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## TEACHERS' PERCEPTION OF THE INFLUENCE OF SCHOOL PLAYGROUND ON STUDENTS' LEARNING AND GENERAL DEVELOPMENT

**KEHINDE ALUKO**

Institute of Education

University of Benin

Benin City

E-Mail: [kehinde.aluko@uniben.edu](mailto:kehinde.aluko@uniben.edu)

**IMASUEN KENNEDY**

Institute of Education

University of Benin

Benin City

E-Mail: [kennedy.imasuen@uniben.edu](mailto:kennedy.imasuen@uniben.edu)

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### Abstract

*The study investigated the influence of school playground on students learning. To guide the study, four research questions were raised. The descriptive survey design was adopted for the study. The population of the study consisted of the one hundred (100) pre-primary and one hundred and sixty-two (162) primary schools with three thousand five hundred (3500) teachers in Benin Metropolis. A sample of 350 teachers was used for the study. A structured questionnaire was used to collect data for the study. The data were analyzed using mean and standard deviation. The findings revealed among others that the type of playground available in schools influence play in children. It also influences the general development of children in school, and lack of playground is responsible for poor play habits in children to a great extent. It is therefore recommended amongst others that stakeholders in education should ensure that every school has an adequate playground and play facilities, the culture of play should be re-introduced to children and time should be allocated strictly for play in the school time table so that children will be exposed to the various forms of play.*

**Keywords:** Playground, Learning, General Performance

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### Introduction

Movement is the key to developing physical, mental, intellectual and social skills necessary for promoting wellbeing in children. Behaviour in children is shaped through various forms of play, therefore the child's school environment, by extension the classroom should be structured in such a way that will promote various forms of play. The child's environment is the laboratory that provides an opportunity for the child to explore and master all forms of emotional needs. Whatever the child is today is a product of experiences placed before him earlier in life.

According to Sussman (2012) and Thelm (2009) play is undoubtedly the first and most significant experience the child is exposed to. Expert in child psychology and development notes that play cannot be substituted by any other activity. Socialization of the child in the classroom is greatly enhanced through the process of play and

movement science is quite clear when it notes that, children are naturally curious and therefore always exploring and investigating the world around them. The medium they use in accomplishing this is their senses, and in the major tool deployed in achieving the task is play. To satisfy their curiosity and unveil the mysteries of their world, both physical and social, play becomes the necessary tool. Through play, children develop the spirit of collaboration and conflict resolution with others. Furthermore, through play, children are involved in participatory activities as may be required in the classroom. Whatever behaviours that are acquired during play ultimately promote their self-esteem.

Stover and Rees (2009) opined that play among children allows them to flourish in all aspects of development. Importantly, such development should be holistic and multi-facet in nature. The child needs to deploy the sense to use in order to understand the real world around him/her. In this regard it is important that the child has access to unrestricted space to move and play so as to acquire different types of skills; the gross motor, fine motor, eye-hand and eye-foot coordination skills, in addition to imaginative play, physical and outdoor, and construction play. The implication is that the child is able to develop holistically (Yilmaz, 2016). Evidence abounds that children with unlimited space to play and run around are most likely to behave better and perform better academically (Barros, Silver & Stein, 2009). Physical skill development in children is assumed to improve and promote intellectual development. Similarly, research has shown that physical activity in young children can enhance concentration, motivation, learning and well-being (Goldestein, 2012; Roskos & Christie, 2007; Stover, 2009). To acquire this behaviour, children should have access to the playground, play facilities that will encourage the habit of physical activity and active play that support learning (Etnier, *et al*, 1997).

In view of the importance of play in the life of the child, the American Academy of Pediatrics prescribed that children must have at least 60 minutes each day in open-ended play. In addition, the World Health Organization (WHO, 2002) and the American States Department of Health Services (2002) strongly recommend physical activity at the various levels of development and noted that movement activities will benefit participant greatly when regularly used. The intensity and level of participation in play remain undecided. The contribution of the playground to the child's learning and physical development is well documented in (Wolfgang, 2004). Furthermore, Yilmaz (2016) noted that the school playground is very valuable toward qualitative development of the child in gross and fine motor skills, intellectual skills, social skills and sensory skills acquisitions.

What is worth considering is that play or movement in whatever form should assist in developing large and small motor skills as well as promote cardiovascular endurance need. There is the need to adequately prepare young children not only in academics but also to be able to effectively address the growing problems of degenerative diseases like obesity and diabetes, among others.

