



Relationship between Early Childhood Play Activities and Holistic Development of the Learner in Pre-schools in Kiambu County, Kenya

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ABSTRACT

The study investigated relationship between early childhood play activities and holistic child development in Kiambu County, Kenya. It was conducted on a sample of 300 participants' comprising 150 teachers and 150 managers of pre-school institutions. Questionnaire and interview guides for managers and teachers were the main instruments used to collect data. Pretesting of the questionnaires yielded a reliability coefficient of 0.752 and 0.692 for teachers and managers respectively. Quantitative data collected were analysed using Statistical Package for Social Sciences and also by using narrative technique. Majority (88%) of the pre-school teachers were female, and youth within the age group of 21-25 years age. The pre-school teachers and managers considered lecture method and child- play activities important in contributing to the holistic development of the child at pre-school level. There was a significant relationship between perceptions of pre-school teachers and managers on influence of early childhood play activities on holistic development in terms of emotional, motor-physical and social skills in children.

1. INTRODUCTION

1.1 Background Information

There is abundance of literature emanating from studies on the role of child-play activities on holistic development of pre-school children in terms of shaping their social skills, physical, communication, confidence and child's creativity (Jolley, 2010; Frost, 2010). Such studies on the role of play during early childhood years and holistic child-development through time and across cultures have consistently demonstrated two characteristic features of play in human societies (Ampofo & Orodho, 2014). First, it is clear that play is ubiquitous among humans, both as children and as adults, and that children's play is consistently supported by adults in all societies and cultures, most clearly in the manufacture of play equipment and toys (Gauntlett, Ackermann, Whitebread, Wolber & Wekstrom, 2010). Second, it emerges that play is a multi-faceted phenomenon, with a variety of types that appear in all societies, but that there are variations in the prevalence and forms that the various types of play take in different societies (Howard & Eisele, 2012). These variations appear to arise from differing attitudes concerning the nature of childhood and the value of play (Tyler & Frinus, 2000). Given the general difficulty with defining play, and the recognition of its complexity, it is not surprising that there have been numerous attempts to categorise different types of play. As Moyles (1989) in Howard (2012) has demonstrated, for every aspect of children's development, there is a form of play.

However, in the contemporary psychological literature the various kinds of play are generally divided into five broad types based upon the developmental purposes which each serve, partly arising from the evolutionary analyses to which we have referred above, and how each relates to and supports children's learning (Samuelson, 2009). These types are commonly referred to as physical play, play with objects, symbolic play, pretence/ socio-dramatic play and games with rules. Although each type of play has a main developmental function or focus, arguably all of them support aspects of physical, intellectual and social-emotional growth (Howard & Eisele, 2012). From all the available evidence, a balance of experience of each of these types of play is likely to be beneficial to children's development.

The line between play and learning in children is so thin that it hardly exists because, unlike adults who learn as they work, children learn as they play (Toluhi, 1980). Moreover, play is everything to children because through it, they are able to express their feelings, emotional dilemma and build social skills that are needed during their adulthood (Tassoni, Beith, Eldridge & Cough 2003; Jarvis, 2010). Childhood play can be categorized into five main categories that include creative, manipulative, physical, imaginative and social play (Toluhi, 1980; Tassoni *et al*, 2003). Through these five areas, children learn to share, make decisions, play

by the rules, express emotion, and learn the language of their playmates, reason and think for themselves (Johansson & Pramlin, 2006)). During the formative years, when children experience rapid mental, physical, emotional and social growth, play is critical because it accelerates these forms of growth (Tassoni *et al*, 2003; Frost 2010). With this observation the United Nations Convention on the Rights of the Child stated that all children on earth without discrimination have the right to play and develop to their fullest potential (Bruce & Maggitt, 2005; Howard, 2012).

Although early philosophers and psychologists like Maria Montessori, Friedrich Froebel Susan Isaac and Jean Piaget differed on many issues, they all agreed on the fact that child play is critical to children's growth and development (Tassoni *et al* 2003; Jolley, 2012). For instance, Piaget viewed a child as a biological organism that acts upon its environment, continually working towards establishing harmony or equilibrium between itself and the environment through play (Smart & Smart, 1997; Howard & Eisele, 2012). Friedrich Froebel who founded his first kindergarten in 1840, observed that children learn more effectively through outdoor activities or play (Tassoni *et al*, 2003). In her works, she invented the finger play, and songs to enable children learn symbolic behaviours (Tassoni *et al*, 2003). Although Maria Montessori did not believe in imaginative play like Froebel, she believed that children needed to experience concepts such as size, shape and order through structured play (Tassoni *et al*, 2003). From the foregoing historical trajectory, it should be reiterated that pre-school dates back to 1828 when it was established at the Boston infant school to take care of children of working mothers (Khan & Kamerman, 1987). By 1898 it had become credible and the National Federation of Day Nurseries was founded (Tuner & Hamner 1994).

