household and pre-school children's academic performance in mathematics in Mukuru Kwa Njenga pre-school.
3. To investigate the extent to which family's attitude towards academic achievement influences pre-school children's academic performance in mathematics.
4. To determine whether parent's/ guardian's education level influences pre-school children's academic performance in mathematics.
5. To examine in what way the distance to and from school influences pre-school children's academic performance in mathematics.

1.5. Research questions

In order to investigate the above statement of the problem and the objectives, the following questions were generated to guide the study.

1. What is the relationship between pre-school children's residential area and their academic performance in mathematics?
2. Is there relationship between the number of people in the household and the pre-school children's academic performance in mathematics in Mukuru Kwa Njenga pre-school?
3. Does the family attitude towards academic achievement influence pre-school children's academic performance in mathematics?
4. Does the parent's/guardian's education level influence pre-school children's academic performance in mathematics?
5. What is the relationship between the distance the pre-school children travel to and from school and their performance in mathematics?

1.6. Significance of the study

The parents/guardians of the pre-school children will benefit from the research findings in understanding their role in their children's performance academically especially in mathematics. They will be provided with rich information as to why they are their children's first teachers and the pillars in their performance in number work.

The findings of the study may be useful to the personnel in the ministry of education in understanding their role in facilitating academic performance in pre-school education sub-sector which is an important institution in the entire

education system. Pre-school education not only enables girls and boys to gain access to education but also it gives them a bearing on their lives.

Kenya Institute of Education (K.I.E) and other institutions involved in training of pre-school teachers will also benefit. K.I.E will benefit by improving the quality of training of teachers who handle children from different home backgrounds. The findings will further benefit future researchers in identifying priority areas in which to carry out more in-depth researches on homes and institutions which partner with schools in pre-school children's effective performance in Mukuru Kwa Njenga and other parts of the country (Kenya).

1.7. Limitations of the study

According to Best and Khan (2008), limitations are conditions beyond the control of the researcher that may place limitations on the conclusion of the study and their application to other situations. Personal characteristics of the respondents had an effect on data gathering. Some respondents did not exhaustively respond to all items. Some concealed information deeming it personal. The researcher had less mitigating mechanism upon this as respondents were simply not willing to respond the items at the time of carrying out the interview.

There are some factors that the researcher was not able to control such as the responses of the respondents which could be affected by factors such as suspicion and fear of the repercussions of their responses. The respondents could therefore give socially acceptable responses in order to avoid offending the researcher (Musula, 1988) thus resulting in responses that are less reliable and valid. To

overcome this, the researcher assured **the** respondent's confidentiality so as to minimize the effects of these limitations.

1.8. Delimitations of the study

The researcher's study was in Mukuru Kwa Njenga pre-school. The area under study could have characteristics likely to be found in many parts of the country; therefore, the findings may be generalized due to the similarity in their way of life, regional and physical disparity.

The study concerned the researcher with examining variables such as residential area, distance between home and school, parent/guardian's education level, family's attitude towards academic achievement in number work and size of the household so as to establish any significant relationship between them and the academic performance in mathematics of pre-school children in Mukuru kwa Njenga pre-school thus focusing only on the pre-scholars.

1.9. Basic assumptions

The researcher took the home background to be a factor influencing the academic performance in mathematics of children in Mukuru Kwa Njenga pre-school without actually verifying it. The researcher assumed that it is the home where children come from that has a lion's share of the degree of their performance. This is because all the children learned in the same class, taught by the same teachers who followed the same curriculum but their academic performance in mathematics was not the same. This led the researcher to assume that homes where the children came from play a significant role in their academic attainment.

1.10. Definition of Terms

Academic performance. The way in which one carries out an activity successfully especially in academics.

Access to education: The way of teaching or entering a place where teaching done.

Achievement oriented behavior: The way in which one is concerned with achieving something.

Aspirations, a strong wish to achieve something.

Attainment: A success in achieving a given skill through interests to the mind.

Attitude: The way one behaves, thinks or feels towards somebody or something.

Education level: A standard of academic ability or level of learning.

Enrolment: An official way of becoming a member of a school course or group.

Environmental factors: The place in which people live including all the physical condition that affect them. E.g. parents are responsible for providing the right environment for their children to learn.

Household' All the number of people that live in the same house.

Home background: The type of place where one lives or feels he/she belongs.

Influence: The power to change or control something or somebody. The power to control or change academic performance of pre-school children.

K.I.E: Kenya institute of education

Ministry of Education: A government department concerned with giving people useful knowledge.

Number work: mathematical activities as done in pre-school level

Parent: a person's mother or father who is legally responsible for the care of a child.

Pre-school: school sub-sector that prepares children for primary school. The children in this school sub-sector are usually between three to six years of age.

Residential area: A place that provides space for someone to live in.

1.11. Organization of the study

This study is presented in five chapters. Chapter one deals with the introduction on the study. It presents; background of the problem. Statement of the problem, purpose of the study, the research objectives, significance of the study and definitions of key the terms. Chapter two is the review of literature related to this study. The review further presents the theoretical and conceptual framework .Chapter three describes the research methodology that will be used. This includes the following subheadings: - research design, target population, sample and sampling procedure, research instruments, validity of the instruments, reliability of the instrument, data collection and data analysis techniques. Chapter four deals with presentation of the study. It contains findings of the study pertaining to parents, teachers and children's questionnaires, interview and documentary analysis forms and the findings pertaining to the research questions formulated for the study and conclusion. Chapter five will deal with the summary, conclusions and recommendation of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Literature was about the influence of home background on the academic performance of pre-school children in mathematics. Many researches to date on home background as an influence on children's academic performance tend to focus on either parents/guardians education level, residential area, family attitude towards academic achievement, distance to and from school and size of household. The input and output studies based on achievement of pre-school children provided rich evidence that home background has regular important influence on children's academic performance. Such studies have shown such factors to be apparently effective while others have shown the opposite and their total outcome throws doubt on the importance of rich background in the progress and performance Briggs (1992). Education research has been interested in finding out either or not home background has an influence upon performance in academics and extent to which students learn or reason.

2.1 Residential area and pre-school children's academic performance in mathematics

The positive link between the children's residential area and their academic achievement is well established by Sirin (2005). He points out that the relation of poverty and low socio-economic status exerts pressure on the child's outcome. These include; low IQ, educational attainment and achievement and socio-emotional problems. Influences on children's educational outcomes can be

associated with geographic location and characteristics of residential neighborhood among other factors (Jacob, 2004; Sanborimatsu et al. 2006).

Stanley, Cornello, Edwards and Marquart (2008) compared the difference between urban and rural school communities and noted significant differences in income and education of high school students' parents. The findings showed that parental education and social economic status rather than on community/ school characteristics of urban and rural settings has a role to play on academic attainment (Stanley et al, 2008). AnsuDatta (1987) stated that children from poor families are more likely than others to be born in crowded areas often lacking normal amenities such as baths, electricity and running water or even a toilet. The homes are in most cases poorly furnished and have very little to offer the children for imaginative play. The food available is often insufficient and nutritionally imbalanced. The clothes worn may not offer adequate comfort or protection against the extremes of weather.

Onocha (1985). Crane (1983) and Rane (1998) argue that the family background and the context of a child affect his/her reaction to life situation and levels of performance. Thus Chado (1988) concludes that the environment one lives in has great influence on her/his performance in school.

Eshiwani (1983) carried out a study to find out factors affecting performance among school children in Western Province of Kenya. He identified environmental factors as playing a key role in influencing academic achievement of students. According to his findings, the environment in which an individual child lives influences how he or she perceives him or herself and shapes his or

/

her aspirations, self-esteem and motivation. Therefore, the environment can either enhance or hinder a child's learning and attainment.

In 1972, a report published by International Labor Organization (I.L.O) pointed references to the wide range between a small group of rich and vast masses of poor Kenyans. In Zambia, the second national development plan noted with concern that there existed large differences between wages and different sectors of the economy in the 1960s which were interesting particularly between the lower and higher wage level. It may be worthwhile here to note how social-economic differences tend to distinct patterns of behavior and the extent to which they can be correlated to education. Everywhere social strata based on wide disparities in income tend to develop the following characteristic of patterns of life marked by residence, house furnishes, food habits, quality of nutrition kind, qualities of clothing, posture, gesture, general physical being, speech ability and usage etc.

2.2 Size of household and pre-school children's academic performance in mathematics

Mia Kellmer (1985) states that when a substantial minority of children come from broken homes or from large families, with feckless, indifferent parents, teachers have seemed to have some measurers of support. From research evidence (Mia Kellmer 1985) shows that they out perform their counter parts who come from homes which are not broken. This has indicated that the effect of home circumstance (notably parental attitudes and interests, housing conditions, family size etc) upon which children progress in schools heavily outweigh any effects of

school factors such as the school size, staff experiences etc (CPeaker 196V. Wiseman 1967).

