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**INFLUENCE OF SCHOOL-BASED FACTORS ON PUPILS' TRANSITION  
FROM PRIMARY TO SECONDARY SCHOOLS IN NAKURU COUNTY,  
KENYA**

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**ABSTRACT**

Kenya envisions attaining middle income status by 2030. One of the key drivers of this envisioned development is having skilled workforce. Developing competent workforce calls for measures such as ensuring all children have access to quality primary education and increasing pupils' transition from primary to secondary schools to meet the anticipated middle and high level manpower requirements. The national average transition of pupils from primary to secondary schools for Kenya stood at 76.6% by 2013 but falls below global standards and the national target. In Nakuru County, transition has stagnated at about 50% and decreased to 48.6% despite the inception of Free Day Secondary Education in 2008 and there being several vacancies in secondary schools within the County. Therefore, there was need to investigate the extent to which selected school-based factors influence pupils' transition from primary to secondary schools. This study applied *ex-post facto* research design where a sample of 406 respondents (42 head teachers and 364 teachers) was selected from the population of public school head teachers and teachers using the stratified random sampling method. The sample size was determined using Krejcie and Morgan's (1970) table. Data was collected using questionnaires and analysed using regression method at the .05 level of significance. School-based factors such as punitive school and regulations, inadequate teaching staff, and poor quality of physical facilities were found to have a statistically significant negative influence on pupil transition to secondary school using data from both head teachers and teachers. The study recommends that the government and other stakeholder should address these School-based factors in order to increase pupils' transition to secondary school.

**Keywords:** School-based factors, transition, primary-to-secondary, Nakuru County

## **INTRODUCTION**

### **Background to the Study**

The value of education in many nations cannot be over emphasized. Education plays a major role in socialization, development and reform (Ogusanju, 2006). It aids in instilling knowledge and skills in an individual (UNESCO, 2012). Although primary education has been the principle concern of several countries in their development agendas, there is a mounting acceptance that secondary education also has a vital role in ensuring a country's development. A World Bank Paper (2008) cited secondary education and training as pre-requisite to economic growth and social development. In order for countries to compete in a globalised economy, it is important for labour markets to have high calibre school graduates with relevant skills and knowledge.

Transition is an important indicator of the performance of an education system as it demonstrates how balanced or unbalanced the education program between the two levels is (World Bank, 2008). The global average primary to secondary school transition stood at 85% in 2011 (UNESCO, 2011). According to UNESCO, West and Central Africa have the lowest education transition rate at 52%. Transition rates are highest in developed countries such as US, France and Japan with 98% transition rate while Eastern Europe has 96%. Most developing countries are characterized by low rate of transition. Kenya is not any different from other countries in the pursuit of a more developed society.

In Kenya, a good number of students upon finishing primary school do not make it to the secondary level (Kirera, 2013). According to the Kenya National Bureau of Statistics (2015) Kenya achieved an average transition rate of 72.5% (69.9% for boys and 75.3% for girls) in the 2014/2015 year indicating that the 100% target was not met despite the efforts made by the government. Transition rates in Nakuru County, which is the target locale of the study, were lower than the national average. Transition rate in Nakuru County stagnated at about 50% between the years 2008-2013 and drastically decreasing to 48.6% in 2016. This implies that over half of the pupils who sat for their K.C.P.E examination in 2016 did not proceed to secondary school.

Several studies have linked low pupil transition to secondary school to school-based factors such availability of teaching and learning resources. For instance, Mutahi (2008) observed that a number of school-based factors affect student transition including type of teachers, teacher-pupil ratio, quality and adequacy of teaching and learning resources, quality of physical facilities, and school rules and regulations. Ogolla (2013), Gichohi (2014), Ramogi and (2015) also linked transition rate to school-based factors. However, none of these studies was based on Nakuru County; hence, the findings may not reflect the situation in the county. Although the study by

Ndungu (2016) was conducted in Nakuru, it was limited to a single sub-county (Gilgil Sub-county) hence may not adequately represent an accurate picture of the entire county. It is on this basis that the study sought to investigate the influence of selected community and school-based factors leading to the low rate of transition from primary to secondary schools.