In the context of Kenya, pre-school classes for the African children were first established in the 1940's around the concentration camps to take care of the children as their parents engaged in forced communal labour (Gakuru, Kabiru & Njenga, 1982). But this was to change after independence, when the Kenyan government realized the important role played by early childhood education. Thus, pre-schools were established through self-help projects. However, due to the acute shortage of trained teachers, untrained teachers taught the pre-school classes. But in 1966 the Ministry of Housing and Social Services established and organized training institutions for pre-school teachers, which produced about 120 graduates per year. Ten years later in 1976 the Ministry in conjunction with Bernard Van Lee Foundation established a pre-school section at the Kenya Institute of Education (K.I.E) whose role was to prepare the syllabus, teaching and evaluation materials, conduct research, prepare teacher's guides and organise in-service courses and workshops (Gachukia, 1982). In its effort to improve pre-school education, the Ministry of Education in conjunction with the Bernard Van Lee Foundation organised a National Seminar on

pre-school education in Malindi in 1982, which recommended the establishment of the NACECE to coordinate all the pre-school teaching and learning activities (Bernard Van Leer Foundation, 1982).

An earlier report by (Okwemba, 2000) indicated that most pre-schools in Nairobi and its environs (which include Kiambu District) do not conform to the required standards and operate without a defined curriculum. Pre-school teachers claim that they are unable to follow the laid down curriculum due to pressure from parents who want them to produce "supper intelligent kids". This is not in line with what numerous experts say regarding the importance of play. For example, Kola (2000) a specialist in early childhood education insists that pushing children to know how to read and write at a tender age denies them the opportunity to be children because they need to play and socialize. Ndeti (2000) also pointed out that the long hours children spend in pre-school classes must be for social development and play, any other purpose is harmful and may produce long term negative consequences.

Oluoch (1982) on his part observed that despite the fact that the Kenyan Education Act recommends a class size of 20-25 pupils per teacher, the situation in some rural and private institution classes hold up to 50 pre-school children under one teacher. This not only leaves little or no room for child play but also makes it difficult for the teacher to organize any indoor activities. Such ratios not only affect the quality of education but also the teacher's morale. According to the same Education Act, the main objective of early childhood education is to enable children enjoy living and learning through play (Koech, 2003; Kamunge, 1988).

The foregoing studies conducted in Kenya seem to indicate that pre-school teachers' perception of the impact of childhood play activities on child development is not fully understood. For instance, Kariuki (2002) reported that teachers in most pre-schools in Kenya seem to concentrate more on teaching of writing and reading skills at the expense of the other dimensions of education, a situation that tends to put stress on children at that tender stage of their development. This is not in line with Mohanty and Mohanty (2002) who insisted that Kindergarten should be a school without books and also without rigid mental activities but should be a place where children express their feelings through songs, movements and construction. Tassoni *et al* (2003) on their part pointed out that any early childhood teacher who ignores child play is unlikely to produce an all-round adult from children under his or her care. The question is "if child play is this important to the pre-school child's development how does the pre-school teacher perceive it? Perception is the brain process of organizing and interpreting sensory information to give it meaning (Schiffman, 1990). Teachers' perception is important because if they perceive play to be important for development of children, they will accord it the seriousness it deserves but if they perceive it as unimportant then they will ignore it. It is against this backdrop that this study delved into determining the

relationship between the perceptions of teachers and managers regarding the role of play and child's holistic development in the context of Kiambu County, Kenya.

1.2 Statement of the Problem

Observations by various early child psychologists indicate that child play is the most important vehicle for learning during infancy and throughout the pre-school period. Despite this, most pre-school teachers in Kiambu County do not seem to accord the play activities the attention they deserve. The cause of this puzzling scenario is not well established but could probably be due to the lack of play materials, space and the teacher's background factors. Among these factors the background factors may have a greater influence on how the teachers perceive child play activities and their role in child development. The way pre-school teachers perceive the role or impact of child play activities on child development is important, because it determines how they will treat the play lesson and the extent to which they will be willing to improvise the missing resources. If they perceive it to be important, they will accord it the attention it deserves but if they perceive it as unimportant then they will ignore it. Currently, there is no empirical data on how pre-school teachers perceive the impact of childhood play activities on child development in Kiambu County. Therefore, this study was set to investigate the relationship between pre-school teachers' perception of the impact of early childhood play activities on child development. The problem focused on how pre-school teachers background factors such as age and gender influence the way they perceive the relationship between early childhood play activities and holistic child development.

