

## Play Influence on Cognitive Development among Primary School Children in Nakuru County, Kenya

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**Abstract:** Play is essential to development because it contributes, among other developments, to cognitive development to children and youth. Play also offers an ideal opportunity for parents to engage fully with their children. Despite the benefits derived from play for both children and parents, time for free play has been markedly reduced. The recent report from head teachers, class teachers and parents of children in schools in Kenya indicates that these children have been exhibiting increased learning difficulties, inability to solve simple problems associated with socialization and control of emotions, many cases of truancy, dropping out of school and aggressive behavior. This paper embarks on assessing the influence of play on cognitive development among primary school children at Kihingo Division, Njoro Sub-County of Nakuru County in Kenya. This study was guided by social cognitive theory and it targeted teachers and pupils from 18 public primary schools in the study area. Stratified random sampling design was adopted to sample 154 pupils from the 18 schools. Nasiuma's formula was used to come up with an ideal and an appropriate sample size for the pupils. Questionnaires and interview schedule were used as the key data collection instruments. Questionnaires were used to collect data from the teachers while interview schedules were used to collect data from the pupils. Data was analyzed by use of descriptive statistics with the aid of Statistical Package for Social Sciences (SPSS Version 24) tool. Data was presented in graphs, pie chart and tables. From the findings the researcher concluded that children who are more engage in play are more decisive in their actions compared to less active children. From the findings, the researcher concluded that children who are more engage in play are more decisive in their actions compared to less active children. Playful children are more creative and innovative compared to less active children. The study recommends that the government and other education stakeholders partner to provide enough play and instructional materials to primary schools.

**Keywords:** play, cognitive development.

## INTRODUCTION

Play is the child's way of life and it is inseparable from childhood. Without play children are incomplete. Different activities need different play equipment and materials to be used. Play and physical activities stimulate all aspects of growth and development. There is need to provide children with play equipment and materials, space, time to freely explore their environment [1]. Play is freely preferred activity motivated from within. In the upkeep of children, sufficient playing space and a collection of play materials is essential [2]. Play is valued in early childhood education, thus fixed in the curriculum. The contribution of play dictates its importance towards the intellectual, physical and social welfare of kids and teens [3]. Social competence is enhanced by Constant play between children and elders as well as emotional maturity. It is the pillar of an organization since it maintains communication more so because people are supposed to handle different roles. Development of

required skills which is vital in children growth is countered by play [4]. Different mental abilities and individual capability depend on play. These aspects are essential for the adjusting children functioning according to the American Academy of Pediatrics [5].

Development is growth changes which occur in children in their entire life time right away from birth. This vicissitudes are systematic comprising physical, cognitive, and emotional development. These are three major zones of child development. They include developmental vicissitudes which occurs in a foreseeable pattern. Physical development are the physical vicissitudes in the body which comprises changes in bone thickness, size, weight, gross motor, fine motor, vision, hearing, and perceptual development. Growth is faster in the first two years of life. The child's size, shape, senses, and organs have phases of vicissitudes. The child obtains new aptitudes as the physical vicissitudes occurs. In the first year,

physical growth primarily embroils the infant coordinating motor skills. The infant reiterates motor actions which builds physical forte and motor coordination [6]. Play contributes to cognitive development among other developments, making it vital to the health of children. Play further gives an opportune moment for parents to participate fully with their children. In spite of the advantages of both children and parents play, there is less time for free play.

Today Children have insufficient support for play as compared to past generations; this is due to haste lifestyle vicissitudes in family setting, and giving attention to education and enhancement activities at the expense of freedom of play. Due to pressure and rigidity of the curriculum, play time has been slashed down to enable syllabus coverage. These children are always constantly fatigued and lack the agility and peer group popularity and have become over dependent. It is on this basis that the study sought to fill this gap by evaluating the influence of play among children on cognitive development in Nakuru County, Kenya.

## LITERATURE REVIEW

### Influence of Play on Child Cognitive Development

Cognitive processes involved in play are alike to those involved in learning: incentive, meaning, recurrence, self-guidance, and abstract thinking. Modern toys and games, by good quality of their electronic performance and possibilities and discovery - learning activities par excellence. Duration of attention in the course of free play relies solely to the kind and number of toys around [7]. It is vital to support and embolden self-directed activities even though they considered meaningless to grownups. In order to support gratification of the child, they should be permitted with the freedom to accomplish their play activities this helps child's aptitude to concentrate [8].