Children from larger families are found to do worse than children from smaller families. Similarly children lower down the birth order do worse than those in higher up the birth order (I. Acorou, 2001). According to Adler cited in Liba (1989). First birth or the oldest child is usually advantaged by a good deal of attention and warmth during the early stages of life, which he entertained all alone. Observation and studies have shown that more attention is accorded to the first born (Becker, 1989). Parental attention by parents declines as the number of siblings increases and later born children perform less well than their earlier born siblings.

Leoma (1982) discovered that on relationship of birth order and creativity first born and configurations of oldest and only children are significantly more creative on verbal tests of creativity than later born. Nwafor and Anjo (1988) observed that there was more significant outstanding academic performance among first birth children. Terubiaje (2002) observed that there is a significant difference in the intelligence capacity between the first born and later born. Spears (1982), in his study investigated the birth order effect on intelligence with later born children revealed that later born children were less capable than earlier siblings, when birth order effects were controlled, family size was found to be negatively related to intelligence. However, Powell and Steerman (1993) and Van Eijk and Degraaf (1995) argued that children's attainment depends on input of time and money from their parents. The more children there are in the family the less the

inputs. These inputs are not money alone but other essential things like time, attention, resources and so on. On the other hand Booth and Kee (2006) confirmed that children from large families have high levels of education. Research on the family size and sibling position has been based on a theory' of the allocation of parental resources as presented in Becker (1981) and Spauta and Paulson (1995) who confirmed that differences were found in hirth order and family size of adolescents' achievement in academics.

2.3 Family attitude towards attainment and pre-school children's academic performance in mathematics

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According to the star newspaper Tuesday, November 8 2011. to be bom into a particular family means to acquire a status (or set of statuses). In the community and in society, the family's status gives status to the child. It is this status that determines how others respond to him or her. This is to say that what is expected of a child at a given society e.g. school depends on some extent on his parent/parent's marital status or his/her family's social position and attitudes towards achievement. This is because families differ in the rate in which they take their children to school and pace them (children) towards academic achievement. Limited income among lower class families have been found to restrict provision of school books, development funds and other necessary materials to ensure good performance at school. (Kinyajui 1977 and Nderitu 1999). Poor families have low-aspirations for their children than upper class due to opportunity cost of the child according to Torodo (1977). On the other hand children from high social-

economic background tend to perform better in school; as a result of good parents' educational standards, high income especially in urban areas where the best schools are found. Parent's willingness to help their children in school work and ability to buy them supplementary books is significant in the academic achievement. Avalos (1986) and Nderitu (1999) in their study on leaching children of the poor explain that income among the lower class families restrict provision of tuition fees, school text books and other resources necessary to ensure good performance in school'.

Kinyajui (1977), in his study revealed that social economic background of the family influences the rate of down point and repetition throughout the educational level, Waweru (1982) cited high dropout rate, repetition, discontinuation and suspension as some of the education interruptions that are characteristic to children who come from poor or underprivileged families.

Cullen (1969) noted the importance of parent's encouragement on academic performance. A study of Kapila (1976) and Kithuri(1977) also reported a positive association between parent's participation in the child's work and academic performance. Mortimore (1988) and Nderitu (1999) found out that parent's involvement in the life of the school going child influences children's progress and development positively.

Michieka (1983), in a study on the causes of school dropout in Kisii identified parental involvement in the student's work as a factor that affects children's performance. A positive association between parent's participation in the child's school work and academic performance exists.

Okui (1995) in her study with the standard seven pupils in the slums of Nairobi reported a positive association between parent's participation in the child's school work and performance. Children from better socio-economic background tend to have an advantage hence tending to perform better in school than those from deprived families.

The home environment has an exceedingly greater role to play on the academic performance of every child. Smith et al (1989) reveals that home environment may enhance positive self esteem which may improve academic performance. The home environment must be encouraging and supportive towards academics. Mwona (1993) comments that for a child to make the most of his educational needs, the child should have an easy access at home to instruments like books, newspapers, space, light and silence for convenient study.

Albashir (1974) cited influence of home environment as one of the factors which influences the student's performance in national examinations. Muola (1990) studying Harambee schools in Nyandarua District asserted that there is a positive relationship between student's performance and home environment.

As per the present research study, it is seen through the literature review done that positive attitude towards academic performance in the family or home of the child is a factor on the child's academic attainment. A child exposed to parents who model achievement oriented behavior (e.g. Obtain advanced degree, reading frequently; encouraging a strong work ethic and provide achievement oriented opportunities (e.g. library and museum trips; after school enrichment program educational trips and videos) should develop the guiding beliefs that achievement

is to be valued, pursued and anticipated. This belief should then in turn promote successful outcomes across development, including high school graduation, the pursuit of higher learning as the acquisition of high prestige occupations. Not surprisingly, there are positive relation between parent's level of education and parent's expectations for their children's success. Dans-Kean (2005) suggests that more highly educated parents actively encourage their children to develop high expectations of their own.

Mclovd's(1989) found out that parent who experiences difficult economic times have children who are more passionate about their education and vocational future. Parent's involvement in the child's academic activities has been defined and measured in multiple ways including activities that parents engage at home and school and the positive attitudes parents have towards their children, school and teacher (Epstein 1996, Grolrick and Slowkaezek 19⁴, Kohl, Lengula and Mahon. 2000). Positive attitude towards education has been associated with the child's increase in academic performance.

Kimm-K.aufiman. Planta Cox and Brand Bradly (2003) reported that an increase in parent's school activities such as increased number of parent's teacher contacts was associated with worsening achievement as increased contacts may have occurred to help the teacher to manage the child's existing behavioral problems.

In the research under study the researcher realizes that there is a relationship between attitude portrayed towards academic performance and actual achievement.

2A Parent/Guardian's education level and pre-school children's academic performance in mathematics

Parental education level is an important predictor of children's educational and behavioral outcomes (Davis-Kean, 2005, MC Cartney & Taylor, 2002). The family social economic status including parent education level, would predict the quality of family interactions and child behavior. Guerra and Huesmann. (2004) point out that the quality of family interactions and child behavior would shape by the late adolescence, educational achievement and aspirations for future educational and occupational success. Late adolescent aspirations for future success would affect actual educational and occupational success in adulthood (Slegers & Miller 2002).

Parent's level of education has been said to have an influence on students' need to achieve. Kimto in Makindo (1999) on his study on relationship between secondary school students and academic performance showed a strong and positive correlation between father's level of education and students achievement motive. Cantu (1975) in a study of 73 Mexico American pupils found the parent's education attainment, income level and environment proved to be highly significant in determining the child's level of education attainment.

Amalala (1975) in his study on 370 boys and 112 girls in Nigeria found out that male students from educated families performed significantly better than male students from uneducated families. Ball et al (1984) also found out that educational background of the family is related to the academic performance of the child.

Literate parents have interest in their outdoor assignment and they supervise these assignments. Griffin (1996) shares an opinion that parental participation is of great importance in determining the pupil's performance. According to Indongole (1987) the socio economic background of the candidate tends to influence performance. For example, well educated parents tend to provide their children with educationally stimulating environment by encouraging them to study and have access to relevant books and related literature.

Parental education level is an important predictor of children's educational and behavioral outcomes (Dans-Kean. 2005; Dearing, McCartney, Taylor 2002; Duncan, Brooks-Gunn. and Klebanor, 1997). This is through Columbia county longitudinal study, a 40 year developmental study initiated in 1960 with data collected most recently in 2000 (Eron, Walder and Leftkowitz 1971).

Research suggests that parental education indeed is an important and significant unique predictor of a child's achievement. For example, in an analysis of data from several large scale developmental studies. Duncan and Brooks Gunn (1977) concluded that material education was linked significantly to children's intellectual outcomes even after controlling for a variety of other indicator such a household income. Dans-Kean (2005) found direct effects of parental education and income exerted indirect effect on children's achievement fostering behaviors and subsequently children's achievement, through their effects on parents' educational expectation.

Family process models (e.g. Congere et al, 2002) have proposed that effects of financial strains, unstable employment on the child's outcomes are mediated

through parenting stress and family interaction patterns e.g. lower level of warmth, nurturance and monitoring of children. That is family variables such education and family interactions as it is established within broader social learning models (Hues man 1998).

It is possible that low parental education levels could affect negative family interaction patterns which can influence child behavior problems and in turn affect lower academic and achievement oriented attitudes over time. Parental education and family interaction patterns during childhood also might be linked more directly to the child's developing academic success and achievement oriented attitudes. In general (Bandura 1986) said that social behavior is shaped partly through observation and direct learning experiences. This experiences leads to formation of internalized cognitive scripts, values and beliefs that guide and maintains behavior aver time (Anderson and Huesmann, 2003; Hucsmann 1998) according to Eccles ride and Barber 2004; Eccles, Wigfield and Schekefele 1998). This cognitive process accounts for the emergence and persistence of achievement related behavior and ultimately successful achievement.