1.3 Purpose and Objectives of the Study

The purpose of this Study was to investigate the pre-school teachers and managers background factors, especially age and gender and their perceptions regarding the relationship between early childhood play activities and holistic child development in Kiambu County, Kenya. The main objective was to determine perception of teachers and managers regarding the relationship between early childhood play activities and holistic development among pre-school children in Kiambu County, Kenya.

2.0. RESEARCH DESIGN AND METHODOLOGY

2.1. Research Design

This study used the descriptive survey design. This design was preferred because it is considered by most researchers to as being best suited for a research that intends to determine the nature of prevailing condition or conditions that exist (Mugenda & Mugenda, 1989; Orodho, 2012). Gay (1981) and Orodho (2017) similarly

concur that descriptive survey design is a better design for a research that involves collection of data, in order to test a hypothesis or answer questions concerning the current status of the subjects in a study. Orodho (2017) further points out that this design is appropriate for this type of research because it enables researchers to collect a lot of information in a relatively short time.

2.2. Study Population and Sampling

The target population for the study were the pre-school teachers and managers in Kiambu County. This County a total of about 425 pre-school institutions, 425 managers, about 1,957 teachers and 16,616 pre-school children spread throughout the County. Purposive sampling was employed to select teachers and managers. Proportionate random sampling technique was also utilized to ensure that all the accessible individuals in pre-schools, especially the teachers and principals were accorded equal and independent chance of being included in the sample (Borg & Gail, 1993; Orodho, Nzabaliwa, Odundo, Waweru & Ndayambaje, 2016). The sampling techniques yielded a sample size of 300 participants comprising 150 teachers of pre-school children and 150 managers of the pre-school institutions sampled.

2.3. Research Instruments and Data Collection

To achieve the purpose of the study, two questionnaires were developed. The first one targeted Pre-School Teachers' Perception of the Impact of Play Activities on Child Development while the second one targeted the Managers' perception of the impact of play activities on child development. The instrument contained four sections. The first section contained eight forced response questions that targeted the Pre-school teachers' personal characteristics. The second section contained eight questions made up of both open-ended and force response items. The items in this section investigated how pre-school teachers handled play activities. The third section contained matrix questions that used 5-point Likert scale investigating the teachers' perception on the impact of early childhood play activities on motor physical, social and emotional development of children. Section four contained two questions that required the teachers to rank the activities they perceived as contributing most to the learning process of the pre-school children. The ranking was done using numbers (1,2,3,4 and 5), where the activity that was perceived to contribute more was to be ranked first.

Both teachers and managers questionnaires were pre-tested to determine their validity and reliability. Validity for the two questionnaires was determined by a panel of experts from the university department. The reliability of the pre-school teachers' questionnaire was found to be as low as 0.469. Due the low reliability the researcher found it necessary to modify the instruments of by adding and removing some items. After the

modification the reliability coefficient calculated using Kunder-Richardson 20(KR-20) formulae improved to 0.692. The manager's questionnaire yielded a reliability coefficient of 0.5261. This was low but after modification (adding new items and removing some) the reliability coefficient improved to 0.752.

The interview schedule contained open-ended questions investigating the Pre-school Teachers' perceptions of the importance of early childhood play activities in the learning process of children under their care. Interview schedule was used because it provides in-depth data that is not possible to get when using a questionnaire. The other reason why the researcher used the interview schedules is because it enabled one to probe the respondents further and extract any necessary personal or sensitive information. Orodho et.al (2016) counsel that the use of a comprehensive questionnaires and interview schedules not only enable a researcher to collect as much information as possible in the shortest time possible but also make the results of the study more viable.

To collect the required data the researcher distributed 150 questionnaires to pre-school teachers and 150 questionnaires to pre-school managers. Apart from distributing the questionnaires, the researcher used an interview schedule to interview teachers. During the interview the researcher assured the respondent confidentiality as far as the given information was concerned. To ensure that interviewing was done systematically, consistently and as objectively as possible, the researcher used an interview schedule to ask questions that led the respondent's towards giving data that help meet the study objectives.