## **LITERATURE REVIEW**

The concept of transition in education covers the major transitional points in the education cycle. Transition from primary to secondary school is a major challenge in Sub-Saharan Africa. Despite achieving remarkable rise in primary and secondary school enrolment over the past decade, there are places where just 36% of children who have attained the appropriate age for secondary school get to enroll. More than 21.6 million children of lower secondary school age in Sub-Saharan Africa remain excluded from school and many are never expected to enter school. By 2009, sub-Saharan Africa was home to 30%, of all lower secondary school-age children who are out of school worldwide where 40% of all lower secondary school-age girls and 33% of boys were out of school (UNESCO, 2011).

In 2003, the Kenyan government implemented the free primary education program. This new and welcome development saw an estimated 1.3 million children going back to school. In 2000, the primary completion rate was 57.7 percent (60.2 boys, 55.3). By 2013 it had increased to 81.8 percent (80.3 boys and 78.8 girls) (Republic of Kenya/UNESCO, 2015). However, access to secondary and tertiary education remained a challenge for most young people in Kenya. In 2010, approximately 30 percent of the primary level graduates did not proceed to the secondary (Kikechi, Musera & Sindabi, 2011). This was despite government efforts to introduce Free Secondary Education in 2008 and other efforts that the government made towards achieving Education for All such as expansion of the construction of school infrastructure in order to increase access to secondary education for learners transiting from primary education.

In Kenya, transition continues to be an uphill task especially from primary to secondary schools and if inadequately addressed, it is a sure way of undermining the gains made in education sector (ANPPCAN, 2004). This study therefore seeks to investigate the influence of selected school-based factors such as teaching and learning resources on pupils' transition from primary to secondary schools in Nakuru County, Kenya. Several school-based factors that were examined in this study include: availability and access to teaching/learning resources, peer group influence, school rules and regulations and teacher-pupil ratio.

## **THEORETICAL FRAMEWORK**

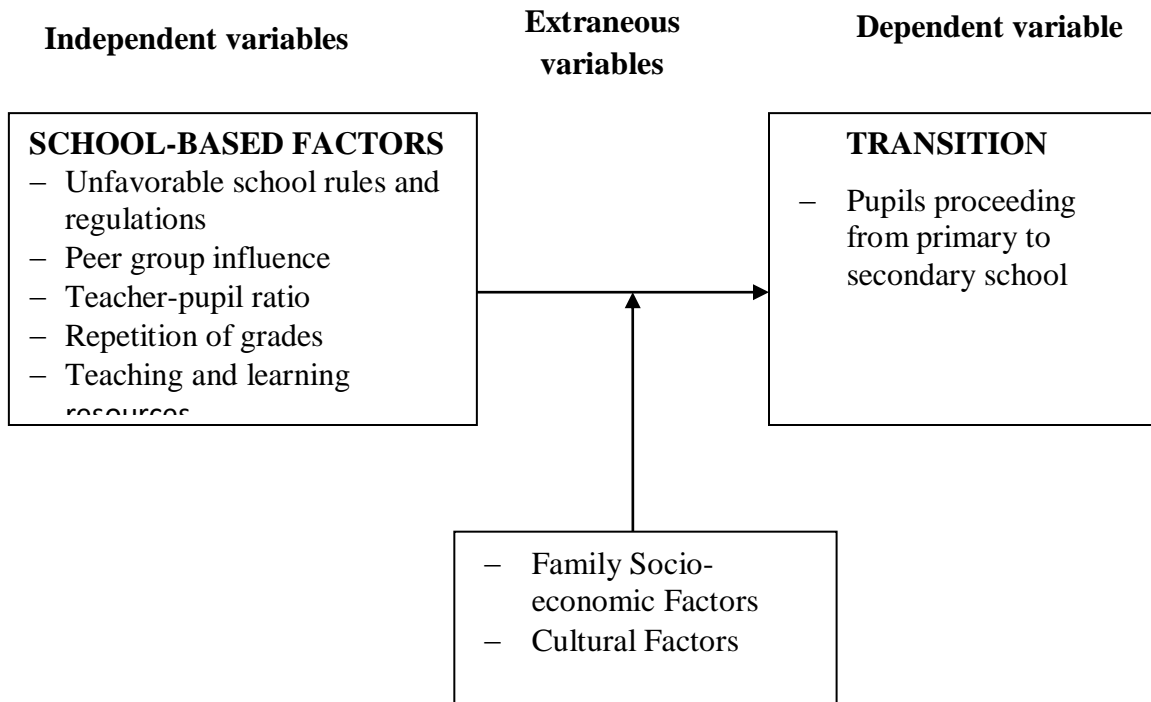
The study was guided by Bronfenbrenner (1979) Ecological Systems Theory. In this theory, it is believed that a child's development is influenced by several factors within the environment like people and the surrounding institutions among others. The theory further states that our character and behaviour is shaped by the environment that we interact with as we grow. The theory identifies five environmental systems including; micro, meso, exo, macro and chrono environmental systems. The micro systems setting is the direct environment people have in their lives; their family, friends, classmates, teachers, and neighbors.

