

Implication of outdoor environment on children's physical activity performance levels and learning in public pre-schools in Kenya

A growing body of knowledge suggests that quality outdoor environment has a significant implication on children's physical activity level and learning. Globally, there is consistent evidence showing that a rich outdoor environment is a valuable complement of children's learning and development. This descriptive survey study adopted Vygotsky's (1978) Socio-cultural theory in examining the implication of outdoor environment on children's physical activity performance levels and learning in public pre-schools in Borabu Sub-County. The objectives of the study were to: find out the state of outdoor environment in pre-schools in Borabu Sub-County; establish the influence of outdoor environment on children's physical activity level; establish the influence of outdoor environment on children's learning experiences and; find out the strategies pre-school teachers are using in providing outdoor play activities. The target population was 50 public pre-schools, 50 primary school head teachers, 50 pre-school lead teachers, and 1603 final pre-school class pupils in Borabu Sub-county. The study employed cluster, purposive, and simple random sampling designs. The schools were selected using cluster sampling techniques. The study comprised of 44 pre-schools, 44 primary school head teachers, 44 pre-school lead teachers, and 309 final pre-school class pupils. Data collection instruments used were questionnaires, an interview schedule, document analyses and observation. Validity of the instruments was determined through examination of the items using face validity. A pilot study was conducted in two pre-schools to determine reliability of the instruments and split-half method was used to ascertain a reliability coefficient of 0.848. Quantitative data were analysed using basic descriptive statistics involving means, standard deviations, relationships, and covariance. Qualitative data were analysed using thematic analysis. The study found that; the general state of outdoor environment component was unsatisfactory; there was a relatively weak relationship between availability, adequacy, effectiveness, and location of various components of outdoor environment in ECDE centres, and the ability of pre-school children's ability to performing various loco-motor activities and rhythmic movement activities. Further results indicated that when all the four states of the outdoors were combined, they explained only 20.6% of the variance in the pre-school overall academic achievement. Additionally, it was indicated that a rich outdoor environment had a positive influence on pre-school children's development of various skills. The study also established that pre-school teachers mainly monitored, directed, and provided comments as children played. Also, majority of teachers supported individual work, ensured safety measures in the playground space, developed age-appropriate play equipment, and arranged play equipment in the play space. There is need to provide adequate and secure outdoor environment where children can effectively participate in outdoor activities and thus acquire physical and psychosocial skills. The study recommends that another study be conducted in another location to confirm these findings and investigate whether the findings have any implications on the Kenyan pre-primary teachers and pupils.