In the current study of influence of home background of the academic achievement and the review done on the same on parent's education level shows that parental/guardian education level is a strong predictor for children's academic performance. This is further supported by Eccles expectancy value theory of achievement. (Eccles, 1993, 1998)

Pidgeon (1970) does not much consider education status as having significant influence on academic performance; rather he suggests that it is a motivational

factor. In the home background such as interests and attitudes of the parent that is important in influencing children's performance. It is the interest that parents consistency show in their children's school work but not the fact that they are well educated. So if brought up in a home where parents strive for success the child may very well have same tendencies in him/her. Muola (1990) and Arasa's (1995) studies found a significant relationship between father's level of education and the girl's achievement motivation.

Eshiwani (1983) carried out a study to find out factors affecting performance among primary and secondary school pupils in Western Province of Kenya. He identified environment factors as playing a key role in influencing the performance of students. According to his findings the environment in which the individual student lives and interacts with influences how he/she perceives himself/ herself shapes him/her aspirations, self esteem and motivation. Therefore the environment can either hinder or enable a student's learning.

2.5 Distance to and from school and pre-school children's academic performance in mathematics

Philip Vernon (1973) argues that traveling long distance to and from school may be hard. Most children are also expected to undertake heavy chores at home in the morning and evenings, the effects of these in their learning may be considerable. As S.A Richardson (2000) points out that their brain damage children may be backward because they cannot explore their physical and social environment normally and play with other children. This may be so because they are overprotected since their physical environment is not safe or are rejected at home.

The current research study on the influence of home environment on pre-school children's academic performance showed that the distance the children cover to and from school influences their academic performance at a very low rate.

Richardson (1973) points out that young people are now at risk, not only from openly hostile members of their own generation but also from other young people who profess to be offering them help. In the process of commuting to and from school, the children could be in danger of interacting with people of anti-social behavior and drug traffickers who might influence them to drug taking. These drug traffickers have actually been known to target students.

Another challenging factor to students is where they live or commute from. Living in slums or low standard areas with lack of social amenities e.g. clean water, electricity and reading space. (Eggleton 1977, pg 34) in his book, The Ecology of the School, writes that in such low income areas of residence truancy among students is rampant that it affects the students performance in public examinations.

2.6 Theoretical Framework

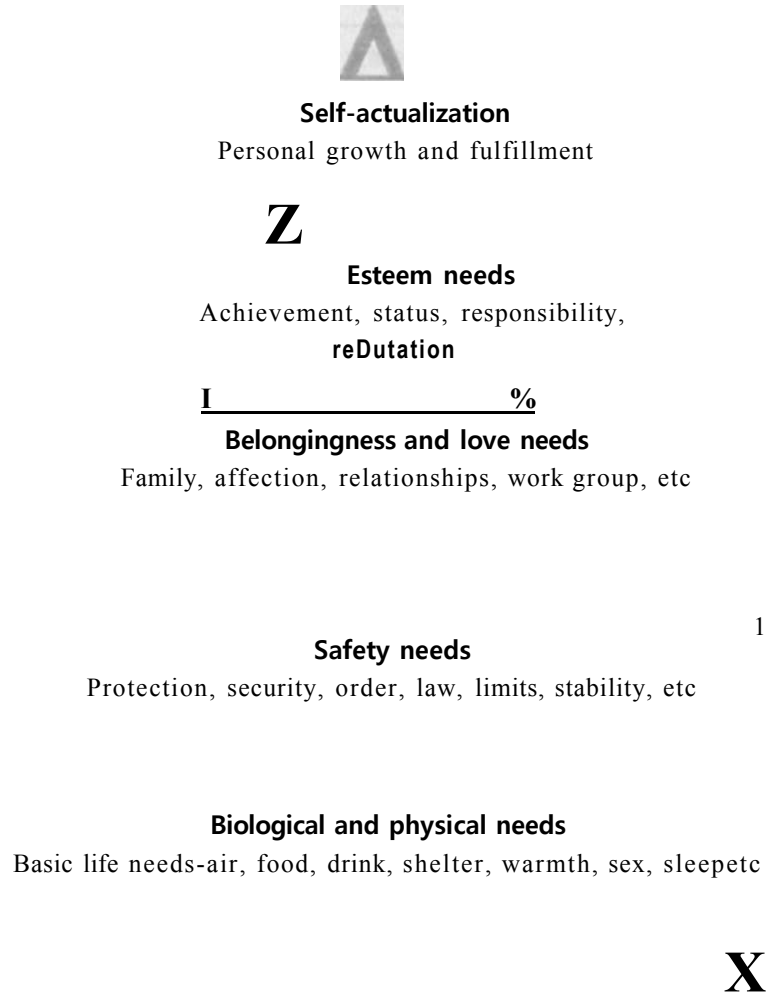
The theory chosen for this study is humanistic theory. This theory was chosen because it attempts to explain how human beings are motivated by various factors such as biology and achievement of power (Abraham Maslow 1954). Maslow explains how to achieve a given goal (in this case academic achievement) is directed and sustained by different factors ranging from psychological, safety and love needs among others

Abraham Maslow (199J) posted a hierarchy of human needs. According to him an individual is ready to react upon growth needs among which lies education if only the deficiency needs such as psychological needs, safety needs, belongingness, love needs and esteem needs are met.

Maslow's hierarchy of needs

The theoretical framework according to Abraham Maslow (2001-2004) was represented diagrammatically as shown: Maslow's Hierarchy of Needs states that we must satisfy each need in turn, starting with the first, which deals with the most obvious needs for survival itself. Only when the lower order needs of physical and emotional well-being are satisfied are we concerned with the higher order needs of influence and personal development. Conversely, if the things that satisfy our lower order needs are swept away, we are no longer concerned about the maintenance of our higher order needs.

Figure 2.1 Theoretical framework

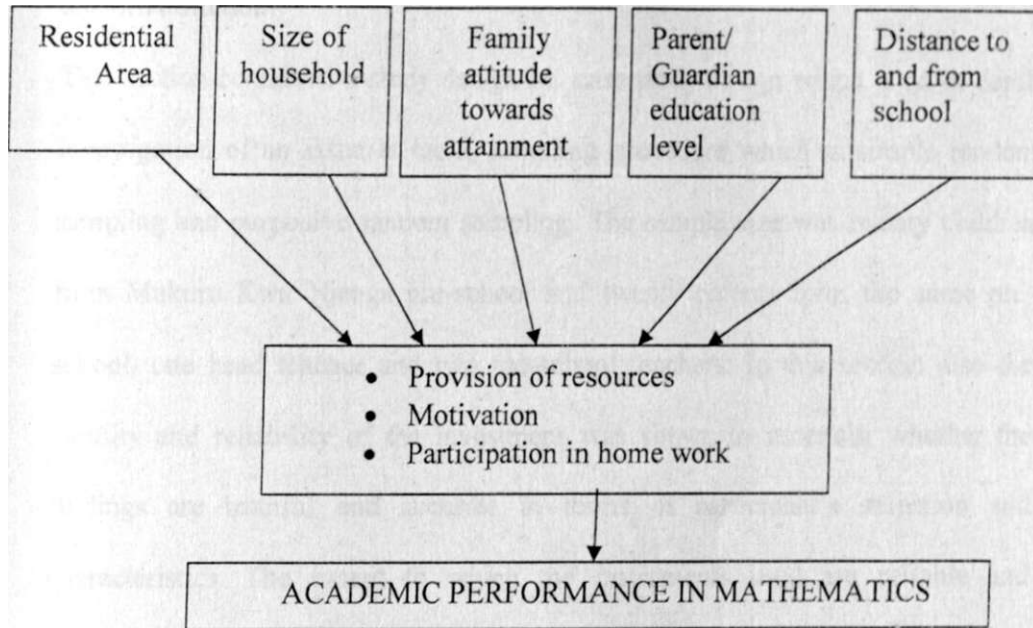


Source: www.businessballs.com

2.7 Conceptual Framework

The conceptual framework of this study was developed based on the findings of other researchers such as Muola (1990) while studying Harambee schools in Nyandarua district asserted that there is a positive relationship between students' academic performance and their home environment. Davis-Kean (2005), MC

Cartney and Tailor (2002) also pointed out that home background especially parental education level is a predictor of children's educational and behavioral outcomes.



Source: Researcher

Figure 2.2 conceptual framework

From the figure the independent variables determine academic performance in mathematics. They include; residential area, size of the household, family attitude towards attainment, parent/guardian educational level and distance to and from school. This therefore implies that performance in number work was dependent on the independent variables. However these were not the only variables that influenced performance but they formed the basis of research for this study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This section contained a study design i.e. case study design which is an in-depth investigation of an issue at hand, sampling procedure which is simple random sampling and purposive random sampling. The sample size was twenty children from Mukuru Kwa Njenga pre-school and twenty parent? frm the same pre-school, one head teacher and two pre-school teachers. In this section also the validity and reliability of the investment was shown to ascertain whether the findings are truthful and accurate in terms of participant's selection and characteristics. The extent to which the instruments used are reliable and consistent. Data collection procedure involved interviews and documentary analysis, forms for children, questionnaire for teachers and interviews for the parents. Finally the data collected was organized and interpreted in this section.