The Meso system involves the relationships between the Microsystems in one's life. Examples of meso system may be the relationship between pupils in a given school or between teachers and pupils. The exo system is the setting in which there is a link between the context where in the person does not have any active role and the context where in is actively participating. In school settings, micro system that may affect the child though do not involve him directly include staffing levels and teaching and provision of learning resources.

The macro system is the actual culture of an individual. It includes the social or cultural ideologies and beliefs that affect an individual's environment. In the school setup, the macro system may also refer to culture of the school including traditions, beliefs, and policies among others. The chrono system includes the transitions and shifts in one's lifespan. This may also involve the socio-historical contexts that may influence a person for instance divorce, a major life transition which may affect not only the couple's relationship but also their children's behavior. This theory is relevant to the study as it demonstrates how various aspects of the child's environment can affect his or her development.

## **CONCEPTUAL FRAMEWORK**

This study holds that pupils' transition from primary to secondary (dependent variable) is contingent upon school-based factors. The study also posits that there are extraneous variables which may act as catalysts hence fastening or slowing the relationship between independent and dependent variables. Such variables include family socio-economic factors and cultural factors. The conceptualized relationship between the variables subsumed in the study is illustrated in Figure 1:



**Figure 1: Interrelationship between Variables subsumed in the Study**

**RESEARCH METHODOLOGY**

*Ex-post facto* research design was applied in this study. This method is used when the researcher is not able to select, control or manipulate factors (Kasomo, 2007). It can be used instead of experimental research design when trying to identify the relationship between variables, for instance cause-effect relations. As indicated in the background of the study, transition is already a problem in Nakuru County, and therefore *ex-post facto* design was applied to study which school based factors can explain pupils’ transition to secondary schools.

The target population was 7805 respondents comprising 420 head teachers and 7385 teachers in all the 420 public primary schools in Nakuru County. From this population, a sample of 406 respondents was selected comprising of 42 head teachers and 364 teachers. Since the population was homogeneous, stratified random sampling was used and a total of 42 schools were selected. The nine sub-counties that make up Nakuru County were used as strata. All the public primary

schools per sub-county were listed down, papers folded and churned up. The researcher then picked schools randomly according to the sampling ratio accorded to each stratum.

Two sets of questionnaires were administered; one for head teachers and the other one for teachers. A Likert scale with five point rating scale was used out of which the respondents were to choose the option that best suited their opinion. The scale was labeled; Strongly Agree (SA), Agree (A), Moderately Agree (MA), Disagree (D), and Strongly Disagree (SD). The scoring was SA= 5, A=4, MA=3, D=2 while SD=1. The questionnaires were examined by the experts in the School of Education in order to ascertain their validity.

