

**EFFECTS OF SOCIO-ECONOMIC FACTORS ON DROPOUT AND
RETENTION RATES IN PUBLIC DAY SECONDARY SCHOOLS
IN CHEPALUNGU SUB COUNTY, BOMET – KENYA**

GODFREY KIPNGETICH KIRUI

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DECLARATION AND APPROVAL

Declaration

This research thesis is my original work and has not been presented for award of diploma or conferment of a degree in this or any other university.

Signature.....

Date.....

Kirui Kipngetich Godfrey

PGC/EEP/001/2017

Approval

This thesis has been submitted with our approval as University Supervisors

Signature..... Date.....

Dr. Viviline Ngeno

Department of Education, Administration, Planning and Management

University of Kabianga

School of Education

Signature..... Date.....

Prof. Joshua Manduku

Department of Education, Administration, Planning and Management

University of Kabianga

School of Education

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DEDICATION

To my mother Bornes, my brother Aldad and my daughter Chepchirchir for their encouragement and patience while I was pursuing this course

ABSTRACT

Education plays a critical role in promoting economic, social, cultural and political development of individuals, communities, nations and humanities. The Government of Kenya has consequently been allocating substantial resources to the education sector. In fact, the Government has been shouldering tuition fees in all public secondary schools since 2008. Despite these efforts by the Government, there are notable wastage in secondary school education sector probably due to internal inefficient operations in school. The purpose of the study was to establish effects of socio-economic factors on internal efficiency of education in public day secondary schools in Chepalungu Sub County. There was a need to determine the extent to which parental level of education influenced internal efficiency of education, establishment of the extent to which family structure influenced internal efficiency of education, examination of the extent to which parental income levels influenced internal efficiency of education and establishment of the extent to which students' engagement in household duties influenced internal efficiency of education. The study adopted educational production theory which asserts that an education process is looked at as where inputs are converted into outputs. This was a descriptive survey study that targeted a population of 327 Class Teachers, 3277 students and 62 principals. A sample of 14 schools, 66 class teachers and 346 students were used. Field survey method was adopted to collect data using questionnaires and document analysis. Data collected was analyzed using statistical package for social sciences (SPSS version 21) and presented using tables, frequencies and percentages. The analysis revealed several socio-economic factors influencing internal efficiency in the provision of secondary education in Chepalungu Sub-County. These factors are: parental education levels, family structure, parental income level and student's engagement in household duties. The study found out that cases of retention rates are very low due to family instability, low levels of parental education, the structure of the child's family and the students' engagement in household duties. Absenteeism is also a big challenge being caused by parental attitudes, truancy, and orphan status. Also, most parents in Chepalungu sub-county are depicted to be poor or very poor as most parents are subsistence farmers, small scale business persons or casual workers. Their education level and background is crucial in students' progress in education. From the findings of the study the researcher recommends that the impoverished status of the sub-county should be addressed as a matter of urgency by the community with the assistance of the government for the parents to have reliable sources of income to economically support their children in school. There should be a departure from the reliance on formal or salaried employment which at the moment accounts for less than 30% of the total employment. The researcher also recommends further research to be conducted to determine the status of internal efficiency in private secondary schools in Kenya.

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ABBREVIATIONS AND ACRONYMS

ETF	Education Task Force
GER	Gross Enrolment Ratio
GoK	Government of Kenya
MOEST	Ministry of Education Science and Technology
NER	Net Enrolment Ratio
NSCEH	National Environment and Health Study Centre
OECD	Organization for Economic Co-operation and Development
RDE	Regional Director of Education
SPSS	Statistical Package for Social Sciences
TSC	Teachers' Service Commission
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
SCR	Student Completion Rate

OPERATIONAL DEFINITION OF TERMS

The following are the significant terms that were used in the study:

Educational Production Function A function that relates various inputs to education including those of families to the maximum level of student achievement that can be obtained.

Family Structure referred to the members of a household who are linked by marriage or bloodline.

Internal Efficiency This is the flow of students from the point of entry to the point of completion with minimum drop out and repetition. It referred to average attendance, retention, repetition and dropout rates.

Parental Income Levels referred to the father and mother financial status in the family of the students in secondary schools.

Parental Level of Education referred to parent's education levels which range from K.C.P.E certificate holders, those with adult education and those without education to degree holders.

Provision of Education referred to the school's ability to offer quality education to students in day secondary school level.

Students' Engagement referred to the degree of attention, curiosity, interest, optimism and passion that students show when they are learning or being taught, which extends to the level of motivation they have to learn and progress in their education. In this study it shall refer to the relationship between child labour and internal efficiency in the provision of education in day secondary schools.

Socio-Economic Factors referred to family status which comprise of parents' income, parental education levels, and parental occupation based on mother's education, father's education, mother's occupation, father's occupation and combined income.

CHAPTER ONE

INTRODUCTION

1.1 Overview

The chapter contains the background of the study, the statement of the problem, purpose of the study, research objectives, research questions, justification of the study, significance of the study, scope and limitation of the study and assumptions of the study.

1.2 Background to the Study

The effects of socio-economic factors on internal efficiency in the offer of education in public day secondary school has been the focus because there will be elimination of the possible threats that can be faced. The World Conference on Education for All held in Jomtein, Thailand in 1990 declared basic education a human right. This was deemed achievable if access to basic education was fair to all. The role it plays and its actual growth and development of the society have become points of common concern in both developed and developing countries (Hasan, Halder & 2018). The basic education coalition contends that education is one of the most effective development investment countries and their donor partners can make. An educated population is essential for economic growth and more generally for a higher quality life (Agasisti, Bonomi & Sibiano, 2014).

According to Gitonga (2012), measures of internal efficiency reflect effectively a part of the educational system that uses available resources to achieve specified educational outcomes. Education systems in many countries exhibit high levels of inefficiencies

which affects how students perform, Day and Hong (2016). Internal efficiency of an education system is defined as the ability to educate the greatest number of students in the shortest time and with the least use of financial and human resources. A system is said to be internally efficient if the inputs and efforts channeled to it give the expected output. According to Gitonga (2012), secondary education has internal efficiency problems such as high wastage because of low completion, high repetition and dropouts especially in upper classes.

According to an empirical study done by Getange (2013), on the rates of school dropouts, Africa had one of the highest dropout rates in the world. Out of 13.95 million enrolled, 45% dropped out at various grades (I to V) thus between 5 to 9 years. This dropout rates have adversely affected the completion rates of female at 46% compared to male at 54%. The socio-economic factors have been identified to be the major causes of high dropouts. Low per capita income of people and poverty are the main reasons forcing children to drop out of school or not to enroll. Pakistan implemented several programs and projects with varying levels of success. In mid 2000s, the education sector reform programs to mitigate the problems of drop outs and low enrolment were implemented in Punjab and Sindh provinces providing missing school facilities such as toilets, textbooks and students stipends were also provided (Annual Ministerial Review June 2011). After the programs were established, girls' enrolment increased by 33%. The overall NER rose from 55% to 57% in 2009 while GER remained at 91% between 2007 and 2010.

Internationally, Parents control the initial decision of a child to attend school and often influence the nature of a child's participation in education. Support that the children

receive in education may influence persistence with school. Retention of learners in secondary schools is strongly related to family background and education of parents (Afonso, 2006). Parental support is critical in the area of moral, psychological and basic necessities of the child towards shaping of the child's life (Pelt, 2009; Holford, 2010). Ngwiri (2008) asserts that the parent is the first teacher of the child. Moreover, parental contribution in areas of fees, teaching materials and uniforms has been vital for the expansion of education in Kenya (GoK 2012). Parental participation can be enhanced by ensuring that demands on them are kept to the minimum and are related to improvement of the learning. Amounts of funds demanded as well as reasons for such demands should be worked out with the consensus of all parents through real democratized process and most important of all, ensure that parent's contribution are correctly utilized in ways that are clearly transparent and accountable.

Family related factors such as low socio-economic status which lowers the parents' capacity to pay school fees and also buy reading materials for their children, and low educational attainment of parents who thus cannot motivate their children to learn contribute to low internal efficiency (Odebero, 2002). The low retention levels are further worsened by the negative perceptions held by some students towards education, which due to high level of educated unemployment causes poor attitudes towards regular schooling (Verspoor, 2008). In Kenya, the stakeholders recognize that although major strides have been made in education in quantitative terms, there are serious shortcomings in the education system. Despite heavy investments in the 8:4:4 system of education, high wastage as a result of low retention in school among secondary school learners is

experienced (GoK, 2012). Wastage is the worst form of inefficiency because when learners drop out of school, resources already invested in them go to waste.

A study carried out by Achoka (2007) on ten cohorts between 1990 and 2002 revealed that dropout rates for the ten cohorts ranged between ten and fifty percent. Emerging from this fact is a crucial question, where do the girls and boys who drop out of these cohorts go? And what do they do where ever they go? Kenya incurs a loss through drop out in educational sector (Kiveu, 2009). The drop out signifies unfulfilled aim, goal and objective for the individual, community, and nation as a whole. For instance, for any drop out at the secondary school level, the country loses the potential workforce. Thus, in Kenya, all education stakeholders must consider over some of the specific factors that may be contributing to cases of dropout. Some of the major factors, which are behind low retentions, have been highlighted as education policies and institutional processes; school-based factors; and household and community-based factors (Abagi & Odipo, 2011).

