

PHYSICAL FACILITIES AVAILABILITY ON CHILDREN ATTENDANCE IN PUBLIC PRE-PRIMARY SCHOOLS IN MWATATE SUB-COUNTY, KENYA

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The purpose of this study is to establish the influence of physical facilities availability on children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. The study employed a descriptive survey research design. The target population for this study was 279 comprising of 184 Pre-Primary School teachers in 92 School Committee Chairpersons and 3 ECDE supervisors in three zones of Mwatate sub-county. The study employed a census method to determine the sample sizes of Pre-Primary School teachers (184) and ECDE supervisors (3); and a ten percent rule for School Committee Chairpersons (11). This gave a total sample size of 178 persons. Three instruments namely: the Pre-Primary School Teacher Questionnaire, School Committee Chairperson Interview and ECDE supervisors Interview Schedule was employed to collect data from the respondents. The instruments were validated by use of expert judgment while reliability of the tools was established through the use of test-retest procedures. Internal consistency of the tool was established through the use of the Cronbach's Alpha measures. The questionnaire was deemed to be reliable after attaining a reliability value of $\alpha = 0.88$. Data was analyzed statistically using percentages and Chi-Square measures at 0.05 confidence levels. The study established that there is a statistically significant relationship between physical facilities availability and children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. Overall, the study highlights the need for institutions and parents to work together to create a conducive learning environment for all children. This includes providing a variety of learning resources, maintaining clean and orderly classrooms and encouraging regular school attendance. By addressing these issues, institutions and parents can help ensure that all children have access to quality education and the opportunity to reach their full potential.

Keywords: Physical facilities, Children attendance, Pre-primary schools, School committee

INTRODUCTION

School physical facilities are an integral aspect of quality schooling. Apart from making the learning environment conducive, the quality of school physical facilities provides students with a feeling of self-respect, self-worth and the ease with which learning takes place. Although facility issues may not be a problem in developed nations, inadequate and dilapidated facilities is a major challenge facing education development in third world countries for long (Bhattarai, 2017; UNESCO, 2003). In Malawi, only 12 percent of qualified pupils in primary schools are able to join secondary schools because of inadequate school facilities (World Bank, 1995). In Tanzania, 50 pupils shared a toilet against the Water, Sanitation and Hygiene (WASH) guidelines for schools in Tanzania recommending 20 girls and 25 boys per pit latrine (Uwezo, 2017).

In Kenya despite the huge investments made in education, consistent government reports (The Ministry of Education Strategic Plan 2005-2010 and National Education Sector Plan 2013-2018) indicate that the country still faces infrastructure constraints in its efforts to meet both national and international commitments in enhancing access, equity and quality in education (Republic of Kenya, 2015). Many schools in ASAL, urban slums, pockets of poverty, and rural locations in impoverished districts have subpar facilities and an insufficient number of permanent classrooms, the research found. Most schools, particularly those that provide Early Childhood Developmental Education and Special Needs Education (SNE), have outdated or unfinished infrastructure (Republic of Kenya, 2006, 2015). Pre-Primary School children require clean and orderly physical environment that affords them physical activity including play and safety. Wambui (2011) found that many ECDE centers lacked adequate logistical support for monitoring and evaluation, and that in some ECDE centers, facilities for food preparation and serving to children were in poor state, as part of an effort to investigate the challenges encountered in the development of Early Childhood Education in Kenya. While such environment may be a hindrance to children's enrolment, equity and quality learning, its impact on Pre-Primary School attendance could be enormous. Yet the extent to which these physical resources were hindrance to Pre-Primary School attendance has not been highlighted by studies on education development in Kenya including ECDE (Wahome, 2005; UNESCO, 2005; Murungi, 2012).