Elardo and others [9] discovered that having variety of toys in infancy is linked to higher IQ levels when the child attains three years, unrelated traditions and social class. Play as one of the programs in school permits children to associate with their environment and aids them with interactive learning opportunities [10]. It is beneficial for children to take perils and encounter new challenges in their lives [11]. Other analysts propose that a child should be permitted to take jeopardizes; this makes them to be cautious in their day in day out activities and enables them to judge possible perilous circumstances [12]. Hostile character traits is connected to null interests and participating surroundings and negative character traits is more common in dreary grounds which lacks bushes and natural boundaries with in later life [13]. Some plays encourage various types of cognitive processes. For instance, Fantasy play, is seen therapeutic, since it allows children to reveal and face

painful emotions and conflicts while playing with peers.

In addition to that, play develops creativity in children. Children, who forgo some duties to play, are more attentive in their schoolwork. Children should be given a room to come up with their own games, this ameliorates their creativity rather than if they are overseen by the adults [14]. Certain toys like those that teaches letters spelling and vocabularies skills helps the child to develop new language knacks since they become open-minded while playing. Play has numerous benefits like, intelligence, which aids brain development and establishment of new neural linkages. Cognitive growth in children depends with the frequency at which a child is subjected to play. To add on those children who play more often have the likelihood to emotionally mature faster because they have the capacity to get most interaction with peers. School going children necessitates a playing ground; this makes them to be able to play more frequently because there is the need to adjust to setting, the home and the school. In school setting, they are exposed to new play mates and teachers. This adjustment not only prepares them for the studies but also assists in gaining cognitive aptitudes and rub out fear which might make them fail to learn when they commence a different life in school. After breaks from play grounds, children learn and put in practice basic social knacks as they make new friends in the school environment [15].

### Role teachers take in children play

The researcher sought to determine the role teachers play in children play. From the findings majority of the respondents stated that teachers are involved in guiding, instructing, sharing play equipment and materials and also supervision. The teachers are required to oversee that children engage in play according to their age and ability. Proper identification of pupils age help the teachers to allocate the child in a type of play that will help him/her to grow socially, physically, emotionally or cognitively. Teacher's involvement in play enriches children's play and develops children's intellectual and social skills. On the other hand, if teachers give more structured cognitive activities through play and take over the control of play at that time teacher intervention interrupts children's play. In play, the major role of the teacher is to ensure that enough time is allocated and playing materials are provided to all children [16].

There has to be enough space for all children to play freely and the teacher should never force any child to an activity if they do not wish to. Instead, he or she should provide simulative environment where children can have genuine play choices and maintain play to an acceptable standards. According to Schwartman [17] children play what they know and build on from what is known to unknown. If what they know is stereotyped and biased, it would be reflected

in their play. In Preschool, adults are referred to as teachers. They have a very important role to play in children play activities. They need to be aware of the value of all activities in the children's aspect of development. Therefore, they need to play and prepare for the play activities thoroughly.

### Social Cognitive theory

This theory's origin is learning theory which aids in explaining the learning of a behavior through observing others as stated by Bandura [18]. Social learning / modeling / vicarious learning are influenced with internal forces like attention, memory, and motivation, which are not readily seen as behavior. Young children are specifically adjusted to learning by modeling or watching others, that is if they detect model, or if model is strengthened for the actions. As a result children emulate characters of what they see or watch. Bandura trusted that human shapes and improves their behavior by involving in social context. To reinforce this claim, Bandura identified two methodologies; observational learning and vicarious reinforcement. Children learn emerging behaviors through modeling their fellows' behaviors by observational learning method while children reinforce their behavior through vicarious reinforcement processes.

Children observe and imitate models near them in order to advance their behavior. Children start

to learn by observation from the time of birth. For instance, Mahoney and Eccles [19], a she neonate sticks out her tongue after her mother showing the action recurrently in front of her. Modeling theory concludes that, newborns instantly imitate their models' behavior. This is because newborns' brain is made up of 100 billion brain cells. The more an infant associates with the surrounding, the more they become intelligence.