Developed countries have higher enrolment rates compared to developing countries World Bank (2010). France for instance had a school net enrolment of 98.22% while Morocco had 55.2% in 2007 and Kenya had 29.8% in 2008. The following Table shows the Gross Enrolments in some few countries.

Table 1.1

*Gross Enrolment per a sample of 120 students in Public Secondary Schools in Kenya
Between 2017 – 2019*

Country	2017	2018	2019
Argentina	86	89	90
Belgium	111	111	112
Kenya	59	60	65
Tanzania	25	27	27
Uganda	40	42	46

Source: World Bank 2019

This has been influenced by high levels of parental education. The mothers' education has led to sustained increases in education attainment from one generation to another. A wealth of cross country and individual country studies from Africa and Asia over past 25 years reveal that the mothers' education is a strong and consistent determinant of their children's school enrolment and attainment (Ali, Dahie & Ali, 2016). In Tanzania, a study by Mbugua, Reche, Bundi, Kareanki and Riungu (2012) indicates education of the head and spouse does increase the probability of school completion. Heads having attended primary schools increases the girls' chances of completion by 6.7% and that of boys by 4%. Many countries in Africa like Botswana, Zimbabwe, Malawi, Ghana, have focused attention on increasing resources to the education sector in a bid to achieve universal primary education (UPE). According to Nzoka and Orodho (2014) the fathers' education, occupation and income levels determine children access to school. The quality of education that the child receives is dependent on the education that their parents received when they were children.

According to Gu and Day (2013), the high cost of education and household poverty level are critical factors that often pushes the students to do menial jobs to supplement the meager family incomes. Labor participation by a person below the age of 15 years is not widespread but it is escalating at an unacceptable rate (Kayode and Ayodele, 2015). At a conference in Brussels organized by European Forum for Freedom in Education (EFFE) educationists from 18 countries reflected on what could be done to reverse the trend. According to Kapinga (2014) jobs increase the percentage of dropouts as students may and also do have to take on a job to support themselves or their families. The orphanhood often exacerbates financial constraints for poorer household and increases the demands for child labor and dropout for example in Ethiopia (Berkovich & Foldes, 2012). In Northern Ghana, cattle rearing is considered prestigious, parents prefer their sons to take care of the cattle than go to school (Abubakari, A. B. D. U. L. A. I., & Longi, F. Y. T, 2014). In Philippines and the rural Bangladesh, children in poor household start contributing to family income and home production at much lower age than those in higher income households.

The US Center for Marriage and Family released a study in November 2015 that shows broken family structures consistently lead to education difficulties for children especially the girl child in Afghanistan. They face many challenges that prevent them from accessing school, most importantly the lack of value placed on female education. The report shows that children from non- intact families have significantly higher rates of difficulty with all levels of education.(Hassan, N. (2023)

Family structure is a deciding factor in a wide range of child behavior that directly influence academic performance including emotional and psychological distress, attention disorder, social misbehavior, substance abuse, sexual activity and teen pregnancy. According to Peabody (2011), children living with both parents have lower dropout rates and higher graduation rates compared to students living in other family arrangements. Children from unstable families are susceptible to behavior which could undermine their performance in schools. Such behavior includes drug or alcohol use. The rapid spread of substance abuse can be attributed to the breakdown of indigenous society and to the introduction of foreign influences that have made a variety of substance available on the large scale.

In Kenya, a significant improvement in the access to secondary education was witnessed during the inception of Free Day secondary Education in 2008 by the Government. The secondary schools Net enrolment rate (NER) rose from 79.8% in 2008 to 91.6% in 2012. This was a commendable increase when compared to the targeted NER of 84.4% for 2012, an increase of 7.2% compared to the previous NER (EMIS, MOE 2012) secondary school completion rates between 2008-2012 shows that the country has not yet realized 100% completion rates due to wastage being experienced in secondary schools (Republic of Kenya, 2012). Starting school on time will help complete secondary education because delayed school entry is closely associated with increased risk of dropout. Late entry is associated with higher rates of repetition in early forms which can increase the cost of education to households and weaken the internal efficiency of the education system.

According to the National Education Sector Strategic Plan 2015 – 2019 of Chepalungu Sub-County; the overall prevalence of students' dropout was 41%. Therefore, it is clear that there is a lot of wastage in secondary education in Bomet County. More than 50% enrolled students fail to complete the education cycle yet education consumes about 55% of the government's recurrent expenditure. Special attention should be paid therefore to the analysis of internal efficiency of the education system in Chepalungu Sub County, which has school completion rates declining as the number of students who drop out continue increasing.

1.3 Statement of the Problem

Clarity is evident on how the education sector needs to be able to meet the objectives of the vision 2030 in order to create a sustainable development. Despite the government's effort in funding of secondary education through Free Day Secondary Education, parents have had to chip in so as to meet some costs of running of schools. Some students have dropped out of school due to lack of the required resources such as school fees and learning equipment; this has resulted to educational wastage. Cohort survival rates are low and repetition rates and dropout rates are the highest in form one (repetition rate 6.5%, dropout rate 9.12%) and form two (repetition rate 5.84%, dropout rate 5.88%). The data of form three is reflected as follows: in 2012 the county had 50,440 students in public day secondary schools and those who were registered for KCSE in 2013 were 33,821 (65.98%) implying a wastage rate of approximately 34.02%. It was in the light of this that the researcher wanted to find out the socio-economic factors responsible for low retention rates, high repetition rates, high dropout rates and absenteeism in public day secondary schools in Chepalungu Sub County, Bomet County, Kenya.

1.4 Purpose of the Study

The purpose of this study was to determine the socio-economic stipulations that contribute to internal efficiency; retention rates, repetition rates, dropout rates and average attendance and recommend possible strategies to improve education sector in public day secondary schools in Chepalungu Sub County in Kenya.

1.4 Objectives of the Study

The study was guided by the following objectives:

- i) To determine the extent to which parental level of education influence drop out and retention rates in public day secondary schools in Chepalungu, Bomet County.
- ii) To establish the extent to which family structure influence drop out and retention rates in public day secondary schools in Chepalungu, Bomet County.
- iii) To examine the extent to which parental income levels influence drop out and retention rates in public day secondary schools in Chepalungu, Bomet County.
- iv) To establish the extent to which students' engagement in household duties influence drop out and retention rates in public day secondary schools in Chepalungu, Bomet County.

1.6 Research Questions

The study sought to answer the following research questions:

- i) What extent do parental levels of education influence drop out and retention rates in public day secondary schools in Chepalungu, Bomet County?
- ii) What extent do family structure influence drop out and retention rates in public day secondary schools in Chepalungu, Bomet County?

iii) What extent do parental income levels influences drop out and retention rates in public day secondary schools in Chepalungu, Bomet County?

iv) What extent do students' engagement in household duties influenced drop out and retention rates in public day secondary schools in Chepalungu, Bomet County?

1.7 Justification of the Study

The results of this study may be useful to different stakeholders: parents; in order to make them aware of the importance of socio-economic factors in shaping the internal efficiency of education of their children; the school management; in order to enlighten them on the important factors so as to be able to deal with or pay more attention to those factors which may affect adversely the internal efficiency of education in public day secondary schools; The results of this study may also benefit other future researchers in the same field with the literature to support their arguments and hence improve knowledge. These will enrich available information on specific socio-economic factors and how they internal efficiency of education in public day secondary schools.

1.8 Significance of the Study

The findings of this study may be useful in enlightening the school management about the effects of socio-economic factors on internal efficiency of education. Parents/guardians may also get knowledge about their roles in ensuring internal efficiency of education in public day secondary schools and that students attend schools regularly to enhance access to general education standards. The understanding of the socio-economic factors by parents and students on internal efficiency of education is hoped to help them understand the importance of parental level of education, family

structure, parental income levels and students' engagement in household activities on internal efficiency of education.

1.9 Limitations of the Study

According to the article by (Oundo et al 2014), limitations are conditions beyond the control of the researcher that may place restrictions on the conclusion of the study and their applications to other situations. The major limitation of the study was to obtain information from students who after enrolling were unable to complete their studies which could have given more reliable information. To overcome the limitation the researcher used class teachers to give their opinions since they had more information on dropouts. The study was non-general to other areas because there is a need to focus on other factors that affect internal efficiency of education in Chepalungu sub-county. To mitigate against this, other researchers may carry out similar studies in other areas.

1.10 Basic Assumptions of the Study

The study was based on the following assumptions:

- i. That, respondents who were selected for study would give genuine responses.
- ii. That, the KCSE examination was a reliable and accurate instrument for measuring achievement at the secondary school level.
- iii. That, relevant data was available in the schools and at the Sub-County Education office.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter comprises of literature review relevant to the research topic, and includes historical evolution of internal efficiency, parental level of education influence on internal efficiency of education; family structure's influence on internal efficiency of education; parental income levels effect on internal efficiency of education and students' engagement on household duties on internal efficiency of education. It also looks at the theoretical and conceptual framework.

2.2 Review of Related Literature

2.2.1 Historical Evolution of Internal Efficiency

Internal efficiency of an education system is defined as the ability of the education system to turn out its graduates at any level in the most efficient way without wastage, stagnation or repetition Psacharopoulos (2008). Internal efficiency can be measured by class size and student ratio which provide a picture on learning and teaching environment in terms of overcrowding, student-teacher contact and availability of teaching and learning resources.