Young children's development, happiness, and sense of self are all aided by regular playtime. Recognizing the importance of play in children's development, the Pre-Primary School curriculum now includes time for play. Grinsburg (2007) argues that children's play is crucial to the development of their physical, mental, and emotional well-being. It was postulated by Vygotsky (1931) that children's play facilitates their growth by allowing them to go beyond their first zones of proximal development. Theatrical productions also aid in the development of children's minds and social skills, as well as spark their imagination and encourage them to think beyond the box (Vygotsky, 2004). Despite the recognition that play is an essential component of a child's development at Kenya's Pre-Primary Schools, it has been difficult to provide enough play spaces for students (Republic of Kenya, 2015). Many Pre-Primary Schools, especially privately owned, are located in residential areas that lack enough space to create children's play grounds. The public Pre-Primary Schools on the other are attached to already existing primary schools whose land may not have been planned for Pre-Primary Schools. The scarcity of land limits the development of appropriate play grounds and as a result many pupils are denied the right to learn while playing.

Studies on education development in Taita Taveta County have depicted a sorry state of infrastructure development in schools. In a descriptive study to determine factors causing low transition from primary school to secondary school in Taita-Taveta District, head teachers who were interviewed observed that some pupils from the surrounding areas avoided their schools because they had poor and unattractive facilities (Kikechi, 2003). A correlational research by Juma, Ndirangu, and Udoto at secondary schools throughout the Taita-Taveta area in Kenya confirmed these results by looking at the connection between students' perceptions of the condition of school facilities and their own sense of identity (2018). Among others the study revealed that the sanitation, library and sports facilities and equipment as well as reading material in the libraries were inadequate and of poor quality. While the two studies examined issues on enrolment, transition and students self-concept at secondary schools, the extent to which they affected school attendance and especially among the Pre-Primary Schoolers could be dire.

Conceptual Framework

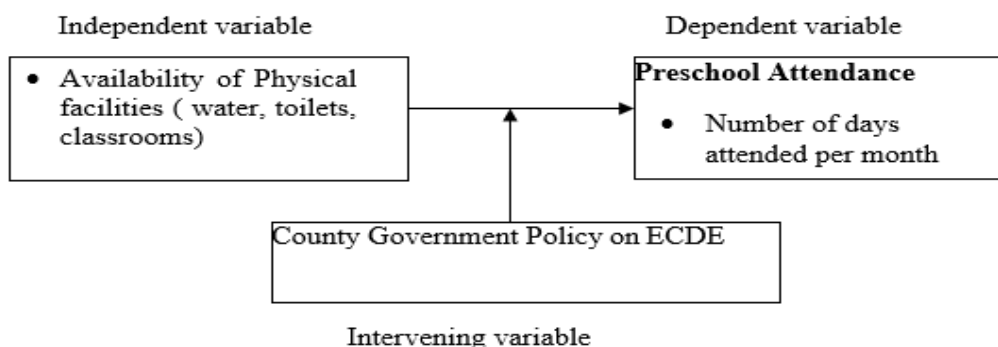


Figure 1: Conceptual Framework

A conceptual framework is a schematic diagram showing the interaction of independent, intervening and dependent variables to explain a research setting. The independent variable for this study is the physical facilities. The dependent variable for the study is the Pre-Primary School attendance, where the school registers and supervision reports was used for this purpose. The County government policies on Pre-primary schools form the intervening variable for this study. ECDE is a devolved function where county governments are supposed to invest and develop this level of education. Their policies in terms investments and motivating teachers can play a pivotal role in Pre-Primary School attendance, factors that have been built in the independent variables.

Research Methodology

The study adopted a mixed methodology approach where quantitative and qualitative data was utilized. This aided the researcher to produce a rich, comprehensive data that was used to get in-depth understanding of fundamental causes, views, and inspirations of the participants. It also provided insights into the study issue in order to uncover trends in thought and opinions, and go deeper into the study issue (Kothari, 2005). This methodology was preferred due to its strong point in that, there could be inadequate evidence, meaning that neither quantitative nor qualitative could bring about sufficient proof since the methods enrich each other. Furthermore, the more the evidence, the better the outcomes and consequently by merging quantitative and qualitative approaches it enhanced the more dependable outcomes (Schreiber & Asner-Self, 2011).