### RESULTS

The chapter focuses on data analysis, results presentation and discussion of the findings. The first part presents the response rate. Descriptive findings respectively are then presented and discussed. The findings are in line with the objective of the study.

#### Response Rate

The sample size of the study was 54 teachers and 154 pupils. Questionnaires were distributed to all the anticipated respondents of the study, out of which 30 teachers and 95 pupils filled the questionnaire. This represented a 92% and 91% response rate.

#### Play activities that pupils are mostly involved in

The researcher sought to determine play activity that pupils are mostly involved in. The results were as shown in table 2.

**Table-1: Response Rate**

Response Rate	Teachers (Frequency)	Teachers (Percentage)	Pupils (Frequency)	Pupils (Percentage)
Expected Response	54	100	154	100
Received Responses	30	56	95	62
Un-received response	24	44	5	38

**Table-2: Play activities that pupils are mostly involved in**

Play activities	Frequency	Percentage
Volley ball	14	15
Foot ball	26	27
Net ball	6	7
Hand ball	5	5
Athletics	44	46
Total	95	100

From the findings 15% of the pupils stated they are mostly involved in volleyball as a play activity, 27% of the pupils stated they are mostly involved in football as a play activity, 7% of the pupils stated they are mostly involved in netball, 5% of the pupils stated they are mostly involved in handball as a play activity while 46% of the pupils stated they are mostly involved in athletics as a play activity. This implies that majority of pupils are mostly involved in

athletics. Resources in form of play objects, space and time are very important in pre-primary classrooms because the level and type of children's play depend mostly on the availability of these resources.

#### Influence of play on cognitive development

The researcher further sought to determine the influence of play on cognitive development. The findings are shown in the table 3

**Table-3: Influence of play on cognitive development**

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
	F %	F %	F %	F %	F %
Children who are more engage in play are more decisive in their actions compared to less active children	16 52	14 45	0 0	1 3	0 0
Playful children are more creative and innovative compared to less active children	17 55	13 42	0 0	1 3	0 0
Less playful children are usually over cautious and fear making mistake.	13 42	16 52	2 6	0 0	0 0
Some of the children who are less playful are easily provoked by situations such as anger	15 49	14 45	2 6	0 0	0 0
It is easier to identify and realize talents of playful children	16 52	13 42	2 6	0 0	0 0

Source: Research Data (2018)

From the study 52% of the respondents strongly agree children who are more engage in play are more decisive in their actions compared to less active children, 45% of the respondents agree, while 3% of the respondents disagreed. Further 55% of the respondents strongly agree that playful children are more creative and innovative compared to less active children, 42% of the respondents agree, while 3% of the respondents disagreed. The finding agrees with Goldstein, [20] who found out that play develops creativity in children. Children who fore-go some duties to play, are more attentive in their schoolwork. He recommended that children should be given a room to come up with their own games, this enhances their creativity.

In addition 42% of the respondents strongly agree that less playful children are usually over cautious and fear making mistake, 52% of the respondents agree while 6% of the respondents were undecided. From the findings 49% of the respondents strongly agree that some of the children who are less playful are easily provoked by situations such as anger, 45% of the respondents agree while 6% of the respondents were undecided. Finally 52 % of the respondents strongly agree that it is easier to identify and realize talents of playful children 42%, of the respondents agree while 6% of the respondents were undecided. According to Anderson-McNamee &Bailey [21] children who play more often have the likelihood to emotionally mature faster because they have the capacity to get most interaction with peers

## CONCLUSION

From the findings the researcher concluded that children who are more engage in play are more decisive in their actions compared to less active children. Playful children are more creative and innovative compared to less active children. Less playful children are usually over cautious and fear

making mistake. It is easier to identify and realize talents of playful children. The finding agrees with Goldstein [22] who found out that play develops creativity in children. Children who fore-go some duties to play, are more attentive in their schoolwork. He recommended that children should be given a room to come up with their own games, this enhances their creativity. According to Anderson-McNamee &Bailey [23] children who play more often have the likelihood to emotionally mature faster because they have the capacity to get most interaction with peers.

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