The question of efficiency was raised for the first time by Frederick Taylor, when he wrote a book on; *The Principles of Scientific Management*. Taylor was partly responsible for the notion of universal applicability (Shan, Y., Taylor, S. D., & Williamson, J. (2024). Efficiency was then regarded as both end and a process. Therefore, the term efficiency was also regarded as the reduction of expenditure with the same or higher

production. He introduced this concept to educational institutions, which wanted to achieve efficiency by reducing the unit cost.

He also elucidated different scholars' notions that the most scholars like Lee Long, (1971); Breneman, (1970); Bowen and Douglas, (1971); Coombs, (1968); Meeth, (1971); and Bowles, (1967) belong to the neo-classical economic orientation and consider efficiency as the ratio between inputs and output.

Further, the concept of efficiency was originally developed and refined by economists who still defined efficiency as the relationship between the inputs into a system (be it Agriculture, Industrial or Educational) and the outputs from that system (be they wheat, vehicles or educated individuals) (UNESCO (2002)). Therefore, an education system is said to be efficient if maximum output is obtained with minimum possible input. Inputs and outputs have somehow to be valued so that they are aggregated and usually prices are used to perform this valuation function. It also stresses the problems of measuring efficiency in education, however are considerable.

However, scholars having a progressive orientation had raised the question about efficiency that determining efficiency only on the basis of inputs and outputs might not provide an ideal or optimum concept. In this respect, it was believed that determining efficiency only on the basis of output would be like ignoring the social benefits of education. Thus, it would be like supporting the capitalist ideology of an educational system, which is purported to enhance the class system in the society by sorting out the deviants from the group.

2.2.2 Influence of Parental Level of Education on Internal Efficiency of Education

Education has become as a necessity for children to succeed in life; parents become supportive towards their children when it comes to education (De Guzman & Gallardo, 2017). Schooling becomes a family matter in which children become at least partly dependent on the education level of the parents. Parents with little knowledge can be less supportive; they are less able to help with things children need to learn at school. Furthermore, it is apparent that parents with higher education levels spend more time doing interactive activities, like walking and playing, which can be explained by the felt necessity to invest in children for their future benefit. These activities can have an influence on the scholastic achievement.

Farooq Chaudhry, Shafiq and Berhane (2011), conducted a study on the impact of parental education level on students' academic performance in metropolitan city of Pakistan. The study findings indicated that students' whose parents had higher level of education performed better in standardized test than their counterparts whose parents had not attended any formal school. This is true because educated parents can better communicate with the children in school works and makes follow up on the children's progress more effectively than illiterate parents. Concurrence was found in the study conducted by Emeka (2012), confirming that educated parents tend to have children who are more motivated to excel in schools than children from less educated parents.

In similar ways, Mamet and Mudassar (2017) asserted that educated parents possess favorable attitudes towards education. Furthermore, the findings of the study conducted by crimson foundation on Rwanda educational multi-covariates confirmed that parental

educational level influences effectiveness of school in Rwanda (Haynes et al, 2018). In Rwanda NISR (2014) reported that 32% of household heads have no education, 55% have attended primary school and 8% and 3% have attended secondary school and university respectively. The percentage of household heads with no education is two times higher among females compared to males and is three times higher in rural areas compared to urban ones

In Tanzania, a study by Evans (2008) found out that education of the head and spouse does increase the probability of completion of students. Heads having attended primary school increases the girl's chances of completion by 6.7% and boys by 4%. Ministry of Education in Kenya (2002) showed that parents with higher level of education ensure that their children remain in school. Parents with low level of education have negative attitudes to education because they do not see the immediate benefit and cannot help their children in areas of academic difficulties which discourage learners hence, they drop out of school. In Kenya, the government has formulated policies for adult literacy programs and continuing education and non-formal education to mitigate low levels of education.

Research done by UNICEF (2004) in 55 countries and two Indian states found out that; children of educated women are much more likely to go to school and the more schooling the women have received the more probable it is that their children will also benefit from the education. In Kenya, a study by Forum for African Women Educationist (FAWE) in 2015 found out that of the male community members interviewed, 64% had education levels below class 6 and others did not have formal education in Wajir and

Mandera counties. One third of women did not have formal education. Students with parents who did not complete primary or just completed primary, and students with parents who completed senior four or senior six or university performed considerably better than those whose parents never attended school at all (Nannyonjo, 2007). The highest increase in test scores was for the students whose parents had a university degree. Fathers' education had a stronger influence than mothers.

2.2.3 Family Structures' Influence on Internal Efficiency of Education

Hunter and May (2003) describe a particularly notable relationship between the family background and dropping out of school. Thus, children from poor families, from single parent families, from poorly educated parents are those with fewer role models in higher education and are more likely to drop out of school. According to Bavora (2008), students living with both parents have lower dropout rates and higher graduation rates compared to students living in other family arrangements.

There exists a close relationship between absenteeism and variations among the families in the United States. Children who come from families with low income, single parent families and families from racial and ethnic minority status, did not attend school regularly compared to other advantaged families (Pryor & Ampiah, 2003). Adolescents from certain classes tend to behave in conformity with the standard of environment they come from. The students' personalities and the attitudes of the families to education interact in such a way to encourage drop-out behavior. Children witnessing violence in their homes suffer serious cognitive, behavioral, emotional and developmental impairments which significantly alter their lives (Jaffe, 1990). Studies indicate that 50% -

70% of the cases in which a parent abuses another, the children are physically abused as well. Adolescents raised in an abusive environment are dramatically more likely to be runways to engage in teenage prostitution or other delinquent behavior: to be prone to substance abuse or suicide attempts and to commit sexual assaults (Common Wealth of Massachusetts, 1985). Substance abuse affects youth mostly but cuts across all social groups. Alcohol, tobacco, bhang and Khat are the substances most often abused and the youth are also abusing imported illegal substances such as cocaine and mandrax, hence this affects their participation in schools.

Children from unstable families are susceptible to behavior which could undermine their performance in schools Bavora (2008). As early as age three, children's ability to adapt to classroom routines appears to be influenced by their parents' marital status. For instance, children growing up with their own married parents are three times less likely than those in any other family structure to experience emotional or behavioural problems such as attention deficit disorder. Overall, children living with their own married parents have fewer behavioural problems compared to children whose parents are living together but not married. Family structure is a deciding factor in a wide range of children behavior that directly influence academic performance including emotional and psychological distress, attention disorders, social misbehavior, substance abuse, sexual activity and teen pregnancy. The rapid spread of substance abuse can be attributed to the breakdown of indigenous society and to the introduction of foreign influences that have made a variety of substance available on large scale (National Agency for the Campaign against Drug Abuse 2002).

According to Bavora (2008) students living with both parents have lower dropout rates and higher graduation rates compared to students living in other family arrangements. High birth rates are associated with large families and the need for school age children especially in low-income families to look after their young siblings.

2.2.4 Parental Income Levels and Internal Efficiency of Education

In Latin America, Africa and South Asia, wastage is prevalent among the students or students from low socio-economic background, in the rural than the urban regions and again among girls than the boys (Koech Report 1999). Factors influencing this school wastage according to Eamon (2005) is poverty which may give rise to illness, malnutrition, absenteeism, the opportunity cost of schooling for poor families, cultural factors, which affect girls in particular, inappropriate curriculum and examinations which is excessively academic and designed to prepare majority of students for upper secondary and higher education and a shortage of secondary school places, which leads to repetition at the primary.

According to Mwoma (2008) education usually entails expenses such as buying reading materials and stationery. Economic status determines the extent of parental involvement in their children's education. Parents who are poor and cannot afford to buy supplementary learning materials are less likely to be actively involved in their children's education. They are preoccupied with different chores to fend for their families and, paradoxically, children are expected to engage in some form of child labor that can contribute towards family provisioning and sustenance.

Ogoye (2007) notes that socio-economic status is a critical issue in many African communities where illiteracy and poverty levels are high, thus limiting parental involvement in homework. In some cases, learning and reference materials have to be shared among students, and not all parents are able to buy for their children personal subject-specific text copies. More important is the fact that some parents expect the children to help them after school, during that time the children are expected to undertake their homework assignments. This is against the children's desires to study in the evening and in a quiet place.

Poverty and economic challenges of the time contribute to lack of motivation, negative self-concept in terms of academic abilities, failures at school, domestic violence, delinquency and higher dropout rates (Abagi and Odipo, 2007). The income level is usually determined by the occupation of parents' hence it is a factor that determines access to education. In Mexico, education expanded significantly between 1970-2000. Enrolments rose from 9.7 million in 1970 to 21.6 million in 2000. The poorest states like Nayarit and Chiapas continued to have low below average enrolment and attendance in schools, hence Mexican government introduced several programs and the main one was 'Oportunidades' formerly known as PROGRESSA which provided grants to low-income families so that children could attend school and health services.

2.2.5 Students' Engagement in Household Duties and Internal Efficiency of Education

Studies have explored the relationship between child labour and children's educational attainment. As in other developing countries, children in Kenya are engaged in domestic chores, often to the detriment of their education (Kadenyi and Kamuyu; 2006; Chepchieng and Kiboss 2004; FAWE, 2003; Ayoo; 2002). Recent studies in Kenya have examined child labour in relation to enrolment, attendance (days absent, lateness to school), grade repetition, years of schooling attained, and reading competence.