2.4. Data Analysis.

The data that was collected was coded and then keyed into the computer using the Statistical Package for the Social Sciences (SPSS). The researcher used SPSS to manage, analyse and display the data as recommended by Orodho, Ampofo Ndayambaje and Bizimana (2015) This is because it is a set of comprehensive and integrated set of programs that makes calculations easier and enjoyable (Mugenda & Mugenda, 1999; Orodho,2017). Since most of the data generated in this study was descriptive by nature both descriptive and quantitative methods of data analysis were used. The means, percentages and frequency distributions were used to analyse the data while correlation coefficient was used to establish the relationship between pre-school teachers' background factors and their perception on the importance of play on child development. Inferential statistics such as t-test and Pearson product moment correlation were used to answer the research questions.

3.0. RESULTS AND DISCUSSION

3.1. Correlation between Play and Holistic development by gender of teacher

The correlation results showed no significant relation between the gender of pre-school teachers and their perception on the importance of early childhood play activities on holistic development of the learner in terms of emotional, social, cognitive and motor physical skills. The situation changed a bit with the managers because a test of hypothesis revealed a significant and positive relationship between their gender and their perception on the importance of play activities in the development of emotional and motor physical skills. The results are summarised in Table 1. This result indicated that irrespective of the gender of the pre-school teacher their perception about the importance of play activities on the development of cognitive, social, emotional and motor physical skills remained more or less the same. As for the managers gender seems to influence the pre-school managers' perception on the importance of early childhood play activities on emotional and motor physical skills.

Table 1 : Perceptions of Relationships between Play Activities and Holistic Development

Important for the Development of		Pre-school teachers gender	Pre-school managers gender
Emotional Skills	R	0.101	0.276
	sig	0.234	0.311
Social Skills	r	-0.061	0.080
Cognitive Skills	sig	0.650	0.342
Motor and Physical Skills.	r	0.093	0.054
	sig	0.342	0.432
	r	-0.019	0.129
	sig	0.432	0.234

3.2. Play Activities and Child Development by Marital status of respondent

A test of hypothesis revealed that there was non-significant positive relationship between marital status of pre-school teachers and their perception of the importance of early childhood play activities on the development of emotional and cognitive skills. The results are summarised in table 2. On the other hand, a negative insignificant relationship was indicated between marital status of pre-school teachers and their perception on the importance of child play activities on the development of social and motor physical skills.

Table 2 : Perception Regarding Play Activities and Child Development by Marital Status of Respondents

Important For Development of		Marital status of the Pre-school teachers	Marital status of the Pre-school manager
Emotional Skills	r	0.049	-0.039
	sig	0.234	0.123
Social Skills			
Cognitive Skills	r	-0.052	0.074
	sig	0.342	0.411
Motor and Physical Skills.	r	0.098	0.080
	sig	0.221	0.231
	r	-0.109	0.183
	sig	0.324	0.321

The results in Table 2 imply that the marital status did not significantly influence the perception of pre-school teachers on the importance of early childhood play on holistic development of the learner in terms of social, emotional, cognitive and motor physical skills. On the other hand, the correlation results showed a significant positive relationship between the perception of pre-school managers on the importance of early childhood play activities in the development of motor physical skill ($r=0.183$ $p<0.05$) and their marital status. Interestingly the trend changed when it came to the rest of the skills where Pearson Correlation results indicated an insignificant positive and negative relationship between the perceptions of pre-school managers on importance of play in the development of emotional, social and cognitive skills and their marital status. These results imply that marital status has no significant influence on the perception of pre-school managers as far as the importance of play in the development of emotional, social and cognitive skills is concerned.

3.3. Play Activities and Child Development by Educational Level of Respondents

The Pearson Correlation results indicate that there was a consistent positive significant relationship between the pre-school teachers' perceptions on the importance of early childhood play activities in the development of the cognitive, emotional and social skills and the highest level of education attained. The results are summarised in Table 3. These results indicate that as the pre-school teachers attained higher educational level their perception on the importance of play activities on the development of cognitive, emotional and social skills in children not only remained positive but also improved further.

These results expose education level as one of the major factors that has great impact in the formation and shaping of the pre-school teachers' perception on the importance of early childhood play activities in the development of the cognitive, emotional and social skills. These skills that are cognitive, emotional and social are important in bringing down the high dropout rate experienced in the first five years of primary schooling (Mohanty and Mohanty, 2002). These results are supported by Graham *et al* (2001) and Kariuki (2000) who pointed out that the higher the level of education reached by the early childhood educators the better they become in their ability to integrate play into the teaching and learning process.