3.1 Research Design

The research adopted case study. Case study design is a descriptive intensive and in-depth investigation. It is also systematic and objective. Case study design was used to illustrate general condition or situation of other home background conditions as the one of Mukuru Kwa Njenga pre-school children, and it can also be used as a way of setting up hypothesis for further

3.2 Target Population

Mugenda and Mugenda (1999) defined population as the entire group of individuals having common observable characteristics. Bricken (1988) defines

target population as a large sample or population from which a small proportion is selected for observation and analysis.

The target population in this study was two pre-school teachers, one head teacher, thirty parents and thirty pre-school children. The pre-school teachers were of help as they understood the background of the pre-school children better. The teachers interact with the children on a daily basis. This means that they were in a position to give important information in this study. The pre-school children's academic performance will be analyzed through what was in the documents like children's work books, syllabuses, record of work covered, lesson plan books, class registers and progress records.

Twenty pre-school children was one third of the population of children in Mukuru Kwa Njenga pre-school. Twenty parents represents one third of the specific homes from where the children come. The school head teacher provided important information on the pre-school children's academic performance in mathematics.

3.3 Sampling procedure and sample size

The research was done on thirty parents fifteen of who were male and fifteen female. Thirty pre-school children. These children were of the parents sample for this study. Two pre-school teachers who gave documents of children for analysis. One head teacher of the school is also crucial in the study. The parents were important in giving information on the distance from home to school.

Various aspects of children's home background were researched on, for example famil) attitude towards attainment, size of household, the distance covered when

coming to and from school and their residential area. To crown the aspects the parents/ guardians' education level and the role it played on the children's academic performance as an aspect is crucial for the study.

The method of study was simple random sampling and purposive random sampling. Purposive random sampling was of help to determine if home background influences pre-school children's academic performance. Simple random sampling was necessary because the population was homogeneous in terms of the same pre-school which has similar characteristics.

Table 3.1 sample size

Category	Target	Sample size	Percentage
Head teacher	1	1	100
Teachers	2	2	100
Pre-school children	60	20	33.3
Parents of pre-school children	60	20	33.3

3.4 Research instruments

3.4.1 Use of interviews: The researcher used interviews. The interviews are social interaction between the researcher and the participants. This took place face to face. The researcher interviewed the parents individually. According to Anderson (1990). these interviews helped the researcher to penetrate the feelings and thinking of the interviewee, in this case the parents. The researcher used a tape recorder to record open ended interviews and then went back to the recorded interviews to analyze and summarize (Bogdan and Biklen (1992).

3.4.2 Use of questionnaires: The researcher set a number of questions to which the respondents had to respond to in a written manner. This technique was useful to the teachers and the head teacher who are literate. This technique was preferable since it was not very expensive. Questionnaires ensured likelihood of honesty as respondents needed not give their identification.

3.4.3 Documentary analysis forms: The researcher searched for data from relevant documents at pre-school level in these case documents used include, children's end of term report book, progress record to access the information from these documents. The researcher prepared documentary analysis form which comprised the name of the document, purpose of the document, description of the document and significance of the document through which the researcher got information for each of the document. The documentary analysis form was important as it did not limit the researcher to time and space. Secondly, the documents are always there and readily available. This ensured that the researcher could access documents without, any form of bias since the data was already there.

3.5 Reliability and Validity

3.5.1 Reliability

Mugenda and Mugenda (2003) define reliability as a measure of the degree to which research instrument yields consistent results or data after repeated use. The pilot study was conducted to enable the researcher assess the clarity of the questionnaire items so that those items found to be inadequate or vague could be modified to improve the quality of the research instrument thus increasing its

reliability. The split half technique of reliability testing was employed, whereby the pilot questionnaires were divided into two equivalent halves and then a correlation coefficient for two halves computed using the Spearman Brown prophecy formula. The coefficient indicates the degree to which the two halves of the test provide the same result and hence describe the internal consistency of the test.

3.5.2 Validity

Validity is defined as the accuracy and meaningfulness of inferences which are based on the research results (Mugenda and Mugenda 1999). Validity according to Borg and Gall (1989) is the degree to which a test measures what it purports to measure. All assessment of validity was subjective opinions based on the judgment of the researcher (Wiersman, 1995). The pilot study helped to improve the face validity of instruments being used. This was improved through expert judgment of the research supervisor who was an expert in research this helped improve content validity of the instruments.

3.6 Procedure for data collection

The administration of data collection instruments was done by the researcher both at pilot and main study. The researcher in this study interviewed the twenty parents on face to face basis. This interview enabled the researcher to penetrate the feelings and thinking of the interviewee. Use of open ended interviews was done while recording in a tape recorder, so as to get back to the information recorded when analysis was being done.

The researcher used a questionnaire for the head teacher and the two pre-school teachers who were literate and therefore favored by the questionnaire as they responded to questions in a written manner. Questionnaires comprised a mixture of closed ended questions and open ended ones. In the closed ended questions the responses known as others\specify were included whereby the respondents were to be specific.

In the use of documentary analysis which was the search of data from documents, the researcher in this study accessed information from documents such as. end of term report card, and pupils progress records. Through the purpose of the document, description of the document and the significance of the document the researcher got information required.

3.7 Method of data analysis

The researcher used open and closed ended questionnaires for the head teacher and two pre-school teachers who are literate in comparing attributes in tabular and graph form. This research yielded both qualitative and quantitative data. Qualitative data was used to analyze qualitatively using content analysis of meanings and implications emanating from respondents' information. The researcher used statistical package for social sciences to analyze interrelated information. This enabled the researcher to categorize findings and conclusion from various tools according to the themes (variables). It also enabled comparison of the information given by the respondents as portrayed by the use of pie charts, bar graphs and tables.

Interview schedule for the parents was used to analyze data because of the parents'/guardians' literacy level the interviewed parents/guardians referred in terms of their levels of literacy. The information was presented in terms of percentages. The researcher analyzed the pupils' end of term report book and progress records as obtained through the two pre-school teachers. The information obtained was presented in terms of frequency and percentages in tabular form depending on the attributes such as the number of report books signed or not signed by the parents/guardians and the number of report books which were not taken home for signing.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0 Introduction

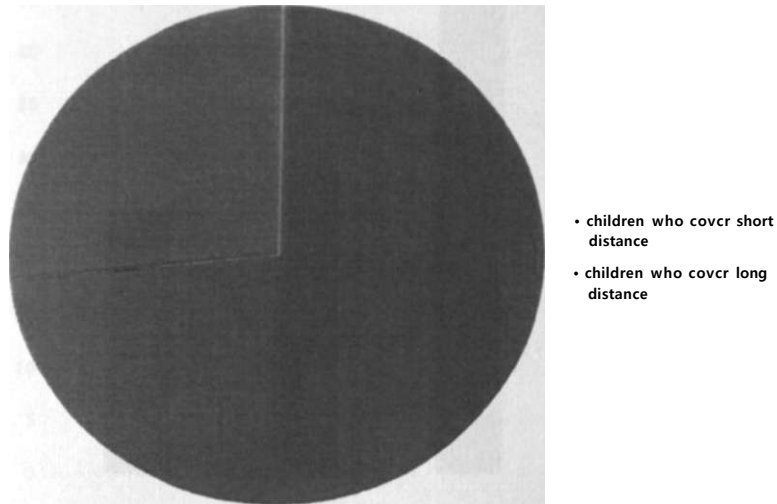
This chapter covers data presentation analysis and interpretation. Data was collected, cleaned and coded for analysis. Closed ended items were analyzed using quantitative analysis while open ended items were grouped into themes and then analyzed using SPSS computer program. The generated data is herein presented in pie chart form and graphically based on research objectives.

4.1 Influence of residential area on pre-school children's academic performance in mathematics

The findings revealed that most children come from near the school representing 73.3% of whole children respondent population. Those who cover long distances to and from school represented 26.7% of the respondents. It can therefore be said that most children in Mukuru Kwa Njenga pre-school covered a short distance to and from school. The findings reveal that they do not get too tired to work in their number work.