A survey carried out by Kenyan and Japanese researchers in Kisii Central Sub County,(Omenge and Nasongo; 2010), revealed that students' engagement in domestic tasks made them to sleep late and wake up early. In addition to this, learners lamented that their participation in domestic tasks never left them with enough time for doing school assignments and also conducting private study

2.3 Theoretical Framework

The study was conducted in line with Education Production Function theory (EPF). This theory was extensively developed by Pritchett and Filmer (1997), and later Hanushek revised the theory in 2007. The theory is based on systematic relationship between resources and students' outcomes and relationship between school and students' outputs.

In economic view, production function theory states that there is a relationship between physical outputs, production process and inputs. Hanushek (1979) further explained that the number of outputs depends on the quantity of inputs and the constraints imposed by

the underlying technical process.

Family background is usually characterized by such socio-demographic characteristics as parental education, income, and family size. Peer inputs, when included, are typically aggregates of student socio-demographic characteristics or achievement for a school or classroom. School inputs typically include teacher background (education level, experience, sex, race, and so forth), school organization (class sizes, facilities, administrative expenditures, and so forth), and district or community factors (for example, average expenditure levels). Based upon this, statistical analysis (typically some form of regression analysis) is employed to infer what specifically determines achievement and what is the importance of the various inputs into student performance.

The most significant innovation of recent years is the use of large administrative data bases. These data bases employ state or local records on individual student's performance and are most notable for tracking students across grades. Student performance is then related to that programs and personnel that each student is exposed to over time. These large scale databases, often following all students in a state over time, permit controlling for a wide range of influences on achievement through the introduction of fixed effects for schools, individuals, and time (see, for example, Rivkin et al., 2005 or Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2006). These fixed effects hold constant any systematic differences that do not vary within a category (such as constant differences among the sampled schools in terms of the selection of schools by families and teachers) and obtain estimates of various inputs from their variation within each of the schools. By eliminating systematic selection and sorting of students and

school personnel, they can concentrate on specific causal factors that determine individual student outcome.

So, this theory was suitable for the study because it helped explain how quality of parental educational levels, family structure, and parental level of education and household duties (inputs) influenced the rates of dropout and repetitions of schools in Chepalungu sub-county.

In an equation form, production function can be represented as:

$A = f(E, S, I, H)$ where;

A = Achievement

E = Parental level of education

S = Family structure

I = Parental level of income

H = Household duties

On the basis of this theory, the study sought to examine the socio-economic factors influencing internal efficiency in the provision of education in public day secondary schools in Chepalungu Sub County. An educated population is a productive population hence there is need to remove the barriers for the population to access education. If socio-economic factors are managed, they will lead to enhanced daily attendance, high retention rates, reduced drop outs and low repetition rates.

The weakness of this theory is that much of the analysis is in the economics of education; the common inputs of education are school resources, teacher quality and family

attributes and the outcome is student achievement. This area is, however, distinguished from many because the results of analyses enter quite directly into the policy process.

2.4 Conceptual Framework

A conceptual framework simplifies the proposed inter-relationships between the variables in the study and show the same diagrammatically (Mugenda, 2003).

It explains the relationship between the independent, dependent and intervening variables.

Figure 2.1 shows the conceptual framework for the study

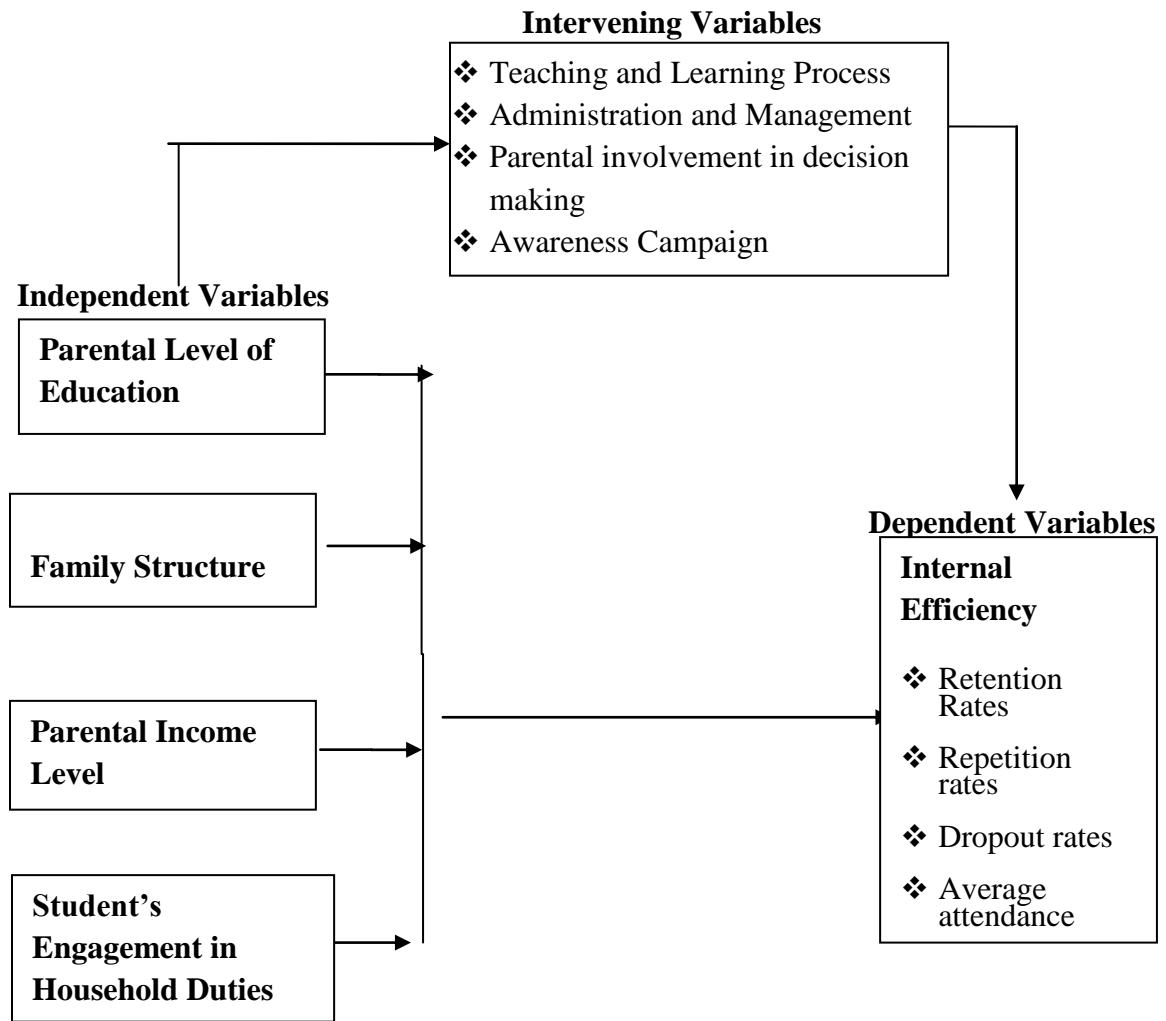


Figure 2.1: Conceptual Framework

The conceptual framework shows various factors that may influence internal efficiency as determined by the socio-economic factors which includes parental level of education, family structure, parental income levels and student's engagement in household duties. Parent's education level can affect the academic performance of a student because children will look up to their parents for motivation in terms of education. Also, parents who are educated are able to guide their children. Student's engagement in household duties can influence their commitment to education. Economic status mostly revolves around the ability of the parents to financially support all the academic needs of a student. Last but not least, the family structure has also been conceptualized as to affect the overall learning process of students in schools. Within the structure, aspects such as single, monogamous and polygamous may affect the academic performance of students in one way or the other.

On the other hand, there are a number of intervening variables which needs to be taken into consideration so as to enhance the effectiveness of internal efficiency of education. Some of these variables as shown in the conceptual framework include, awareness campaigns being held so as to enlighten the parents on their characteristics which are affecting the academic performance of their children. Another intervening variable include holding annual meetings in the school for parents as well as involving them in the decision-making process. This helps in improving the attitude of parents towards the education of their children and thus encouraging them to be directly involved in the academic progress of their children.

2.5 Identification of Knowledge Gap

The literature has been reviewed on various socio-economic factors influencing internal efficiency in the provision of education in schools. Enrolment rates has been traced with a view of highlighting retention and completion rates which if compromised by the student's social background would lead to drop outs, repetition, and poor performance.

Studies on internal efficiency have been done mostly in public primary schools and very few in the public day secondary schools. Other studies (Khatar et al. 1998; Khandker 1996; Patrinos and Psacharopoulos; 1997; Kanbargi; 1988) have been done in developing countries like Nigeria and little in Kenya and more particularly in Chepalungu Sub-County. The study therefore focused on socio-economic factors influencing internal efficiency of education in Chepalungu Sub County.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology used in the study. Specifically, the chapter discusses; the research design, location of the study, target population, sampling size, sampling procedure, research instruments, pilot study, validity of the research instrument, reliability of the research instrument, data collection procedures, data analysis techniques and ethical consideration.