Notwithstanding the importance of play and movement in the holistic development of the child, play in the Nigerian school setting seems to have been ignored. This is particularly evident in the school setting, where homework among schools and pre-schools children are regarded as higher than play. Besides school recess opportunities are on the decline while physical activities are almost being excluded from the school

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schedule. The common practice and sight in most rural and urban schools in Nigeria, for instance, are that new building and housing structures are now erected on what was previously reserve for playgrounds.

Children require large space to express themselves adequately, in order to acquire necessary motor skills to be able to explore and learn. However, with most schools converting available space into a building, while most schools are situated in an enclosure with no land available for children to run around and play (Aluko, 2010).

The early years of the child are very crucial in laying the foundation for worthwhile developmental experiences, upon which subsequent learning will be built. Therefore, the quality of play facilities made available for the child at home and school must be adequate and suitable. In particular, the environment created for the child to explore and manipulate to make sense of the real world should be appropriate and suitable for the child's needs.

The playground may be the natural environment that represents dynamic and rough playscapes that challenge motor activity in children. The environment in terms of topography, like slopes and rocks, provide the expected natural obstacles that children will have to cope with, (Fjortoft, 2001), while the structured environment designed to help promote children motor, academic and social skills development, can be achieved through play and activity. The playground is expected to facilitate classroom management and supports the actualization of set curricular goals and objectives (Catron & Allen, 2007). Worthy of note is that behaviour exhibited during play, feelings and actions reflect the type and quality of environment provided for the children.

Children having access to the playground to move, play and express themselves, not only promote and nurture physical skill development, the cognitive domain is equally enhanced and able to flourish. Besides, enhancing psychomotor and cognitive domains, social-emotional skills are positively enriched (Rivkin, 2000). Children are exposed to varied opportunities to freely mix with other children during play while trying to cope with different types of play, materials, and environment. During this process communication and empathy skills and coping skills are developed while interacting with peers and environment (Richardson, 2004).

Unfortunately, there has been a progressive decline in movement and play activity by children over the years due to excessive television viewing; fewer family members to play with and fewer safe outside playgrounds. This according to Fjartoft (2001) may be attributed to the unstructured and unorganized traditional games, involving moving around which are now fast being replaced by sedentary behaviour like sitting in front of the television, computer games and lack of attention from parents and other siblings. These have resulted in having young children unable to play, walk and move their bodies. The consequence is poor health leading to degenerative health disease like obesity and infant diabetes and rickets.

Playgrounds are classified into three categories. The traditional playgrounds, contemporary playgrounds, and adventure playgrounds. The Traditional playgrounds are predominantly made up of stationary and large metal equipment, such as slides, swings and jungle gyms (Yawkey, 1999). Most children tend to spend a greater part of

their playtime with this equipment, due to the fun and excitement they provide. Frost and Strickland (1985) in their studies revealed that these categories of equipment challenge the children to engage in portable, complex, and manipulative play in a stationary environment. The contemporary playgrounds consist of alternatively manufactured surfaces which are not the same with metal ones they include, sandbox, wheeled vehicles or playhouses. On the other hand, the adventure playgrounds are made up of natural features which represent the dynamic and roughplay surface, which tasks the energy in children. According to Fjortoft, (2001) this type of playgrounds tries to replicate the natural topography dotted with slopes and rocks which provide artificial obstacles to the growing child. In the opinion of Yilmaz, (2016) the natural, playgrounds expose the child to the natural surface and offer them the opportunities to explore and find solutions to their environment.

The use of these categories of playgrounds depends on the attraction and challenges they pose to the child and experiences drawn from them. Frost (1985) observed that pre-school children mostly exhibit a bias for materials that provide creative loose materials, as against large stationary equipment. The choice of playgrounds according to Barbour (1999) among children may be dictated by the increasing number of children competing for the use of the equipment without offering co-operative play.

Despite the benefits accruable to having playgrounds in schools, there is a decline. Several reasons have been adduced for this decline in play and provision of playgrounds. The issue of safety and appropriateness of playgrounds suitability are implicated. Most parents and guardians' fear for the safety of their children and wards. An environment that is prone to injury and poorly maintained and supervised is regarded as not safe for the life of the child; such an environment may discourage parents refusing from granting their children the permission to participate in physical activities (Pyle, 2002). Furthermore, lack of time to enable them to accompany their children and monitor play is a major barrier. In an investigation conducted by Clements (2004) on the status of play between parents and their children's play activities, observed that parental safety worries have considerably limited children's play opportunities. When this is compared to the opportunities for play opportunities in days their parents grew up, it was discovered that such behaviour limitation is an obstacle to developing play habits. The influence of outdoor playgrounds in promoting play activities among children makes it imperative that no approval should be given where such facilities are lacking. The programme of play activity is perceived to be a valuable part of daily exercise in the life of growing children. American Academy of Pediatrics (2002) and World Health Organization, (2002), assert that such activities should not be seen as mere break time exercises but as part and parcel of the total education programme (Pate, *et al*, 2008).