The study used a descriptive survey research design. The purpose of a descriptive study, as outlined by Orodho (2004), is to answer the questions "who," "what," "where," and "how" in relation to the variables under investigation. According to Kothari (2004), descriptive studies focus on making concrete inferences and providing a detailed account of some aspect of a person, group, or circumstance. The target population for this study was 279 persons comprising of 92 School Parents Committee Chairpersons, 184 Pre-Primary School teachers and 3 ECDE supervisors distributed in three zones. According to Taita Taveta Education and Libraries Department, Bura zone has a total of 1068 Pre-Primary School children in 41 ECDE centers, with Chawia zone having 1021 in 33 ECDE centers and Ronge having a total of 820 in 18 ECDE centers with one supervisor for each zone (Taita Taveta County Government, 2019). This information is as summarized in Table 1.

Table 1: Target population

Mwatate Zones	No. of ECDE Centers	School Parents Committee Chairpersons	Pre-Primary School Teachers	ECDE Supervisors
Bura	41	41	82	1
Chawia	33	33	66	1
Ronge	18	18	36	1
Total	92	92	184	3

Source; Education and Libraries Department, Government of Taita Taveta (2021)

A sample refers to a subset of the target and accessible population (Orodho, 2009). According to Orodho (2009), a sample size for a study depends on a number of factors, including the type of the research design adopted. Thus, apart from the School Parents Committee Chairpersons where 10 percent of them were used in the study, census method was used to sample the two remaining category of the respondents namely: - pre-primary school teachers and ECDE Supervisors, hence 184 pre-primary school teachers and 3 ECDE Supervisors. Thus the total sample size was 198 persons. This information is as summarized in the Table 2.

Table 2: Sampling Size and Sampling Procedure

Zone	Chairpersons of Parents Committee		ECDE Teachers		ECDE Supervisors	
	Target Schools	Sample size	Target Population	Sample size	Target Population	Sample size
Bura	41	5	82	82	1	1
Chawia	33	4	66	66	1	1
Ronge	18	2	36	36	1	1
Total	92	11	184	184	3	3

The researcher created three tools to collect information from the participants for the study. These were interview schedules for the School Parents Committee Chairpersons and pre-primary school supervisors; and questionnaires for pre-primary school teachers.

According to Orodho (2009), the goal of data analysis was to improve the researcher's knowledge by carefully looking for and organizing data and other materials collected from the field, and to show the findings to others. Organizing, classifying, manipulating, and summarizing data to get to the answers to the research questions are all part of this, as stated by Mugenda & Mugenda (2003). The accuracy of the field reports was checked when data collection exercise was complete. The data was sorted into frequency tables for use with the appropriate statistical software. After then, the Statistical Package for the Social Sciences (SPSS) was used to analyze the data that has been entered into the computer. Frequency tables were created using the collected information on parents, allowing for the calculation of means and percentages. Data was analyzed using Descriptive statistics and Chi-Square test.

Results

The study set out to determine the influence of physical facilities availability on children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. The study hypothesised that: - There is no statistically significant relationship between physical facilities availability and children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. Thus, the researcher therefore provided the ECDE teachers with a list of variables on physical facilities availability and asked them to provide information on whether the variables had any influence on children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. They were supposed to give their responses on a likert scale where VA=Very Adequate, A=Adequate, NSA=Not sure of their adequacy, I=Inadequate, and VI=Very inadequate. The Descriptive statistics was then done on the collected data as summarized in Table 3.

Table 3: Teachers response concerning influence of physical facilities availability on pre-primary school children school attendance

Variable	VA	A	NSA	I	VI	Totals
Toilets for Pre-primary children	0 (0.00%)	12 (6.74%)	38 (21.35%)	114 (64.04%)	14 (7.87%)	178 (100.00%)
Playing fields for Pre-primary children	0 (0.00%)	4 (2.25%)	0 (0.00%)	126 (70.79%)	48 (26.96%)	178 (100.00%)
Classrooms for Pre-primary children	33 (18.54%)	47 (26.40%)	7 (3.93%)	57 (32.02%)	22 (12.36%)	178 (100.00%)

Key: VA=Very Adequate, A=Adequate, NSA=Not sure of their adequacy, I= Inadequate, and VI=Very Inadequate

The findings in Table 3 show that majority of the respondents (71.01%) indicated that toilets for pre-primary children were either inadequate or very inadequate. Only a very small fraction of them (6.74%) said that they were adequate. This finding was supported by one of the ECDE supervisors who had the following to say:

“.....the toilets in our schools are not enough for our children..... The pre-primary school children at times have to compete with those who are in upper primary for the toilets which makes it difficult for them.....”