3.2 Research Design

Tracy (2019) state that research design is the plan, structure and strategy of investigation proposed for obtaining answers to research questions. It includes the data collection tools and the data analysis techniques the researcher intends to use. The study will adopt descriptive survey design. It was preferred as it explains the existing status of both the dependent and independent variables. It is relevant to the study because it seeks to collect data from respondents about the socio-economic factors affecting internal efficiency in public day secondary schools in Chepalungu Sub County. There is also a need for engagement of quantitative approaches in collection of data. The use of questionnaires and surveys help in getting information from the respondents appropriately without any inhibiting factor.

Descriptive research design is a scientific method which will require data collected at point in time so as to enable the researcher to draw understanding of the nature of existing conditions (Nardi, 2018). An explanation from Kumar (2019) expounded on

descriptive survey to entail data collected from a population to determine certain status of that population with one or more variables. Descriptive survey research design will enable collection of data such as; attitudes, opinions and habits among others (Nardi, 2018). According to Sekaran and Bougie (2016) they assert that descriptive research design studies have advantages in that they may be adopted to collect information that can be generalized from all population and that they provide relatively simple and straight forward approach to the study of values, attitudes, beliefs and motives.

3.2 Location of the Study

Chepalungu Sub-County is one of the five Sub-Counties within Bomet County which is found in South Rift Valley region of Kenya was appropriate for the study because the variables under study were availed and there was ease in data acquisition. Public day secondary schools within this Sub-county are sixty-two (Sub-County Director of Education, 2nd September 2019).It has five wards namely the Siongiroi Ward, Chebunyo Ward, Kongasis Ward, Nyongores Ward and Sigor Ward (IEBC, 2017). Chepalungu Sub-county has an approximate area of 490.60 square kilometres with a population of 164,837 as per the 2019 National Census Report.

The Sub-County is endowed with good rainfall of 1247 mm, moderate temperature of 17.50c fertile and arable land which is capable of producing various sorts of cash crops such as sweet potatoes and maize among others. The major economic activities carried out by the inhabitants include: agriculture, dairy farming and trading on goods and services produced within the Sub County and beyond.

3.3 Target Population

A target population aggregates all cases to form particular designated specifications such as; institutions, objects or persons with common characteristics. In the study, the target schools were 62 public day secondary translating to a population of 62 principals, 327 Class teachers and 3,277 students (Chepalungu Sub County Enrolment Report, 2020).

Table 3.1

Target Population

Target Group	Population
Principals	62
Class Teachers	327
Secondary School Students	3277
Total Target Population	3, 666

Source: Chepalungu Sub County Enrolment Report, 2019

3.4 Sample Size

A sample is a sub-group from the accessible target population, with relevant characteristics that shall be generalized to because there is a need to establish a strategy where the data obtained can portray what is entailed in the entire population under study. Due to the large number of class teachers and students in Chepalungu sub – county, a sample of between 20% and 50% of schools and class teachers respectively was sampled for easy analysis as recommended by Gay, Mills and Airasian, (2012). This resulted to a sample size of 62 principals and 78 class teachers; to sample the students the researcher used Krejcie and Morgan's sample size determination table. (Appendix V)

Table 3.2 shows the sampling frame.

Table 3.2

Sampling Frame

Target Group	Criteria	Sample Size
Principals	Gay, Mills and Airasian 20%	14
Class Teachers	Gay, Mills and Airasian 20%	66
Secondary School Students	Krejcie and Morgan Sample size table (1970)	327
Total		407

3.5 Data Collection Instrument

The study employed both document analysis and questionnaires which contained both open ended and closed questions.

3.5.1 Questionnaires

The researcher used questionnaires because the study was concerned with variables that cannot directly be observed such as views, opinions, and feelings of the respondents. Such information is best collected through questionnaires (McMillan and Schumacher, 2010). Further Bell, Bryman and Harley (2018) stressed that the questionnaire is a useful tool where the researcher can employ it to collect the people's opinion on the nature and effectiveness of a program.

Structured questionnaire was used for the study. There were two categories of questionnaires. One for class teachers and another for students. Both questionnaires

consisted of sections divided according to the objectives that were to be achieved.

3.5.2 Document Analysis Schedule

The researcher also used document analysis as an instrument of gathering information. According to Babbie (2010), document analysis is “the study of recorded human communications, such as books, websites, paintings and laws” (p.530). Further, it is a method of data collection which involves analysis of content from written documents in order to make certain deductions based on the study parameters. This method provided supplementing data and balancing information to what was collected from the questionnaires.

3.6 Validity of Instruments

Validity entails the accuracy and relevance of inferences based on research findings from instruments used in measuring what was intended to be measured (Girard & Cohn, 2016). Validity is the extent to which the instrument measures what it is supposed to measure according to the researcher’s subjective assessment (Masuwai & Saad, 2017).

Face validity of the test items was done by experts in the field of education to ascertain the relevancy of the questionnaire.

Pilot exercise was also conducted to enable necessary adjustments aspects of the questionnaire which included an assessment of the length of time needed to complete questionnaires. The exercise was conducted in two schools which were excluded from the main study. Suitable group of subjects was tested on selected respondents while

keeping all conditions constant and the same repeated after two weeks to ascertain reliability and the results noted (Bailey, Tomson & Ben-Shlomo, 2016).

This helped the researcher to determine if there were ambiguities in the items of the instruments thus ensuring the instrument elicits the data that was expected to answer research questions. Items that failed to test the variables intended during the piloting process were either modified or discarded.

3.7 Reliability of the Instruments

According to Clayson (2018), reliability of a test instrument is a measure of consistency which a test and re-test produces the same results when administered to the same group over a time interval of two weeks by generating similar data even when used by other researchers, it is also meant to remove possible errors.

Reliability and validity of questionnaire instruments pre-tested were ascertained by using Pearson rank correlation coefficient statistical technique to determine the extent of correlation where 0.8 or more implied that the instruments were reliable (Simiyu & Akaranga, 2016).

The study adopted the Pearson's Product Moment formula:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n(\sum x^2) - (\sum x)^2][n(\sum y^2) - (\sum y)^2]}}$$

Where;

n = the number of respondents

x = the score of the respondents on the first test

y = the score of respondents on the second test

3.8 Data Collection Procedure

Silverman (2016), states that data collections are steps sequencing and actions relevant to guiding research. Prior to data collection the researcher requested for an introductory letter from the University of Kabianga directorate of the board of graduate studies and sought a research permit from the National Commission for Science and Technology (NACOSTI). Preceding the distribution of the questionnaires the researcher also sought the requisite permission from the relevant authorities including local authorities and sub county director of education at the Chepalungu sub county before the commencement of the actual study.

The researcher then wrote letters to the principals to be allowed to carry out the research in their institutions. Once the permission was granted, the researcher visited the sampled public day secondary schools and administered questionnaires to class teachers and students. Once the fieldwork was complete the researcher stored the data samples for data analysis.

3.9 Data Analysis Techniques

Data analysis is the process of bringing order, structure and meaning to the information collected (Mugenda & Mugenda, 2003). According to Kothari (2008), data analysis includes sorting, editing, cleaning, coding, and analyzing data. This was done using Statistical Package for Social Sciences (SPSS) software version 21. Qualitative data was analyzed thematically as created by the objectives. The content was organized as per

themes drawn from study objectives. Further, inferential statistics was analyzed in multiple regression and correlation analysis.

Descriptive statistics, that is, mean and standard deviation was used to analyze quantitative data and presented in tables, charts and graphs. Retention rates was calculated using the following Pearson related formula (Appendix VI)

3.10 Ethical Consideration

Ethical issues relate to the privacy of possible and actual participants, voluntary nature of participation, the right to withdraw partially or completely from the process, consent, possible deception of participants and maintenance of confidentiality of data provided by individuals or identifiable participants and their anonymity (Saunders, 2017).

Research study is inherently intrusive and the data to be obtained can easily be abused. The researcher was guided by a number of ethical principles, no harm was allowed to the respondents as a result of their participation in the research. The respondent's right to privacy was respected and no undue pressure was put on the respondents. They were provided with sufficient initial information about the survey which enabled them give their informed consent concerning participation and the use of data. As was promised to the respondents, the researcher-maintained confidentiality of the data gathered and used it exclusively for academic purpose only.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter deals with data analysis, presentation and interpretation. The data analysis and presentation were based on responses to the items in the questionnaires. The data presentation begins with the demographic information of the respondents followed by presentation, interpretation and discussion of research findings based on the research questions.

4.2 Questionnaire Return Rate

Questionnaire completion/return rate is the number of the sample that participated as intended in all the research procedures. The researcher from the sample that participated in the survey. The field studies involved 412 respondents that included 66 Class-teachers and 346 students all from 14 Public day secondary schools.

Table 4.1: *Questionnaire Return Rate*

Category	Sample Size	Returned	Percentage
Class Teachers	66	49	74.25
Form 4 Students	346	270	77.84
Total	412	319	77.43

The data in Table 4.1 indicates that 49 class teachers returned their questionnaires out of 66 teachers which was 74.25% return rate. The form four students' return rate of the questionnaires was 77.84%, 270 students returned their questionnaires. According to

Mugenda and Mugenda (2003) a 50% response rate is adequate, 60% good and above 70% rate very good. This implies that a response of 77.43% is very good for analysis, as it is representative of the population. This return was therefore deemed appropriate for the study.