Table 3: Play Activities and Holistic Child development by Educational Level

Important for Development of		Pre-school teachers academic qualification	Pre-school managers
Emotional Skills	r	0.242	0.193
	sig	0.331	0.134
Social Skills			
Cognitive Skills	r	-0.142	0.121
	sig	0.412	0.342
Motor and Physical Skills.			
	r	0.265	0.249
	sig	0.311	0.122
	r	0.076	0.069
	sig	0.510	0.134

These results just as in the case of teachers indicate that the higher the level of education reached by the managers the better their perception on the importance of play activities on the development of cognitive, social and emotional skills in pre-school children. However, the results on Table 3 indicate that there was a positive but insignificant relationship between the perception of both the teachers and managers on the importance of early childhood play activities in the development of the motor physical skills ($r = 0.076$ and $r = 0.069$ respectively $p < 0.05$). From these results it was clear that education level reached by the pre-school staff seem to greatly influence their perception on the importance of play activities in the development of cognitive, social and emotional skills. These results seem to agree with Jolley (2010) Findings indicate that pre-school teacher training helps to improve teachers' perception on the importance of play activities in child general development.

The interview results by teachers and managers revealed their perception as follows:

Social skills involved children's active playtime with other kids gives your child the chance to interact and socialise with his or her peers. Through play, they learn a lot of social and interpersonal skills. Similarly, by sharing toys, they learn the value of give and take. Waiting in line teaches them patience and equality.

One teacher elaborated on the role of play by stating that:

Winning in games tells them how to value perseverance and hard work while losing will give them a lesson on resilience and appreciation of others. Conflict and fights are unavoidable but guiding your child how to resolve conflicts through peaceful and positive means will make him or a strong and empathetic person.

Commenting on the influence of play on development of physical skills, a teacher expressed that:

Active play is the perfect form of exercise for young children. Running, jumping, tumbling and climbing help develop muscle and bone health. Their exertion during play helps develop their stamina, motor skills, coordination and balance. It is no surprise that active children are healthier, sleep better, more alert and less prone to obesity, cardiovascular diseases and common illnesses.

With regard to confidence, one teacher stated that:

It is through play that we first develop lifelong friendship and relationships. Friends and playtime help build confidence, sense of belonging and community connection. Their games and activities give a sense of accomplishment and experience. Confident kids do better in school and in life.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1. Conclusions

This study has established that educational level and professional qualification greatly influence the pre-school staffs' perception on the importance of early childhood play activities on the development of cognitive, social, emotional and motor physical skills. The correlation results showed no significant relationship between the gender of pre-school teachers and their perception on the importance of the early childhood play activities on the development of cognitive, emotional, social and

motor physical skills. As for the managers there existed a significant positive relationship between their gender and their perception on the importance of play to the development of emotional and motor physical skills. These results indicate that as far as the pre-school teachers were concerned, gender had no impact on their perception. That is in spite of their gender the teacher's perception remain the same.

With respect to the academic level of respondents, this study indicates that majority of the teachers and managers had attained at least primary school level of education. The results also indicated that teachers and managers with advanced level of education had better perception on the impact of play on child development when compared with their counterparts who had lower educational levels. On the other hand, the correlation results also indicated that for the teachers and managers, the higher their level of education the better their perception on the importance of play on the development of motor physical, social, emotional, and cognitive skills. This implied that education played a greater role in forming and shaping pre-school teachers and managers' perception on the importance of play activities in the development of all the skills in children.

4.2. Recommendations

On the basis of the findings of this study, the following recommendations, which if implemented, would help in improving pre-school teachers and managers' perception of the role of play in the pre-school child development. Specifically, it was recommended that:

1. There is need for the Ministry of Education to conduct in-service training of teachers currently working in pre-school institutions to increase their awareness on the role of play in the development of the various skills including mathematical concepts or cognitive skills.
2. The Kenya Curriculum Development Institute should review the pre-school teachers training curriculum to lay more emphasis on child play activities as the main avenue through which all subjects at pre-school level should be taught.
3. There is need for Kenyan writers and curriculum developers to write text books that emphasize the use of child play activities in the learning and teaching process at pre-school level.
4. The Ministry of Education and other stakeholders should sensitise the pre-school managers, parents and the society as a whole on the importance of child play activities in the growth and development of the pre-school children. This is because, if well sensitised, managers and parents will see the need of buying the play materials and equipment currently lacking in most rural institution.
5. The Ministry of Education should discourage the use of cognitive skills as the only yardstick to

measure success of an educational institution to discourage the cutthroat competition among pre-school and primary school institutions to excel academically. This will also reduce pressure on teachers to produce academic genius at pre-school level.

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