Weather condition is another major cause of inhibition to outdoor play. According to Chakravarthi, Schilling, Heslenes, Maomber (2007), the amount of time teachers devote to children's outdoor play is dependent on the weather. Today in most parts of the World, Nigeria inclusive, a teacher only sees their job as limited to the classroom, while outdoor play is outside their daily work schedule. The quality of training would be teachers and practising teachers receive in higher institution seem to account for teachers' poor perception of what constitutes their daily schedule. The abolition of teachers' training Colleges TC II in Nigeria seems to have harmed the achievement of many school objectives and the quality of teachers for pre-primary and primary

schools. It is not surprising that play among children at this level of education in schools is almost non-existent. The situation is made worse by the lack of play space in most of the schools with the few spaces available converted to other uses.

If the aims and objectives of physical education and sports development in the curriculum must be actualized, playgrounds and personnel must be adequately packaged to meet young children's needs (Shell, 1994). Most importantly, Frost, Worthem and Relfel (2008) argued that whatever structured play and materials provided should be qualitative and varied to meet and enrich children's experiences. It should also be possible for the children to utilize them at their own pace within a social setting. Expanding on the relevance and importance of providing playgrounds in schools, Wellhousen, (2002) noted that playgrounds in schools offer opportunities for children to play, take risks to an acceptable extent, under safe and well-supervised conditions. All these should be consistent with their developmental levels and interests; provide varied materials and space for children use.

In Nigeria today, most pre-primary and primary schools, whether public or private seen to be situated in landlocked areas, with space only available for erecting buildings. This is counterproductive for children's play. Psychomotor development is important in human learning hence physical activities is a core part of the school curriculum. In spite of the importance of playgrounds in promoting play activities in young children, it is hardly available in most schools. Not many studies from the literature have been carried out to reveal the effects of lack of playgrounds on motor development outcome among young children. The consequence is that holistic development is often a mirage. Consequently, the current study has been designed to investigate the influence of playgrounds on children's play, learning and development. To guide this study, the following research questions were raised.

1. To what extent does playground influence play in children in schools?
2. To what extent does playground influence the general development in children?
3. To what extent is playground able to influence cognitive development in children?
4. To what extent is lack of playground responsible for poor play habits in children?

## **Methodology**

The descriptive survey research design was adopted in this study. The population of the study consisted of two hundred and sixty-two (262) private and public pre-primary and primary schools with three thousand five teachers in Benin metropolis. A sample of 350 teachers representing ten per cent (10%) was randomly selected from both private and public pre-primary and primary schools. A four-point Likert type questionnaire titled "teachers' perception of the influence of school playground on students learning and general development" was used to collect the necessary data for the study. The Cronbach Alpha reliability was used to ascertain the reliability of the instrument. It gave an acceptable reliability coefficient of 0.86, and all the items were worthy of retention. The data were analyzed using mean and standard deviation. A mean rating benchmark of 2.50 which is the arithmetic mean of the weight assigned to the four-point Likert scale was used for acceptance.

## Results

### Research question 1

To what extent does playground influence play in children in schools?

**Table 1: Mean ratings of the extent playground is associated with play in children in schools**

S/N	Questionnaire items	Mean	Standard deviation	Remarks
1	Playground encourages children to be active in play activities	3.02	0.52	Agree
2	Playground promote children's sense of attention	3.09	0.61	Agree
3	Playground encourages children's regularity in school	3.90	0.73	Agree
4	Playground enables children to develop motor skills	2.87	0.69	Agree
5	Playground promotes learning	3.53	0.87	Agree
6	Playground promotes healthy personality	3.22	0.84	Agree
Cluster		3.27	0.05	

$\geq 2.50 = \textit{agree}$

Table 1 shows the mean ratings of the extent playground influences play in children in schools ranging from 2.87 to 3.90. Item 1 has a mean rating of 3.02 and a standard deviation of 0.52. This implies that the respondents agree that playground encourages children to be active in play activities. Item 2 has a mean rating of 3.09 and a standard deviation of 0.61. This implies that the respondents agree that playground promotes children's sense of attention. Item 3 has a mean rating of 3.90 and a standard deviation of 0.73. This implies that the respondents agree that playground encourages children's regularity in school. Item 4 has a mean rating of 2.87 and a standard deviation of 0.69. This implies that the respondents agree that playground enables children to develop motor skills. Item 5 has a mean rating of 3.53 and a standard deviation of 0.87. This implies that the respondents agree that playground promotes learning. Item 6 has a mean rating of 3.22 and a standard deviation of 0.84. This implies that the respondents agree that Playground promotes healthy personality. The cluster mean and standard deviation of 3.27 and 0.05 implies that playground is seen as having influence play in children to a high extent.