Fig 4.1

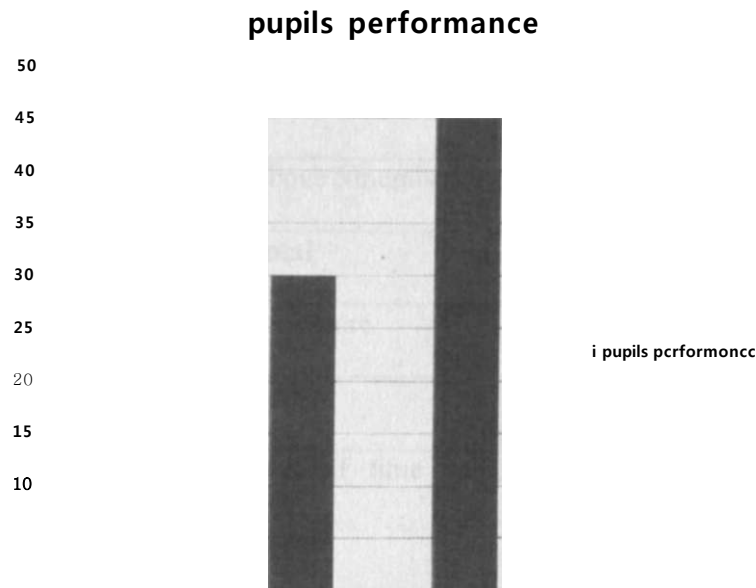
Distance to and from school



Academically 80% of the respondent children could add and subtract in number work. 7.3 % of the respondents had problems with subtraction. 3.1% of the respondents could write numbers in order from 1-50 and 9.4% of the respondents could write numbers from 1-30.

The study revealed that the two pre-school teacher respondents were able to access the pre-school children's work as shown by the pupil's progress records. Those children who showed upward mobility in their performance in mathematics represented 43.3% of the total population of pre-school children. Respondents of pre-school children whose work in mathematics was not consistent represented 32.3% while those whose performance was far much below represented 24.4% of the respondents. The head teacher respondent revealed that all the pre-school children performed differently in mathematics as presented in fig 4.12 below.

Fig 4.2 Percentage of pre-school children performance in mathematics



It can therefore be said that pre-school children in Mukuru kwa Njenga have the capability to perform their mathematics work effectively. They are neither too good nor too bad in mathematics.

4.2 Influence of size of household and pre-school children's academic performance in mathematics

The number of people in the household in particular household was found to influence the way pre-school children perform in mathematics. Those households with 2-3 members represented 35.0% of the respondents. Those families with 4-6 members represented 30.3% of the respondents while those with more than six members represented 35.1% of the respondents (figure 4.2)

Table 4.2 Number of people in the household

VARIABLE	ATTRIBUTE	FREQUENCY	PERCENTAGE
Number of people in the household	2-3 members	7	35.0
	4-6 members	8	40.0
	Above 6 members	6	30.0
	Total	20	100
Learning resources at home	Book store	4	20
	Library	-	-
	Input of time and money	14	70
	Total	18	90
Birth order	First born	6	30
	2 nd -4 th born	10	50
	above 4 born	4	
	Total	20	100
Parents attention to their children's home work	Less than 3 children	9	45
	4-6 children	7	35
	Above 6 children	4	20
	Total	20	100

It was revealed that 30% of the pre-school children respondents were first borns

Those born between the second and fourth position represented 50% of the total

iWtERstry or

respondents while those above fourth position in birth order represented **20%** of the total respondents.

However it was revealed that most families gave their input to children's academic performance in terms of time and money. This represents 70% of the respondents. Those homes with book stores represent 20% percent of the total respondents while those with libraries represent 10% of the respondents.

This study reveals therefore, that the number of people in the household influences pre-school's academic performance in number work and also the parental attention to their children's academic work decline as the number of siblings increase and later born children perform less well than earlier born siblings in pre-school concurring with what Powell and Steerman (1993) and Van Ejjik and Degraaf (1995) had suggested that children's attainment depends on input of time and money from their parents. The more children there are in the family the less the input.

There was a revelation that children from large families are found ^{to} do worse than children from smaller families. Similarly children lower down the birth order do worse than those higher up the birth order. However, from the results posted from the pupil's records and end of term report books, it was evident that this contradicted with 1. Acorou (2001) as there was mixture gesture. Pre-school children's performance in number work was determined by other factors was evident from table 4.1.

The factors presented here are not however exhaustive and therefore are not conclusive to be the only influence to pre-school children's performance in mathematics. There might be other factors that may interfere.

4.3 Influence of family attitude towards attainment and pre-school children's academic performance in mathematics

The study revealed that the family's status gives the status of the child. The study also showed that some families have positive attitude towards good academic performance of their children 50% of the respondent pre-school teachers reported that some parents don't care whether children do well academically or not. However the other 50% said that the children in pre-school can do well even if their families have negative attitude towards their academic performance especially in mathematics. It was revealed that, even where the family members supported the pre-school children morally, there were families that had no reading tables and chairs where children could do their home work. There was also lack of literate members in the families especially where the children are first borns. Lack of basic facilities in the family and its influence on the pre-school children's performance concur with that of Good (1989) which cited lack of basic physical facilities as a condition for poor performance.

The evidence also revealed that most homes had no play grounds for recreational activities. Most children played in the houses, they were not provided with relevant play materials for their age. Mathematics books for the pre-school children were rarely provided for the children as compared to story books. This

made it difficult for the children to interact with materials that build their capabilities to do well in mathematics.

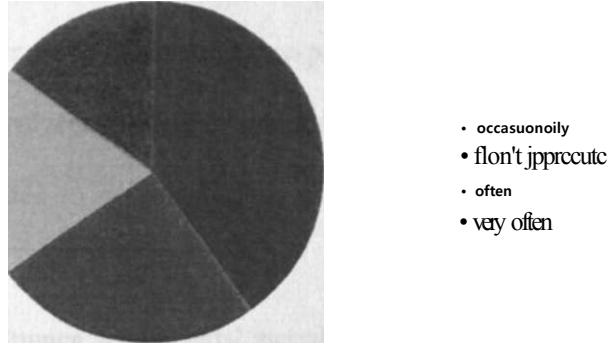
Appreciation of children's performance in number work by family members were seen in terms of prizes given especially when they did well. It was evident that every parent wants his/her children to perform well academically. All the respondents seemed to agree that children needed positive attitude in order to do well. There was evidence however, showing that those family members who recognized and appreciated their pre-school children's academic performance in number work boosted the children's morale.

Table 4.3 Levels of appreciation and prize giving to pre-school children

Level of appreciation	Frequency	Percentage
Don't appreciate	5	25
Occasionally	8	40
Often	4	20
Very often	3	15
Always	-	-
Total	20	100

Figure 4.3 Income level as a source of attitude towards performance

Appreciation and prize giving to pre-school



Income level was found to differ from family to family. This was found to restrict provision of school books, development funds and other necessary materials to ensure good performance. 63% of the parent respondents said that they provide for tuition fees, text books and other resources. 13% of the parent respondents provide for text books only while 24% provide for tuition fee, uniforms and text books for their education.

Most children came from lower class families representing 74%, 20% of the pre-school children respondents came from middle class families while only 4% came from high class families. There was evidence that most children came from homes where physical facilities were not enough, learning materials were inadequate and the few which were there were overstretched. The research findings concurred with the one done by Mwona (1993) who said that for a child to make the most of his educational needs, he/she should have an easy access at home to instruments like books, newspapers, space, light and silence for convenient study.

4.4 Influence of parents'/guardians' education level and pre-school children's academic performance in mathematics.

Based on the evidence so presented, it can be suggested that parents need to encourage their children on academic performance. Parent's participation in the child's work influences their (children's) progress **and** development positively. Parents also need to donate towards school equipment to make their children perform better.

Table 4.4 **Influence of parents'/guardians' education level and pre-school children's academic performance in mathematics.**

Variable	Attribute	Frequency	Percent
Provision of text books	Yes	18	90
	No	2	10
Total		20	100
Parental involvement	Encouragement	8	40
	Participation in children's homework	7	35
Total		15	75

From the analysis done, it was revealed that parent respondent's level of education has a positive correlation with their children's achievement motive. Evidence shows that 36% of the total respondents were form four leavers. 35%

were certificate holders and 24% were diploma holders while 5% of the respondents were degree holders.

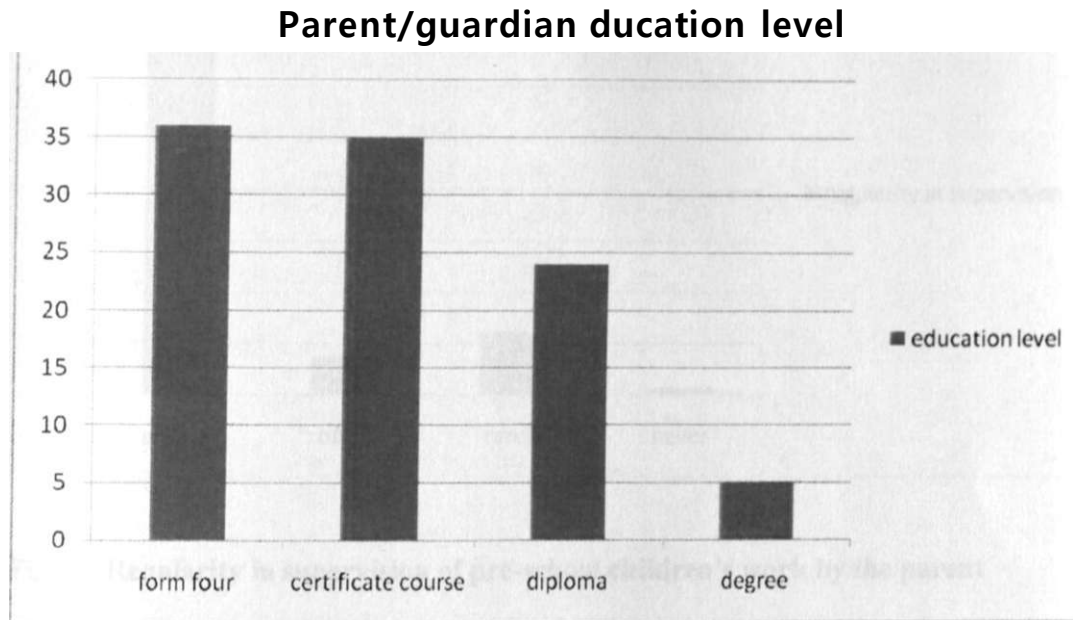


Fig 4.4 Parent/guardian education level and its influence on their children's performance in mathematics.