This finding implies that some of the children in pre-primary school might fear attending school if they are harassed by those in upper primary school. They might also be fearing the use of pit latrines.

Table 3 show that majority of the respondents (97.75%) indicated that playing fields for pre-primary children were either inadequate or very inadequate. Only a paltry 2.25% of the ECDE teachers felt that playing fields for pre-primary children were adequate. This finding was supported by one the Chairpersons of School Committee who had the following to say: *“.....our children in pre-primary school hardly play in the fields given that most of the schools are congested and priority is always given to the seniors in the upper primary when it comes to the use of our fields. The balls and other playing equipment bought by schools are meant for bigger boys and not these young ones in our pre-primary schools.....the pre-primary school children are only made to spectate as the seniors play”.*

This implies that the children in pre-primary schools have nothing to attract them in school in terms of play. At their age they need a lot of play which is not found at school hence might not be motivated to attend school.

The findings in Table 3 further show that a very slight majority of the respondents (44.94%) indicated that classrooms for pre-primary school children were either adequate or very adequate. Despite a sizeable number of the ECDE teachers felt the classes they have for the pre-primary school children were either inadequate or very inadequate.

These descriptive statistics was followed by a Chi-square test of association between physical facilities availability on children attendance in public pre-primary schools in Mwatate Sub-County, Kenya.. The Chi-square test deone at $p \leq 0.05$ significance level illustrated a statistically significant association between physical facilities availability on children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. is as summarized in Table 4.

Table 4: Chi-square test of association between physical facilities availability on children attendance in public pre-primary schools

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	382.272 ^a	1	.000
Likelihood Ratio	285.223	1	.000
Linear-by-Linear Association	108.833	1	.000
N of Valid Cases	178		

a. 177 cells (96.23%) have expected count less than 5. The minimum expected count is .01.

Table 4 shows that the p value ($p=0.000$) for physical facilities availability and children attendance was less than 0.05. Therefore the hypothesis, “there is no significant association between physical facilities availability and children

attendance in public pre-primary schools in Mwatate Sub-County, Kenya” was rejected. This implies that there is statistically significant association between physical facilities availability and children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. This finding is in tandem with that of Wambui (2011) who observed that many Early Childhood Development and Education centers lacked adequate logistical support for monitoring and evaluation, and that in some Early Childhood Development and Education centers, facilities for food preparation and serving to children were in poor state. The influence of such an atmosphere for Pre-Primary School attendance might be immense, even though it may be a barrier to children's enrollment, equality, and quality learning. Yet, the degree to which the lack of these physical resources was a barrier to enrolling in pre-primary school has not been emphasized in any of the studies conducted on the subject of education development in Kenya, including those conducted by ECDE (Wahome, 2005; UNESCO, 2005; Murungi, 2012).

The study concluded that there is a statistically significant relationship between physical facilities availability and children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. This implied that physical facilities availability enhances children attendance in public pre-primary schools in Mwatate Sub-County, Kenya. The study recommended that institutions should prioritize maintaining clean and orderly classrooms that are well lit and ventilated. They should ensure that there is enough furniture for all students, including those with disabilities. Institutions should also consider the needs of children of all ages and ensure that their buildings cater to all age groups. Moreover, they should ensure that there are enough toilets with sufficient water for all students.