Piloting was done to establish reliability of the research instruments. The pilot test involved a total of 20 participants (2 head teachers and 18 teachers) selected from two schools within the county. The pilot followed the test-retest procedure where the same questionnaire was administered twice to the same respondents (twenty in number) at an interval of two weeks. The scores of the respondents on the two tests were correlated using the Pearson product moment correlation coefficient. The instrument was accepted as it achieved a correlation coefficient of .864.

## **RESULTS AND DISCUSSION**

The study sought to investigate and answer the following research question:

To what extent do school-based factors influence pupils' transition from primary to secondary schools in Nakuru County?

The indicators for school-based factors were:

- i. Unfavourable school rules and regulations
- ii. Peer group influence
- iii. Teacher-pupil ratio
- iv. Repetition of grades
- v. Teaching and learning resources

To achieve this objective, the null hypothesis was tested at 0.5 level of significance:

### **School-Based Factors have no statistically significant influence on pupils' transition from primary to secondary schools in Nakuru County, Kenya**

School-Based Factors (SBF) was the independent variable while transition was the dependent variable. Family Socio economic Factor (FSEF) and Cultural Factors (CF) were included in the

model so as to control them in order to rule out the possibility that the difference observed in transition is as result of these factors.

**Table 1: Summary of Regression Analysis between School-Based Factors and Pupils' Transition to Secondary School using the Head teachers Dataset**

Variable		r	r <sup>2</sup>	Constant	F	P
Dependent	Pupils' transition	.695	.483	90.364	52.792*	.000
Independent	School-Based Factors		Beta	Standardized Beta	t	
			-.789*	-.796	-5.091	.000

From Table 1, the beta coefficient for S.B.F is -0.789, which implies the existence of a negative relationship between the selected school-based factors and pupils' transition from primary to secondary school. The t-statistic for this relationship yielded a p-value of 0.000. Since this value is less than the 0.05 level of significance, it implies that the relationship between school-based factors and transition is statistically significant; hence, the null hypothesis is rejected. The r<sup>2</sup> of 0.483 indicates that the model comprising of school-based factors as a predictor explained 48.3% of total variance in pupils' transition to secondary school.

This finding is consistent with the study by Ondieki and Orodho (2015) where it was found that school-based factors had a negative influence on pupils' transition to secondary schools in Nyamira County. Specifically, the study established that pupils within the county had the capacity to perform well at all levels, but shortcomings such as limited teaching and learning resources, teachers failing to employ a wide range of teaching and learning strategies, and teachers failing to play their role as academic motivators. Mathia (2015) also found that pupils' transition to secondary schools in Kiambu County was being hindered by factors such high prohibitive cost. The secondary schools within the county were charging parents hefty levies to cater for their operating costs. Katiwa (2016) also found that pupils' transition rate to secondary schools was hindered by school-based factors such as unavailability of spaces in secondary schools as well as PTA levies.

**Table 2: Summary of Regression Analysis between School-Based Factors and Pupils' Transition to Secondary School using the Teachers' Dataset**

Variable		r	r <sup>2</sup>	Constant	F	P
Dependent	Pupils' transition	.648	.421	64.235	87.092*	.000
Independent	School-Based Factors		Beta	Standardized Beta	t	
			-. 623*	-.223	-2.486	.013

From Table 2, the beta coefficient for School-based factors (S.B.F) is -0.623, which signifies the existence of a negative relationship between the S.B.Fs and pupil transition to secondary schools. Specifically, it implies that holding other factors constant, when the school-based factors become more prevalent the transition of pupils to secondary school declines. The t-statistics for this relationship gave a p-value of 0.013, which indicates that there is a statistically significant relationship between school-based factors and transition. Consequently, the null hypothesis is rejected. These results are consistent to those found in the head teachers' dataset. However, the beta coefficient recorded in the teachers' dataset is slightly lower than that obtained in the head teachers' dataset. This implies that the teacher perceive the school-based factors as less influential on pupil transition rate to secondary school when compared to head teachers. The r<sup>2</sup> value of .421 indicates that the model explained 42.1% of the variances in pupils' transition to secondary school.