### Research question 2

To what extent does playground influence the general development of children?

**Table 2: Mean ratings of the extent playground is associated with societal development in children in schools**

S/N	Questionnaire items	Mean	Standard deviation	Remarks
1	The playground provides an opportunity for children to develop leadership skills	3.78	0.58	Agree

2	The playground provides an opportunity for children to develop co-operation	3.39	0.96	Agree
3	The playground provides an opportunity for children to develop adjustment skills	3.79	0.76	Agree
4	The playground provides an opportunity for children to develop communication skills	2.78	0.89	Agree
5	The playground provides an opportunity for children to develop friendship skills	3.33	0.96	Agree
6	The playground provides an opportunity for children to develop anxiety management	2.70	0.77	Agree
Cluster		3.23	0.06	

$\geq 2.50 = \textit{agreed}$

Table 2 shows the mean ratings of the extent playground influences the societal development in children ranging from 2.70 to 3.79. Item 1 has a mean rating of 3.78 and a standard deviation of 0.58. This implies that the respondents agree that the playground provides an opportunity for children to develop leadership skills. Item 2 has a mean rating of 3.39 and a standard deviation of 0.96. This implies that the respondents agree that the playground provides an opportunity for children to develop co-operation. Item 3 has a mean rating of 3.79 and a standard deviation of 0.76. This implies that the respondents agree that the playground provides an opportunity for children to develop communication skills. Item 4 has a mean rating of 2.78 and a standard deviation of 0.89. This implies that the respondents agree that the playground provides an opportunity for children to develop communication skills. Item 5 has a mean rating of 3.33 and a standard deviation of 0.96. This implies that the respondents agree that the playground provides an opportunity for children to develop friendship skills. Item 6 has a mean rating of 2.70 and a standard deviation of 0.77. This implies that the respondents agree that the playground provides an opportunity for children to develop anxiety management. The cluster mean and standard deviation of 3.23 and 0.06 implies that the respondents agree that playground influences the societal development of children in schools to a high extent.

### Research question 3

To what extent is playground able to influence cognitive development in children?

**Table 3: Mean ratings of the extent playground is able to influence the cognitive development in children in schools**

S/N	Questionnaire items	Mean	Standard deviation	Remarks
1	The playground provides an opportunity for children children's brain to grow	2.69	0.86	Agree
2	The playground provides an opportunity for children to improve their academic achievement	3.39	0.66	Agree
3	The playground provides an opportunity for children to develop concentration	3.37	0.68	Agree
4	The playground provides an opportunity for children to develop problem-solving techniques	3.27	0.72	Agree

5	The playground provides an opportunity for children to develop retention	2.98	0.89	Agree
Cluster		3.14	0.11	

$\geq 2.50 = \textit{agreed}$

Table 3 shows the mean ratings of the extent playground is able to influence the cognitive development in children ranging from 2.69 to 3.39. Item 1 has a mean rating of 2.69 and a standard deviation of 0.86. This implies that the respondents agree that the playground provides an opportunity for children's brain to grow. Item 2 has a mean rating of 3.39 and a standard deviation of 0.66. This implies that the respondents agree that the playground provides an opportunity for children to improve their academic achievement. Item 3 has a mean rating of 3.37 and a standard deviation of 0.68. This implies that the respondents agree that the playground provides an opportunity for children to develop concentration. Item 4 has a mean rating of 3.27 and a standard deviation of 0.72. This implies that the respondents agree that the playground provides an opportunity for children to develop problem-solving techniques. Item 5 has a mean rating of 2.98 and a standard deviation of 0.89. This implies that the respondents agree that Playground provides an opportunity for children to develop retention. The cluster mean and standard deviation of 3.14 and 0.11 implies that playground is able to influence the cognitive development in children to a high degree.

#### **Research question 4**

To what extent is lack a playground responsible for poor play habit in children?