It was found that 77% of the parents have interest in their children's out of school assignments and they supervise the assignments. Only 12% of the respondents reported that they rarely supervise their children's home work nor do they check their books. 7% of the respondent parents reported that they often give the children educationally stimulating environment by encouraging them to study and have access to relevant books and related literature. 1% of the respondents said that the level of education of the parent or guardian is not a factor in the child's performance but the interest and consistency shown by the parents in their children's work that matters.

Regularity in supervision

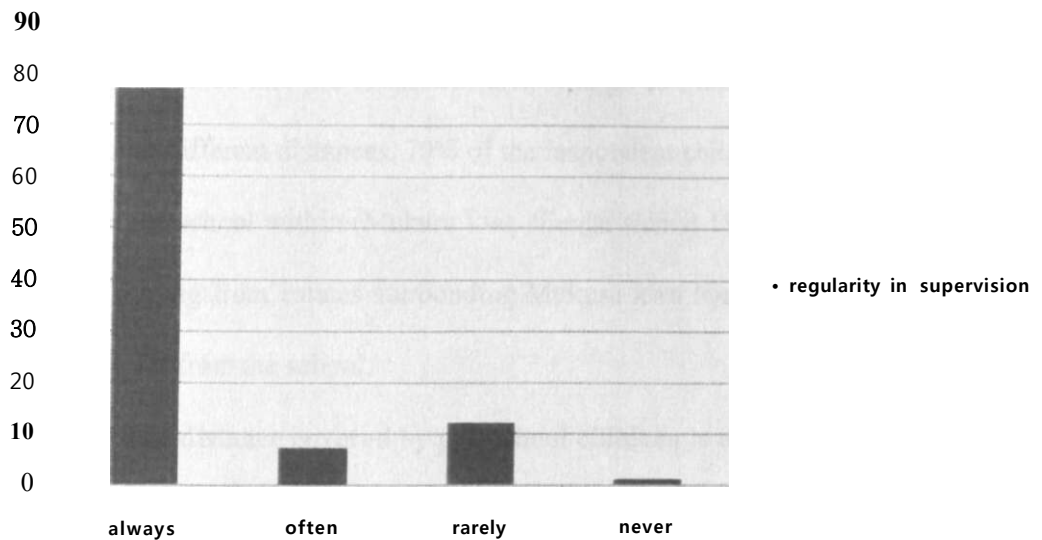


Fig 4.5 Regularity in supervision of pre-school children's work by the parent

Generally most parent respondents acknowledged their role in participation in their children's academics. Although a big percentage participated in the pre-school children's work there were those who were willing to participate but never had time to participate in the homework. Even those respondents who confirmed assisting their children reaffirmed that their effort was not fully engaged. It can be suggested however, from the evidence presented that if assisted effectively in their mathematics work, this can influence their performance given the arousing effects it poses. Parents/guardians therefore need to do something if they desire that their children register good performance in mathematics. Pre-school children should be involved in a lot of activities in and out of the home to enhance their cognitive and manipulative skills.

4.5 Influence of the distance to and from school on the pre-school children's academic performance in mathematics

The study revealed that pre-school children who go to Mukuru kwa Njenga pre-school cover different distances. 70% of the respondent children reported coming from near the school within (Mukuru kwa Njenga slums) 18% of the respondent reported coming from estates surrounding Mukuru kwa Njenga area while 10% come from far from the school.

Table 4.5 The distance covered by pre-school children to and from school

	Frequency	Percentage
Near	14	70
Far	3	15
Very far	3	15
Total	20	100

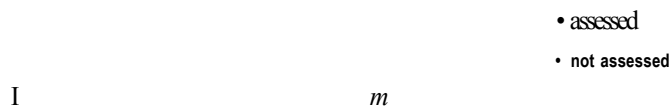
There was evidence that the teachers assess the pupils in mathematics either termly or twice a term as 69% of the respondents reported. However, there was a revelation that a few children had the progress records signed by the parents reported 30% of the respondents. The findings revealed that 74% of the pre-school children respondents did not get any supervision at home because they arrived home late or before their guardians/parents. 22% of the respondents were supervised regularly. The teacher respondents said that the distance influenced the pre-school children's performance. However, the parent respondent seemed not

to be aware of the influence of the distance to and from school in the pre-school children's performance in number work.

It was revealed that 59% of the pre-school children were over protected since their physical environment was not safe on the way to and from school. 48% were expected to undertake chores at home before they travel to school in the morning and evenings after school. 71% of the parent respondents fear the risk their children are exposed to on the way to school. 48% of the parent respondents confessed that in the process of commuting to and from school children could be in danger of interacting with people of anti-social behaviors and drug traffickers. There was evidence of truancy as 45% among the children could fail to attend school to collect old pieces of metal for sale especially those who reside in low income areas.

Figure 4.6 Regularity of assessment of pre-school children's progress by parents

Assessment of pre-school work



Based on the cited evidence it can be suggested that most homes where pre-school children in Mukuru kwa Njenga pre-school came from were not well coordinated.

Children came to school using different means. They covered the distance to and from school using different means. They covered the distance to and from school at individual home discretion without the school control. There was evidence of conflict in the role played by parents to ensure that their children arrive at the school in the right time. Let it be noted that supervision of the child to and from school is key to attainability of desired results. Ensuring that the child, arrives at school safely and with energy to do his/her work serves as grease to a running wheel.

Table 4.6 signing of report forms by parents/guardians

Attribute	Frequency	Percentage
Report forms signed by parents/guardians	6	30
Report forms not signed by parents /guardians	11	55
Those who never take report forms home	3	15
Total	20	100

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the summary, conclusions and recommendations based on the study.

5.1 Summary

Academic performance has been recognized as the driving force behind vvorid economies. Therefore it is a kind of long term investment that any country cannot avoid to venture into. Most countries globally have tried to remove barriers that seem to block their citizens from attaining this valuable property.

However, still developing countries have not managed to provide favorable conditions for enabling their children to explore their full potentials in terms of knowledge and skills. This would enable them to become full participants in future economic development of their countries and hence become self-reliant.

This study has tried to examine and establish the home-based factors that seem to influence the pre-school children's academic performance in mathematics in Mukuru kwa Njenga pre-school in Embakasi, Nairobi county. Academic performance is one of the parameters used to evaluate educational development in many vvorid countries. The study was used to examine these factors through the following five objectives:

- * To find out how the residential area influences pre-school children's academic performance in mathematics.

- To establish the relationship between the number of people in the household influence pre-school children's academic performance in mathematics.
- To investigate the extent to which family's attitude towards academic achievement influences pre-school children's academic performance in mathematics.
- To determine whether the parent/guardian's education level influences pre-school children's academic performance in mathematics.
- To examine in what way the distance to and from school influences pre-school children's performance in mathematics. >

The purpose being established factors in home background that influence academic performance in mathematics in Mukuru kvva Njenga pre-school in Embakasi, Nairobi County.

This was possible through formulation of a number of research questions which guided the study. The study adopted a case study design using qualitative and quantitative data. The study mainly targeted pre-school children, parents, pre-school teachers and the head teacher.

All the targeted participants were reached that is, twenty pre-school children, two pre -school teachers, twenty parents of the pre-scholars and one head teacher. The sample size represented 33% which was enough as suggested by Orodho (2003). Questionnaires, the documentary analysis forms and the interview guide were used as the main tools of data collection. There were two sets of questionnaires: one for the head teacher and another one for the pre-school teachers. Documentary analysis forms were used for the pre-school children and the

interview guide was used for the parents. Data collected was analyzed both quantitatively and qualitatively using statistical package for social science (SPSS) computer program version 17.0 and results reported using tables, pie charts and bar graphs.

5.2 Conclusion

Based on the results, it can generally be concluded that the academic performance in number work in the pre-school is low. There are a number of observations to this effect. It was noted that the teachers were academically and professionally qualified to teach. Many parents were willing to help their children in their academic work though they were not very committed to helping these children with their academic work to enhance good performance in number work. This jeopardized the children's performance in mathematics and the assumptions are that the home background influences the pre-school children's academic performance in number work as indicated.