4.3 Demographic Information of the Respondents

The main purpose of this study was to find out the socio-economic factors influence on internal efficiency in the provision of education in public day secondary schools in Chepalungu Sub-County, Kenya. As such, the study found it paramount to find out the demographic information of the class teachers, since they form the basis under which the interpretation of the data collected would be justifiably made.

The researcher found it necessary to establish the general characteristics of the respondents under which the researcher would justifiably make inferences from their responses. The demographic information of the respondents was based on their gender, academic qualifications and the duration in the learning institute.

4.3.1 Demographic Information of the Class Teachers

The demographic information of the class teachers was based on their gender, age, and academic qualification, duration of teaching in current institutions. The demographic information of the class teachers is presented in this section. The class teachers were asked to indicate their gender. The findings are presented in Table 4.2.

Table 4.2*Gender of Class Teachers*

Gender	Frequency	Percentage
Male	26	53.06
Female	23	46.94
Total	49	100

The findings in Table 4.2 indicated that majority 53.06% of the teachers were male. This shows that there was gender imbalance among the class teachers. However, the gender distribution was deemed appropriate to give information about the influence of socio economic factors on provision of education in the selected schools.

The class teachers were also asked to indicate their academic qualifications. The data is presented in Table 4.3.

Table 4.3*Class Teachers' Academic Qualifications*

Academic Qualification	Frequency	Percentage
Diploma	14	28
Degree	35	72
Masters	0	0
Total	49	100

The data in Table 4.3 indicate that the majority of the teachers, 72% (35) had degree certificates 28% (14) had diploma certificate as their highest level of education. These

findings show that a majority of the teachers are professionals who may understand and have knowledge of the socio-economic factors affecting internal efficiency in provision of education in public day secondary schools. Class teachers as administrators need various skills and knowledge in order to cope with the emerging issues, schools' and environmental factors and demands of the teaching task. Such skills and knowledge can be attained through formal training.

The class teachers still were asked to indicate their work experience. The data is tabulated in Table 4.4.

Table 4.4

Class Teachers' Working Experience

Years	Frequency	Percentage
Below 1 Year	8	16
2 – 5 Years	20	41
5 – 10 Years	14	28
Over 10 Years	7	14
Total	49	100

Table 4.4 reveals that the majority 41% of the teachers had between 2 – 5years' experience on managing their classes. Based on this result it can be concluded that a majority of the respondents had worked for some time, so they had enough experience to do their work accordingly and were in a position to give useful insights into the challenges experienced by the students in accessing education.

4.4 Parental Level of Education on Internal Efficiency in the Provision of Education

The first objective was on the influence of parents' level of education on students' enrolment rates in public day secondary schools. The researcher investigated the parents' level of education, parents assisting the students with their homework and reasons on pupils dropping out of school. The findings on this objective are presented in Table 4.5.

Table 4.5

Parental Level of Education

Education Level	Father	Mother
Primary Level	27	24
Secondary Level	107	48
University Level	35	29
Total	169	101

From the results in Table 4.5, the majority 57.4% of students indicated that their parents were secondary school leavers. It might indicate that fathers have more education and the fathers' education tend to be more influential than mothers. The findings are not in line with Al-samarai and Peasgood (1998) who argued that primary education of heads or spouse does increase the chances of school completion rates.

The researcher also sought to identify if parents assist their children in doing their homework.

Table 4.6*Students' Responses on Assistance of Homework*

Variables	Frequency	Percentage
Assisted	41	15
Not Assisted	229	85
Total	270	100

The data on Table 4.6 indicates that the majority 85% (229) of the students indicated that their parents did not assist them in doing their homework. The findings are not in line with Pryor and Ampiah (2003), who argued that non educated parents cannot provide support or often do not appreciate the benefit of schooling. Parents' level of education is crucial because without some level of education assistance cannot be forthcoming. It is evident that most parents who do not assist their children with homework may be because they are too poor and pre-occupied with matters of survival to bother about homework; they may be illiterate and unable to be of any help to the child; the home environment may not be conducive for study.

The researcher also requested class-teachers to explain why they thought students dropping out of school were attributed to their parent's low levels of education. The findings are tabulated in Table 4.7

Table 4.7*Reasons Cited by Teachers on Students Dropping Out*

Reasons	Frequency	Percentage
Household duties at home	8	16
Inability to pay school levies	23	46
Family Structure	8	17
Poor academic Performance	6	13
Parental Education	4	8
Total	49	100

Table 4.7 indicates that most 46% of the teachers indicated that students dropped out of school due to inability to pay school levies. Despite that parent's level of education affecting the students' completion rates in schools, the researcher sought to know if the parents made any follow-up on their children's' progress in public day secondary schools.

The researcher sought to know if the parents made any follow-up on their children's progress in public day secondary schools.

Table 4.8

Teachers' Response on Parents' Involvement in Students' Progress

Variables	Frequency	Percentage
Sometimes	11	22
Never	31	64
Often not involved	7	14
Total	49	100

The findings on Table 4.8 indicates that the majority 64% of the teachers indicated that parents never consulted them or got involved in their children's progress at school. This reality might be associated with the level of education of parents. Parents who are reasonably educated appreciate the importance and value of education and will tend to be interested in their children's class work. The opposite is the case where the parents' education is very low or even absent. Such parents never bother about the school progress of the children and give less attention to education matters.

4.5 Effect of Family Structure on Internal Efficiency in the Provision of Education

The other objective was on the influence of family structure on internal efficiency in the provision of education. Data on this objective was obtained by probing the respondents on the type of family the students come from and the variables in the family structure that influences internal efficiency in provision of education. The researcher started by looking at the type of family and the results are presented in the Table 4.9.

Table 4.9*Type of Family Structure of Students*

Type of Family	Frequency	Percentage
Nuclear	119	44
Extended	35	13
Polygamous	65	24
Single Family	43	16
Foster Family	8	3
Total	270	100

The findings on Table 4.9 indicate that most of the learners 44% came from nuclear family. This is probably because nuclear family is the most preferred type of family to raise a child from since both parents are involved in the child's development. In this study, a majority of the parents are from other types of family other than nuclear, which is a clear indication or reflection of poor performance in the schools since most of the single parents might be preoccupied in fending for their children at the expense of full involvement in academic performance of their children. This might be the cause of the poor performance by the students in Chepalungu Sub County. Family issues results in lack of concentration by the child in his or her school work and thus results in poor academic performance.

This findings agree with a study by Weitoft (2004:134-137) which examined the educational attainment of children who were living with the same single parent(widowed, non-custodial other parent living, non-custodial other parent

deceased)and children who were living with the same two parents during the same timeframe and noted that “poorer educational performance on the part of the off spring of lone parents can be explained to a large extent by socio-economic disadvantage, especially lack of resources”. According to Chiuri and Kiumi (2005) absenteeism affects efficiency through affecting performance in the National Examinations. Thus, cases of absenteeism points to the internal inefficiency in education in Chepalungu sub-county.

Table 4.10

Family Structures on Students’ Dropout

Statements	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Presence of both parents	254	94	16	6
Single parents	246	91	24	9
1 – 5 Household members	254	94	16	6
Unemployed Parents	267	99	3	1
Financially stable Families	176	65	95	35
Unstable Families	254	94	16	6

The results on Table 4.10 indicate that the majority 94% of teachers indicated that students living with both parents did not miss school frequently while a majority 91% indicated that learners from single parents are more likely to drop out of school. A majority 94% indicated that students from 1 – 5 household members have higher completion rate in school. A majority 99% indicated that students from financially unstable families are more likely to drop out of school. A majority 65% of respondents

indicated that students from wealthier families have less chance of drop-out rates while 94% indicated that learners from unstable families are susceptible to behaviour that can undermine their performance.

4.6 Influence of Parental Income Levels on Internal Efficiency in the Provision of Education

The other objective of the study was to investigate the influence of parental income levels on internal efficiency in the provision of education. Data on this objective was obtained by probing the respondents on the income of the parents and the reasons leading to the students' drop out.

The researcher investigated the parents' occupation status/employment. This was to investigate the financial background of the parents and how it affects the student's academic performance. The findings are presented in Table 4.11.

Table 4.11

Occupational Status of Parents

Occupation Status of Parents	Frequency	Percentage
Self employed	75	28
Employed	46	17
Unemployed	149	55
Total	270	100

The findings in Table 4.11 indicate that the majority of the respondents 55% were unemployed. The students from unemployed parents performed poorly than those from employed parents. This explains the poor performances by the students since majority of the parents are not employed and therefore, they are not very capable of providing the necessary learning materials for their students leading to poor academic performance.

The low financial background status perpetuate education deprivation Kaspro (1999) hence the unemployed parents will definitely find it difficult to pay school fees and meet other educational expenses for their children while employed parents have higher income and therefore deploy their resources in a manner creating preschool conditions conducive to a successful school performance. Prewit, 1989; noted that family income level influence educational chances for the child since this determine the motivation with which the child pursues basic education.

However, the researcher cited two cases of school going children whose performance was good and yet they came from poor family background. After investigation the researcher realized that these children get sponsorship which is offered to some school children in this area. There were also few cases from the employed parents who performed very poorly. This can be as a result of poor parental commitment due to job occupation.