### CONCLUSION

From the findings, the study concludes that school-based factors such as unfavourable school rules and regulations, peer-group influence, insufficient teacher-pupil ratio, repetition of grades and inadequate teaching/learning resources have a significant negative influence pupils' transition from primary to secondary schools in Nakuru County, Kenya. The study recommends that to improve pupils' transition to secondary schools, stakeholders particularly the government should improve the availability of teaching and learning, re-examine their school rules and regulations and improve interactions between teachers and students.



## REFERENCES

- Gichohi, F. (2014). *Institutional factors affecting pupils' retention in public primary schools in Nakuru North District, Kenya*. Thesis submitted to School of Education at the University of Nairobi.
- Kasomo, D. (2007). *Research methods in humanities and education*. Zapf chancery Research Consultants and Publishers. Eldoret, Kenya: Kijabe Printing Press.
- Katiwa, A. (2016). *Factors influencing pupils' transition rates from primary to secondary schools in Kitui Central Sub-County Kitui County, Kenya*. Thesis submitted to the School of Education at the University of Nairobi.
- Kenya National Bureau of Statistics (2015) Economic Survey 2015. KNBS Nairobi <http://www.knbs.or.ke>
- Kikechi R. W, Musera, G. and Sindabi O. (2011). *Factors Affecting Transition Rates from Primary to Secondary Schools: the Case of Kenya*. Journal on the Problems of Education in the 21<sup>st</sup> Century Volume 32, Retrieved from: <http://oaji.net/articles/2014/457-1406541825.pdf>
- Kirera D.M. (2013) *Factors Influencing Transition of Pupils from Primary to Secondary Schools in Meru Central District in Kenya*. Thesis submitted to the School of Education at the University of Nairobi.
- Krejcie, R.V. & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30,607-610.
- Mathia, A. (2015). *Factors influencing pupils' transition rates from primary to secondary school in Kiambu Sub-County, Kenya*. Thesis submitted to the School of Education at the University of Nairobi.
- Mutahi, K. (2008). *Enhancing Transition in education for primary school leavers opening speech*. Nairobi: ANPPCAN.
- Ndungu, A. (2016). *School-based factors influencing pupils' performance in English at Kenyan Certificate of Primary Education in Public Primary Schools in Gilgil Sub-County, Kenya*. Thesis submitted to the School of Education at University of Nairobi.
- Ogolla, J. (2013). *Factors influencing transition rate of learners from primary to secondary schools in Rangwe Division of Homa Bay District, Kenya*. Thesis submitted to the School of Education at Nairobi University.

- Ondieki P.O. and Orodho A, (2015) *School-Based Factors Influencing Performance of Pupils on Transition from Lower Primary to Upper Primary in Ekerenyo Division, Nyamira County, Kenya*. Research on Humanities and Social Sciences Vol.5, No.6. <http://ir-library.ku.ac.ke/bitstream/handle/123456789/13802/>.
- Ramogi, D. (2015). *School-based factors influencing pupils' participation in public primary school education in West Karachuonyo Division, Kenya*. Thesis submitted to School of Education at the Nairobi University.
- Republic of Kenya and UNESCO (2015). *Education for All 2015 National Review Report: UNESCO*. Retrieved from <http://unesdoc.unesco.org/images/0023/002316/231637e.pdf>
- UNESCO (2011). *International education statistics*. A situational analysis of international Position. Paris: UNESCO office.
- UNESCO (2012). *Systematic monitoring of education for all*. Paris: UNESCO office.
- World Bank (2008). *National assessment of education achievement*. Washington DC: World Bank
- World Health Organization (2015). *Reproductive Health Survey 2014*. Geneva, SW: World Health Organization.

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