Many pre-school children were found to be lacking essential facilities such as text books, play ground at homes which made learning difficult and more abstract. Children covered long distance to and from school. They carried chores at home in the morning and evenings thus they arrived school tired and could not carry out their academic work to the expectation.

Most pre-school children were noted to be doing their mathematical activities at home on their own since their parents were too busy sourcing for livelihood. Clear supervisory policies and evaluation measures were missing in most homes. It was noted that team work between the parents, teachers and pre-school children was

lacking. This lack of sense of belonging and ownership influenced level of performance in number work . Though the study was not as exhaustive as it ought to be because of the limitations thus cited any critical academic criticism upon the methods and instruments used in this study, suggestions are therefore welcome to give more insights.

5.3 Recommendations

The following recommendations were made:

- The parents/guardians in Mukuru kwa Njenga pre-school should ensure that their children do not cover too long distances to and from school by residing near the school.
- Parents/guardians in Mukuru kwa Njenga pre-school should always have positive towards their children's work in mathematics.
- Parents/guardians should be willing to provide resources necessary- for their children's academic work to equip the pre-school children with necessary skills and knowledge relevant to their level.
- Critique of the methods of this study for the purpose of giving more suggestions and insights to the study will be accepted.
- There is need for the ministry of education through the PTA (parents Teachers Association to organize seminars and workshops for the parents /guardians so as to equip them with necessary knowledge and skills so as to enable them play their roles effectively as parents as they are the first teachers for their children.

Further research on part or whole of this study in any pan of the country or either replication to verify this finding is suggested.

APPENDIX I

QUESTIONNAIRE FOR THE HEAD TEACHER

Kindly follow the instruction guide through the questionnaire. Please respond to each question by ticking the appropriate response. Your response will be highly **confidential**

1. Do you think the distance pre-school children travel to and from school affect their academic performance? Yes [] No []
2. How does the distance covered to and from school influence their academic performance? Positively [] Negatively []
3. Is the area of residence a factor in pre-school children's academic performance in your school? Yes [] No []
4. Is a family's attitude towards academic attainment a factor in pre-school children's academic performance in your school?
Yes [] No [] If Yes how?
5. Does parent/guardian education level influence pre-school children's academic performance in your school? Yes [] No []
6. Does the size of household influence pre-school children's academic performance in your school? Yes [] No []
7. What role do you play in ensuring that home background does not have a great influence on the pre-school children's academic performance in your school?

APPENDIX II

QUESTIONNAIRE FOR THE PRE-SCHOOL TEACHER

This questionnaire is for educational research purposes. Any information given will be treated with a lot of confidentiality. Please tick where appropriate.

1. Do you think home background influences pre-school children's academic performance?
Yes [] No [] If Yes, how?
2. How does parent/guardian's education level influence pre-school children's academic performance?
Positively [] Negatively []
3. Is there a relationship between pre-school children's residential area and their academic performance?
Yes [] No [] If yes, how?
4. Does the family's attitude towards academic performance influence pre-school children's academic attainment?
Yes [] No [] If Yes, how?
5. Does the distance the pre-school children cover to and from school affect their academic performance? Yes [] No []
6. How often is the pre-school children's academic performance influenced by the size of the household?
Rarely [] Often []

APPENDIX III

INTERVIEW GUIDE FOR THE PARENTS

1. Is the pre-school children's background a factor influencing their academic performance? (Ask a parent to ascertain if home background influences pre-school children's academic performance)
2. Is the size of household a factor in pre-school children's academic performance? (involve the parent to bring out size of household as a factor in pre-school children's academic performance)
3. Does attitude towards attainment influence pre-school children's academic performance? (Involve the parent in explaining how the family's attitude can influence their children's academic achievement.)
4. How does parent/guardian's education level influence the pre-school children's academic performance? (find out from the parent if the parent/guardian is education level influence their children's academic attainment)
5. Is there a relationship between the distance children travel to and from school and their academic performance? (involve the parent in explaining the relationship between the distance covered and academic attainment of pre-school children)
6. Is there a relationship between residential area of the pre-school children and their academic performance? (ask the parent to explain the relationship between where the child lives and the academic performance)

APPENDIX IV

DOCUMENTARY ANALYSIS FORMS

END OF TERM REPORT BOOK

Purpose of the document Description of the document Significance of the document

PUPILS PROGRESS RECORD

Purpose of the document	Description of the document	Significance of the
<p>1. To provide a record of the progress of each pupil in the school.</p> <p>2. To provide a record of the progress of each pupil in the school.</p> <p>3. To provide a record of the progress of each pupil in the school.</p> <p>4. To provide a record of the progress of each pupil in the school.</p> <p>5. To provide a record of the progress of each pupil in the school.</p> <p>6. To provide a record of the progress of each pupil in the school.</p> <p>7. To provide a record of the progress of each pupil in the school.</p> <p>8. To provide a record of the progress of each pupil in the school.</p> <p>9. To provide a record of the progress of each pupil in the school.</p> <p>10. To provide a record of the progress of each pupil in the school.</p>	<p>1. To provide a record of the progress of each pupil in the school.</p> <p>2. To provide a record of the progress of each pupil in the school.</p> <p>3. To provide a record of the progress of each pupil in the school.</p> <p>4. To provide a record of the progress of each pupil in the school.</p> <p>5. To provide a record of the progress of each pupil in the school.</p> <p>6. To provide a record of the progress of each pupil in the school.</p> <p>7. To provide a record of the progress of each pupil in the school.</p> <p>8. To provide a record of the progress of each pupil in the school.</p> <p>9. To provide a record of the progress of each pupil in the school.</p> <p>10. To provide a record of the progress of each pupil in the school.</p>	<p>1. To provide a record of the progress of each pupil in the school.</p> <p>2. To provide a record of the progress of each pupil in the school.</p> <p>3. To provide a record of the progress of each pupil in the school.</p> <p>4. To provide a record of the progress of each pupil in the school.</p> <p>5. To provide a record of the progress of each pupil in the school.</p> <p>6. To provide a record of the progress of each pupil in the school.</p> <p>7. To provide a record of the progress of each pupil in the school.</p> <p>8. To provide a record of the progress of each pupil in the school.</p> <p>9. To provide a record of the progress of each pupil in the school.</p> <p>10. To provide a record of the progress of each pupil in the school.</p>

REFERENCES

- Abrams, L. (2002). Rethinking girls "at-risk": Gender, race, and class intersections and adolescent development. *Journal of Human Development in the Social Environment*, 6, 47-64.
- Akos, P. & Galassi, J.P. (2004). Gender and race as variables in psychosocial adjustments to middle and high school. *The journal of Educational Research*, 98 102-108.
- Alexander, K.L. Entwisle D.R., & Bcdinger, S.D. (1994) *When expectations work: Race and socioeconomic differences in school performance*. *Social Psychology Quarterly*: 57(4): 283-299.
- American school Counselor Association (ASCA). (2004). *American school counselor association ethical standards for school counselors* Alexandria, VA: Author.
- Anderson, C.A. Huesmann L.R. (2003). *Human aggression: A social-cognitive view*. In Hogg MA. cooper J, editors. *Handbook of social Psychology*. Sage Publications; pp 296-323.
- Arbuckle, J.L. & Wothke, W. Amos (1999). *Users ' guide*, Version 4.0. Chicago: Small waters Corporation.
- Arnett, J.J. (2000) *Emerging adulthood: A theory of development from the late teens through the twenties*. *American Psychologist*. 2000: 55:469-480 [PubMed]
- Bandura A. (1986). *Social foundations of thought and action: a social-cognitive theory*. Englewood-Cliffs, NJ: Prentice-Hall.
- Bandura, A. (2002). Social cognitive theory in cultural context. *Applied psychology: An international Review*, 57.269-290
- Berger. K.S. (2001). *The developing person: Through the life span* f5thed.). New York: NY: Worth.
- Blau. P.M & Duncan, O.D. (1967) *The American occupational structure* New York: Wiley.
- Caspi A, Wright BRE. Moffit, T.E. Siiva P.A. (1998). *Early failure in the labour-market: Childhood and adolescent predictors of unemployment in the transition to adulthood*. *American Sociological Review*. 63:424-451.