Bibliography

- [1]. Abdallah, H., Fuseini, M. N., Abudu, A. M. and Nuhu, Y. (2014). Learners' Conundrum in Northern Ghana's Primary Schools, *Education Research International*. Vol. 2014. Pp 1-13
- [2]. Akwach A.S. (2008). *Report on the Current State of the ECDE Elements Implementation Plan*. Nairobi.
- [3]. Anderman, M.E. & Anderman, H.L. (2010). *Getting Students to Work Hard in the Classroom, Second Edition*, Pearson Education, Inc., New Jersey, Upper Saddle River.
- [4]. Anderson, R.H & Shane, H.G. (2002). *Insights on the Long-Term Benefits of Investing in Young Children's Education in Chicago*. National Society for the Study of Education. Year Book II
- [5]. Antonowicz, L. (2015c). *Project for children before entering kindergarten; interview with Marko Tomic of the Centre for Youth Integration in Serbia*. 2 October 2015.
- [6]. Attendance Works (2010). *Why it's important to show up for preschool: boosting learning outcomes by preventing chronic absences*. Washington DC: Attendance Works: Retrieved, June 7 2012.
- [7]. Bandura, A. (1997). *In other words, self-efficacy is the belief that one can successfully carry out an action or set of actions*. New York: Freeman.
- [8]. Barnett, W. S. (2011). Analysis of the efficacy of preschool and early elementary education programs. *Science*, 333(6045), 975-978.
- [9]. Bhattarai, K.N. (2017). *How do various aspects influence students' commitment to regularly attending class? Evidence from Nepal, Analyzed Quantitatively and Qualitatively*. Unpublished PhD Dissertation Colorado State University Fort Collins, Colorado Fall 2017
- [10]. County Government of Taita Taveta (2013). *Reasons for and Solutions to Falling Educational Quality in Taita Taveta County*. County Government of Taita Taveta
- [11]. Cramer, J.R. (1976). *The Impact of a School's Physical Upgrade on Student Attitudes and Behaviors at a Selected Junior High*. Unpublished Doctoral Dissertation, University of Georgia, Athens
- [12]. Croft, D. J. (2000). *Educators of young children: a manual of games and other activities*. Biston: Houghton Mifflin Company.
- [13]. Gottfried, M. (2014). The Impact of Prolonged Absences on Students' Academic and Emotional Development. *Journal of Education for Students Placed at Risk (JESPAR)*, 19:2, 53-75.
- [14]. Kathuri, N. and Pals, D. (1993). *Research Methods in Education: An Overview*. Njoro: Egerton University
- [15]. Kerlinger, F.N. (1973). *Foundation of behavioral research*. New York: Holt, Rinhart and Winton incorporated.
- [16]. Kikechi, W.R. (2003). *Transition Rates from Elementary to Secondary School in the Taita-Taveta District and the Factors That Affect Them*. Unpublished Masters Thesis, Kenyatta University, Kenya
- [17]. Kothari, C.R. (2004). *The approaches, strategies, and procedures used in research*. New Age International, New Dheli.
- [18]. Meoli, A. (2016). *Grounded Theory Study on Preschool Attainment: Parent and Educator Perceptions of Barriers, Health Behaviors, and Practices*. Unpublished PhD Dissertation: University of Central Florida Orlando, Florida.
- [19]. Muchungu, D. (2021). Here's all you need to know about Competency Based Curriculum. The Nation, Nation Media Group.
- [20]. Mugenda, O. & Mugenda, A. (2003). *Quantitative and Qualitative Strategies in Research (Revised Ed.)*. Nairobi: ACTS Press.
- [21]. Muola, J. M. (2010). The Effects of Family Background on Academic Performance in Standard Eight Students in the Machakos District. *Academic Journal* Vol. 5 (3) PP 213-217.
- [22]. Murungi, C.G. (2012). The problem of poor enrollment among children of pre-primary school age in Kenya. *Journal of Education and practice*, Vol 3, No 6.
- [23]. Organization for Economic Cooperation and Development (OECD) (2005). *Motivating, fostering, and keeping excellent educators is crucial*. Paris: OECD

- [24]. Orodho A. J, (2004). *Learning the fundamentals of research design in the social and educational sciences*. Nairobi, Masola Publishers.
- [25]. Orodho, J. A. (2009). *Methods for Writing Educational and Social Science Research Proposals and Reports*. Nairobi: Kaneja Publishers.