The researcher then sought to investigate the parents' average income per month in relation to academic performance. The results are shown in the Figure 4.1.

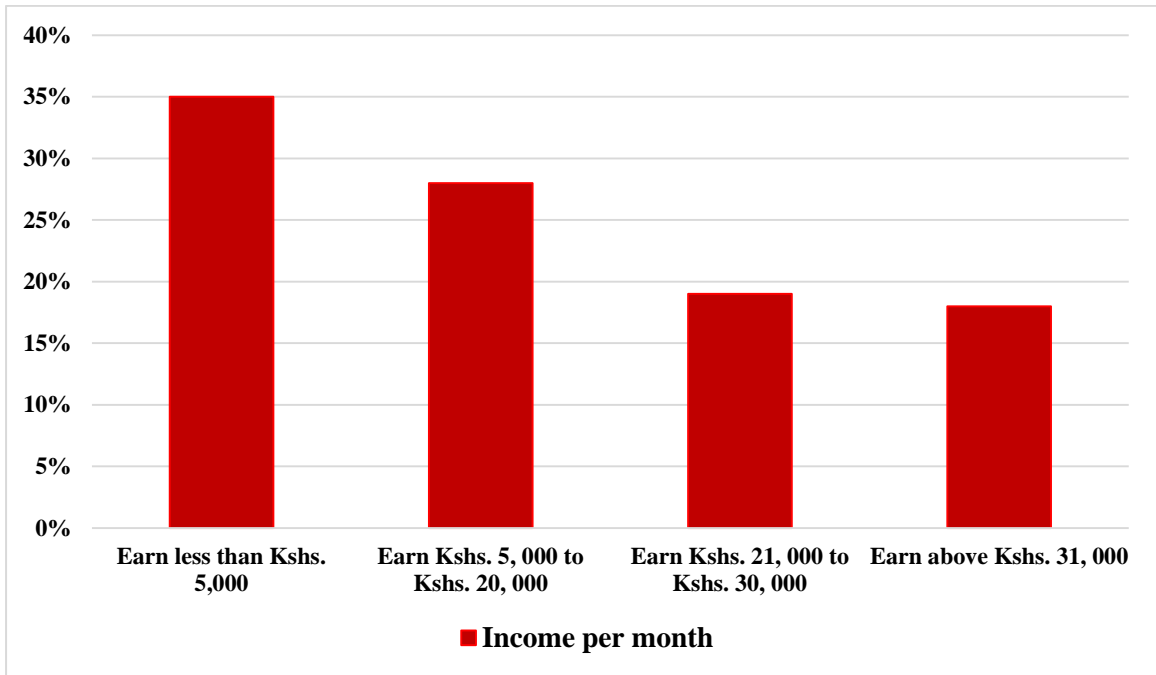


Figure 4.1: Average Range of Parent’s Income Per Month

The findings on Figure 4.1 indicated that most (35%) of the parents earn less than Kshs. 5,000. This explains the poor academic performance by the students in the public day secondary schools and hence provision of education. This is as a result of inadequate income that the parents are earning and thus are not able to provide the required learning materials to their children to enable them perform well.

The findings are a reflection of Mwoma (2008), who indicated that education usually entails expenses such as buying reading materials, stationery among others. This introduces the element of family economic status into question. Studies have noted that family economic status determines the extent of parental involvement in their children’s education. Parents who are illiterate and poor and cannot afford to buy supplementary learning materials are less likely to be actively involved in their children’s education.

They are preoccupied with different chores to fend for their families and, paradoxically, children are expected to engage in some form of child labour that can contribute towards family provisioning and sustenance at the expense of their education resulting to poor academic performance.

Table 4.12

Reasons for Student's Dropout

Statements	Yes	No
Students who drop out of school come from poor families	240 (89%)	30 (11%)
Students who perform poorly in academics decide to drop out of school	162 (60%)	81 (30%)
Students are absent to assist their parents at home	257 (95%)	14 (5%)
Drug abuse results in school dropouts	248 (92%)	22 (8%)
Late school starters drop out before completion	140 (52%)	130 (48%)
Early school starters drop out before completion	43 (16%)	227 (84%)
Students who are orphans drop out of school before completion	149 (55%)	122 (45%)
Students who dropout are from parents with low level of education	140 (52%)	130 (48%)
Students who dropout are those whose parents live together	51 (19%)	219 (81%)

The Table 4.12 indicates that the majority 89% of the respondents indicated that students who drop out of school come from poor families while 60% indicated that students who perform poorly in academics decide to drop out of school. A majority 95% indicated that students are absent to assist their parents with work at home. It was also indicated that drug abuse resulted in school dropouts while a majority indicated that late school starters

drop out before completion. A majority disagreed that early school starters drop out before completion while the others indicated that students who are orphans drop out of school before completion. A majority indicated that students who dropout are those of parents whose level of education is low while a majority disagreed that students who drop out are those whose both parents live together.

Sabates (2010) reports that children are starting secondary school in greater numbers than ever before but dropout rates are significant and this leads to low levels of secondary school completion. The student completion rates (SCR) declined from 76.8% in 2018 to 74.6 in 2019. The decline in SCR could be attributed to dropouts and repetition occasioned by socio economic factors such as poverty, child labour and family structure (Economic Survey, 2019).

4.7 Influence of Students' Engagement in Household Duties on Internal Efficiency in the Provision of Education

The study investigated the influence of students' engagement in household duties on internal efficiency in the provision of education by probing students' involvement in work at home, teachers enhance student socialization to facilitate their performance in the society, parents' adequate provision of students' schools needs and students' involvements in domestic chores affect their academic performance.

The study assessed if the students are engaged in any work at home and the results are presented in Figure 4.2.

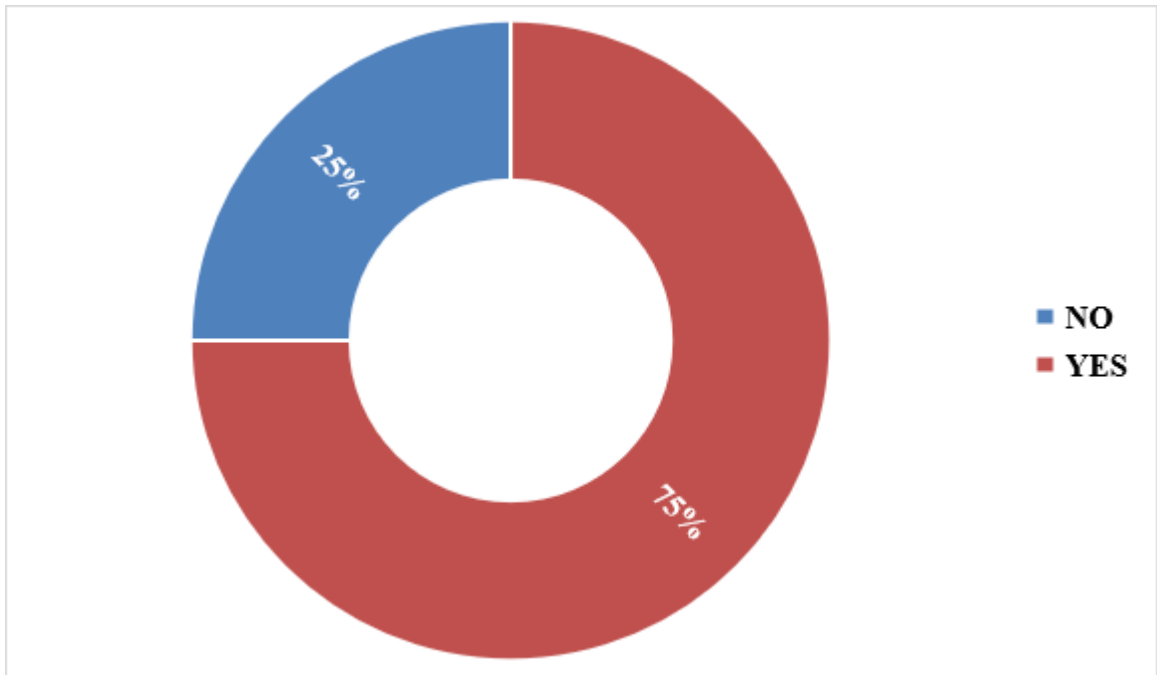


Figure 4.2: Students' Involvement in Work at Home

The findings on Figure 4.2 show that the majority 75% of the students are involved in domestic work at home. The involvement of the students in domestic chores is likely to affect their performance in KCSE.

These findings confirm what Roschanski (2007) found out that involving children in domestic chores lead to irregular attendance of school leading to poor performance and eventually drop out.

The study also assessed if the students find household duties affecting their academic performance the results are presented in Figure 4.3.