- Conger, R.D. Wallace. L.E.. Sun Y. Simons R. I., Mcloyd VC. Brody G.H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*. 38:179-193. [PubMed]
- Cummings, E.M & Davies P.T. (1994) *Children and marital conflict: The impact of family dispute and resolution*. New York: Guilford Press.
- Davis-Kean. P.E. (2005) *The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment*. *Journal of Family Psychology*. 2005; 19:294-304. [PubMed]
- Dearing, E. McCartney K., Taylor B.A. (2001). *Change in family income matters more for children with less*. *Child Development*. 2001; 72:1779-1793. [PubMed]
- Dodge K.A, Pettit G.S.(2003). *A biopsychosocial model of the development of chronic conduct problems in adolescence*. *Developmental Psychology*. 39:189-190. [PubMed]
- Duncan, G.J. & Brooks-Gunn J. (1997) editors. *Consequences of growing up poor*. New York: Russell Sage Foundation; 1997.
- Duncan, G. J, Brooks-Gunn J., Klebanov, P.K. (1994) *Economic deprivation and Early childhood development*. *Child Development*. 1994; 65:296-318. [PubMed]
- Duncan, O.D, Featherman, D.L. Duncan B. (1972) *Socioeconomic background and achievement*. New York: Seminar Press.
- Eccles J, Templeton J, Barber B. (2003) *Adolescence and emerging adulthood: The critical passage ways to adulthood*. In* Bornstein M, Davidson L, Mahwah NJ, editors. *Well being: Positive development across the life course*. US: Lawrence Erlbaum Associates, Publishers. Pp. 383-406.
- Eccles JS, Vida MN, Barber B. *The relation of early adolescent's college plans and both academic ability and task-value beliefs to subsequent college enrollment*. *Journal of Early Adolescence*. 2004; 24:63-77.
- Eccles J.S., Wigfield A, Schiefelbusch U. *Motivation*. In: Eisenberg N, editor.
- Handbook of Child Psychology. (1998) 5. Vol. 3. New York- Wiley; 1998. Pp. 1017-1095.

- Eccles, J.S. (1993) *School and family effects on the ontogeny of children's interests, self perceptions, and activity choice*. In Jacobs J, editor. Nebraska Symposium on Motivation, 1992: *Developmental perspectives on motivation*. Lincoln, NB: University of Nebraska Press. Pp 145-208.
- Eron, L.I., Walder, L.O., Lefkowitz, M.M. (1971). *Learning of aggression in children*. Boston: Little Brown.
- Frome, P.M., Eccles J.S. (1998). *Parent's influence on children's achievement related perceptions*. Journal of Personality and Social Psychology. 74:435-452. [PubMed]
- Guerra, N.G., Huesmann. L.R. (2004). *A cognitive-ecological model of aggression*. *International Review of Social Psychology*. 17:177-203.
- Haveman R, Wolfe B. (1995). *The determinants of children's attainment: A review of methods and findings*. Journal of Economic Literature. 33:1829-1878.
- Hinshaw, S. (1992). *Externalizing behavior problems and academic underachievement in childhood and adolescence: Casual relationships and underlying mechanisms*. Psychological Bulletin. 111:127-155. [PubMed]
- Huesmann. L.R, Dubow, E.F, Eron. L.D, Boxer. P. Siegers. D. Miller, L.S.(2002). *Continuity and discontinuity of aggressive behaviors across three generations*. Paper presented at the meeting of the society for life History Research of Psychopathology; New York.
- Huesmann, L.R., Eron L.D., Lefkowitz, M.M, Walder L.O. (1984). *Stability of Aggression over time and generations*. Developmental Psychology. 20:1120-1134.
- Huesmann, L.R, Eron, L.D, Yarmel, P.W.(1987). *Intellectual functioning and aggression*. Journal of personality and social Psychology. 52:232-240. [PubMed]
- Huesmann, L.R, Eron, L.D. (1986). *Television and the aggressive child: A cross-national comparison*. Hillsdale, NJ: Erlbaum.
- Huesmann, L.R., Guerra, N.G.(1997). *Children's normative beliefs about aggression and aggressive behavior*. Journal of Personality and Social Psychology. 72:408-419. [PubMed]

- Huesmann, L.R. (1998) *The role of social information processing and cognitive schema in the acquisition and maintenance of habitual aggressive behavior*. In: Geen RG, Donnerstein E, editors *Human aggression-Theories, research, and implications for social policy*. San Diego, CA: Academic Press. Pp. 73-109.
- Johnson, R.C., Nagoshi, C.T., Ahren, F.M., Wilson J.R., DeFries, J.C., McClean G.E., et al. (1983). *Family background, cognitive ability, and personality as predictors of education and occupational attainment* *Social Biology*. 1983; 30:86-100. [PubMed]
- Klebanov, P.K., Brooks-Gunn, J., Duncan, G.J. (1994). *Does Neighbourhood and family poverty affect mother's parenting, mental health, and social support* *Journal of Marriage and the Family*. 56:441-455.
- Lefkowitz, M.M., Eron, L.D., Walder, L.O., Huesmann, L.R. (1977) *Growing up to be violent: A longitudinal study of the development of aggression*. New York: Pergamon.
- Magnuson, K.A., McGroder, S.M., (2001). *Intergenerational benefits: The effect of maternal education on young children's academic problems and school readiness*. Unpublished manuscript. Northwestern University.
- Magnuson, K.A. (2004). *The effect of mothers' return to schooling on their children's academic achievement: Evidence from the ECLS-K*; Paper presented at the meeting of the international Society for the study of Behavioral Development; Ghent, Belgium.
- McDonald, R.P., HO. M.R. (2002). *Principles and practice in reporting structural equation analyses*. *Psychological methods*. 2002; 7:64-82. [PubMed]
- McLoyd, V.C. (1989) *Socialization and development in a changing economy: The effects of paternal job and income loss on children*. *American Psychologist*. 44:293-302.
- McLoyd, V.C. (1998). *Socioeconomic disadvantage and child development*. *American Psychologist*. 53(2): 185-204. [PubMed]
- Metropolitan Area Child Study Research Group (2002). *A cognitive-ecological approach to preventing aggression in urban settings: Initial outcomes for high-risk children*. *Journal of Consulting and Clinical Psychology*. 70:17V-194 [PubMed]

- Ministry, R.S., Vandewater, E.A., Huston, A.C., McLoyd, V.C. (2002). *Economic well-being and children's social adjustment*. The role of family process in an ethnically diverse low-income sample. *Child Development*. 73:935-951. [PubMed].
- Moris, P.A., Huston, A.C., Duncan, G.J., Crosby, D.A., Bos, J.M. (2001). *How welfare and work policies affect children: a synthesis of research*. NY: Manpower Demonstration Research Corporation. Mar.
- Morris, P., Michalopoulos, C. (2003). Findings from the Self-Sufficiency project: Effects on children and adolescents of a program that increased employment and income. *Journal of Applied Developmental Psychology*. 24:201-239.
- Nagin, D.S. & Tremblay, R.E. (2001). *Parental and early childhood predictors of persistent physical aggression in boys from kindergarten to High School*. *Archives of General Psychiatry*. 58:389-394. [PubMed]
- Patterson GR. *Coercive family process*. Eugene, OR: Castalia; 1982.
- Ronka, A., Oravala, S., Pulkkinen, L. (2002). *I met this wife of mine and things got on a better track: turning points in risk development*. *Journal of adolescence*. 25:47-63. [PubMed]
- Rutter, M. (1996). *Transitions and turning points in development psychopathology: As applied to the age span between childhood and mid-adulthood*. *International Journal of Behavioral Development*. 19:603-626.
- Schulberg, J.E., Maggs J.L. (2003). O'Malley PM. *How and why the understanding of developmental continuity and discontinuity is important: The sample case of long-term consequences of adolescents substance abuse*. In: Mortimer JT, Shanahan MJ, editors. *Handbook of the life Course*. New York: Kluwer Academic/Plenum. Pp413-436.
- Schulenberg, J., Wadsworth, K.N., O'Malley P.M., Bachman J.G., Johnson, L.D. (1996) *Adolescent risk factors for binge drinking during the transition to young adulthood: variable and pattern centered approaches to change*. *Developmental Psychology*. 32:659-674.
- Sirin, S.R. (2005). *Socioeconomic status and academic achievement: a meta-analytic review of research*. *Review of Educational Research*. 75:415-453.

- Smith, J.R., Brooks-Gunn, J. & Klebanov, P.K. (1997). In poverty for you. *Consequences of living in poor neighborhoods on children's cognitive and verbal ability and early school achievement.* In: Duncan GJ, Brooks-Gunn J, editors. *Consequences of growing up poor.* New York: Russell Sage Foundation Pp.132-189.
- Sobowelski, J.VI., Amato P.R. (2005). Economic hardship in the family of origin and children's psychological well-being in adulthood. *Journal of marriage and Family.* 67:141-156.
- Stevens, G. Hoisington, E. (1987). *Occupational prestige and the 1980. U.S labour force.* *Social Science Research.* 1987; 6:74-105.
- Stipek, D.J. (1998). *Pathways to constructive lives. The importance of early school success.* In: Bohart AC, Stipek DJ, editors. *Constructive and destructive behaviors: Implications for Family, School & Society.* Washington, D.D American Psychological Association. Pp. 291-315.
- Sullivan. E.T., Clark, W.W, Tiegs, E.W. (1957). *California shortform test of mental maturity.* Los Angeles: California Test Bureau; 1957.
- Warner, W.L., Meeker, M. Eells, K. (1960).. *Social class in America.* New York: Harcourt
- White, K.R. (1982). *The relation between socioeconomic status and educational achievement.* *Psychological Bulletin.* 1982; 91:461-481.