**Table 4: Mean ratings of the extent lack of playground is responsible for poor play habit in children in schools**

S/N	Questionnaire items	Mean	Standard deviation	Remarks
1	Lack of playground in school can result in poor motor skill development	3.02	0.52	Agree
2	Lack of playground in school can result in poor leisure play	3.09	0.68	Agree
3	Lack of playground in school can result in poor health	3.44	0.73	Agree
4	Lack of playground in school can result in lack of fitness	2.77	0.88	Agree
5	Lack of playground in school can result in obesity	3.13	0.71	Agree
6	Lack of playground in school can result in rickets	3.02	0.82	Agree
7	Lack of playground in school can result in poor adjustment	3.29	0.85	Agree
8	Lack of playground in school can result in poor relationship	3.45	0.76	Agree
9	Lack of playground in school can result in anti-social behaviour	3.37	0.80	Agree
Cluster		3.18	0.04	



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**$\geq 2.50 = \textit{agreed}$**

Table 4 shows the mean ratings of the extent lack playground is responsible for poor play habit in children ranging from 2.77 to 3.45. Item 1 has a mean rating of 3.02 and a standard deviation of 0.52. This implies that the respondents agree that the lack of playground in school can result in poor motor skill development. Item 2 has a mean rating of 3.09 and a standard deviation of 0.68. This implies that the respondents agree that the lack of playground in school can result in poor leisure play. Item 3 has a mean rating of 3.44 and a standard deviation of 0.73. This implies that the respondents agree that the lack of playground in school can result in poor health. Item 4 has a mean rating of 2.77 and a standard deviation of 0.88. This implies that the respondents agree that the lack of playground in school can result in a lack of fitness. Item 5 has a mean rating of 3.13 and a standard deviation of 0.71. This implies that the respondents agree that the lack of playground in school can result in obesity. Item 6 has a mean rating of 3.02 and a standard deviation of 0.82. This implies that the respondents agree that the lack of playground in school can result in rickets. Item 7 has a mean rating of 3.29 and a standard deviation of 0.88. This implies that the respondents agree that the lack of playground in school can result in a poor adjustment. Item 8 has a mean rating of 3.45 and a standard deviation of 0.76. This implies that the respondents agree that Lack of playground in school can result in a poor relationship. Item 9 has a mean rating of 3.37 and a standard deviation of 0.80. This implies that the respondents agree that the lack of playground in school can result in anti-social behaviour. The cluster mean and standard deviation of 3.14 and 0.04 implies that lack of playground is responsible for poor play habits in children to a reasonable extent

### **Discussion of Findings**

Research question 1 sought to find out the extent to which playground influences play in children in schools. Table 1 reveals that playground influences play in children to a high extent. This is in agreement with Yilmaz (2016) who asserted that through play the child is able to develop holistically. Also, Barros, Silver and Stein (2009) affirmed that children with unlimited space to play and run around are most likely to behave better and perform better academically. Wellhousen (2002) asserted that playgrounds in schools offer the opportunity for children to play, take the risk to an acceptable extent under safe and well-supervised conditions.

Research question 2 sought to find out the extent to which playground influence the societal development of children. Table 2 reveals that the playground influenced the general development of children in schools to a high extent. This is in agreement with Catron & Allen, (2007) who opined that the playground is expected to facilitate classroom management and supports the actualization of set goals and objectives. It is also in agreement with Wolfgang (2004) who asserted that the playground contributes highly to the child's learning and physical development. In the same vein, Yelmez (2016) posited that the school playground is very valuable toward qualitative development of the child, in the areas of gross and fine motor skills, intellectual skills, social and sensory skills acquisitions.

Research question 3 sought to find out the extent that playground is able to influence the cognitive development in children. Table 3 reveals that playground influences the cognitive development in children to a high extent. This is in agreement with Rivkin

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(2000) who stated that children who have access to playground promote and nurture the cognitive domain positively.

Research question 4 sought to find out the extent lack playground is responsible for poor play habits in children. Table 4 reveals that the lack of playground is responsible for poor play habit in children to a high extent. This is in agreement with Fjartoft (2001) who stated that lack of playtime by children has resulted in having young children unable to play, walk and move their bodies and the consequence is poor health leading to degenerative health disease like obesity, infant diabetes and rickets.

## **Conclusion**

Based on the findings, the playground is an important facility for play for children in school. Play shapes the behaviour of children, bring about socialization and above all help the children to explore and investigate their environment, thereby creating in them scientific thinking. It is also a medium through which the child can promote his/her self-esteem because it allows them to flourish in all aspects of development.

Based on the importance of playground to children, it is recommended that:

1. Stakeholders in education should ensure that every school has an adequate playground and play facilities.
2. Teachers and parents should help to re-introduce the culture of play in children.
3. Seminars and conferences should be organized to buttress the importance of play in a safe environment for children.
4. Time should be allocated for play in the school timetable where children will be exposed to the various forms of play as it was in the past.

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