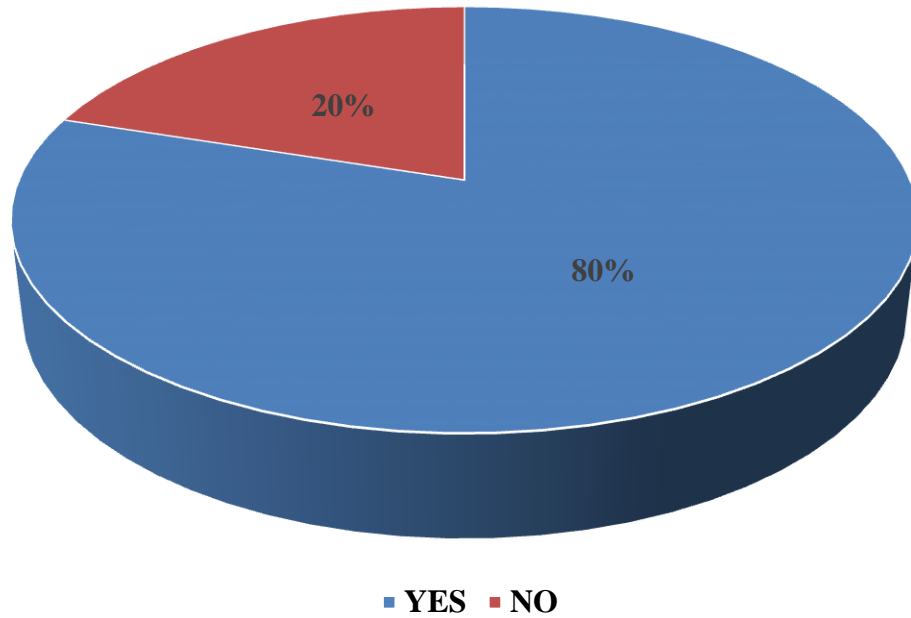


Figure 4.3 Students' Involvements in Household duties

The data on Figure 4.3 shows that a majority 80% of the students' respondents said that their involvement in domestic work at home affect their academic performance at the Continuous Assessment Tests (CATs) and may also have an impact in the final exams KCSE. This shows that most of the students are involved in domestic chores which are affecting their KCSE performance. Other scholars (Khatar *et al.* 1998; Khandker 1996; Patrinos and Psacharopoulos; 1997; Kanbargi; 1988) have also reported that the fact that a child is working increases the probability of failing a grade (or grade repetition) and even dropping out of school.

The teachers were asked if the parents adequately provide for their students' academic needs. The results are presented in Table 4.13.

Table 4.13*Parents' Adequate Provision of Students' Schools Needs*

Needs Provision	Frequency	Percentage
Yes	43	16
No	178	66
Sometimes	49	18
Total	270	100

The findings of Table 4.13 show that a majority of the teacher respondents 66% said that parents do not adequately provide for their students' school's needs. Therefore, for improved performance, the parents should be serious in the provision of school's needs. This will make the children not to be engaged in child labour for their own school needs provision.

This agrees with Moyi (2011) who asserts that poverty is inevitable in poor families; they cannot survive without children's income contribution. These households are vulnerable to income shocks and cannot afford to keep children in school and in other non-work activities at all times.

The researcher then sought to know if the teachers enhance student-socialization to facilitate their performance in the society. The results are presented in Table 4.14.

Table 4.14*Teachers Enhancement of Student-Socialization*

Socialization	Frequency	Percentage
Yes	24	49
No	10	21
Sometimes	15	30
Total	49	100

The data on Table 4.14 shows that most 49% of the students indicated that teachers enhance their student-socialization to facilitate their performance in the society. The teachers should be encouraged in enhancing the student-socialization to enhance their performance in academics. This will improve their Kenya Certificate of Secondary Education performance.

Studies have explored the relationship between child involvement in household duties and children's educational attainment. As in other developing countries, children in Kenya are engaged in domestic chores, often to the detriment of their education (Kadenyi and Kamuyu; 2006; Chepchieng and Kiboss 2004; FAWE, 2003; Ayoo; 2002). Studies in Kenya have examined child's involvement in household duties in relation to enrolment, attendance (days absent, lateness to school), grade repetition, years of schooling attained, and reading competence.

Data from the daily attendance registers was analyzed so as to indicate the retention rates and thus show the efficiency of the school system. Class teachers together with the

deputy principals of the 14 day-secondary schools were able to provide me with the daily attendance registers from the year 2018 to 2021. The following is the analysis in table 4.15

Table 4.15

Data from Document Analysis Schedule

FORM	ONE	TWO	THREE	FOUR	GRADUATES
2018	3,300	3,215	3,115	3,033	2,910
	400	410	210	100	
2019	3,290	3,170	3,108	2,954	2,900
	300	320	300	140	
2020	3,470	3,120	2,970	2,960	2,880
	200	80	460	214	
2021	3,080	3,300	3,008	2,860	2,780
	200	178	100	500	

The following calculations were made from the results.

$$\text{Retention Rate} = \frac{(N_{t+1}^{k+1} - R_{t+2}^{k+1}) + R_{t+1}^k}{N_t^k}$$

Retention Rates between Form 1 and Form 2

$$\frac{(3170 - 320) + 300}{3300} = 0.9545$$

Retention Rates between Form 2 and Form 3

$$\frac{(2970 - 460) + 80}{3170} = 0.8170$$

Retention Rates between Form 3 and Form 4

$$\frac{(2860-500)+100}{2970} = 0.8282$$

$$\text{Graduation Rate} = \frac{2680}{2860} = 0.9371 = 93.71\%$$

From the above results, it is seen that there are low retention rates among the classes, the main cause could have been amount of household duties that the students engage themselves in while at home. The other reason could be low academic levels of parents, who don't see the need to have the child in school continuously. In some schools a good number of learners absent themselves for almost a whole term, only to appear the following term with some excuses; lack of money to pay for school necessities, which stems from the low-income levels of the parents.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter covers summary of the findings, conclusions, recommendations and suggestions for further research.

5.2 Summary of the Study Findings

It was established that parents' education level and background is crucial on a students' progress in education. The majority of the teachers 64% indicated that parents never consulted them or got involved in their children progress at school. Similarly, the students indicated that their parents did not assist them in doing their homework. It was found out that students dropped out of school due to inability to pay school levies.

Despite, the parents' level of education affecting the students' completion rates in schools, the researcher sought to know if the parents made any follow-up on their children's progress in public day secondary schools. The students indicated that their parents were secondary school leavers. Fathers have more education and that education tend to be more influential than mothers.

For objective two, which sought to establish the extent to which family structure influence the dropout and retention rates, the study established that the composition and membership of the family and the organization and patterning of relationships among individual members plays a vital role on the students' education. A majority 94% indicated that students living with both parents have lower drop-out rates while a

majority 91% indicated that students from single parents are more likely to drop out of school. Students from smaller households have higher completion rate in school.

The majority 99% indicated that students from poor families are more likely to drop out of school. Students from wealthier families had less chance of dropout rates while students from unstable families are susceptible to behaviour that can undermine their performance. Majority of the students' respondents come from nuclear family. A few came from polygamous families while others from single families.

For objective three, which sought to examine the extent to which parental income levels influence dropout and retention rates, majority 89% of the respondents indicated that students who drop out of school come from poor families while others indicated that students who perform poorly in academics decide to drop out of school. Students are absent to assist their parents with work at home. Drug abuse results in school dropouts this leads to late school starters who drop out before completion. Early school starters were not found to lead to drop out before completion. Students who were orphans dropped out of school before completion.

A majority 52% indicated that students who dropout are those of parents whose level of education is low. The student's dropout was not equated to those whose both parents live together. A majority (35%) of the parents earn less than Kshs. 5,000. This explains the poor academic performance by the students in the public day secondary schools and hence provision of education. A majority of the respondents were unemployed. A few

self-employed and others employed. The students from unemployed parents performed poorly than those from employed parents.

For objective four which sought to establish the extent to which students' engagement in household duties influence dropout and retention rates, the study established that teachers enhance their students-socialization to facilitate their performance in the society. A majority of the teacher respondents said that parents do not adequately provide for their students' school's needs. Students' involvement in domestic work at home affect their academic performance at the Continuous Assessments Tests (CATs).

The students found domestic work affecting their academic performance. This shows that most of the students are involved in domestic chores which are affecting their academic performance. A majority of the student's respondents agreed that they are involved in domestic work at home. This shows that most of the students are involved in domestic chores that affect their academic performance as this household chores reduces their study time for exam preparations.

5.3 Conclusions

The study findings led the researcher to conclude that parent's levels of income were low. Low parental levels of education lead to students' drop out due to the negative attitudes hence students' low academic progress either, leads to repetition or dropout which affects the completion rates. Family structure has been found to be a major factor that influences inefficiency in schools because children from single parent household are mainly poor hence unable to pay fees.

It can be concluded that household duties affect internal efficiency because students are forced to be out of school to attend to household duties and lack concentration due to fatigue associated to household chores.

The study established that teachers enhance their students-socialization to facilitate their performance in the society. Students' involvement in domestic work at home affects their academic performance. This shows that most of the students are involved in domestic chores which are affecting their academic performance.

5.4 Recommendations

Based on the study findings, the researcher recommends the following;

The government to address the issue of poverty in the area for the parents to have reliable sources of income to economically support their children in school. There should be a departure from the reliance on formal or salaried employment which at the moment accounts for less than 30% of the total employment.

Encourage and compel more substantive and sustained involvement of parents and the community in the Student's education affairs in schools. Parent-teacher associations are required to be more engaged and assertive. Parents and the communities have tended to be casual and indifferent on matters that relate to student's education progress maybe because of social-economic circumstances, parents and communities have not been very forthcoming. This reality notwithstanding, they must be reminded that the education of

children is a cordial responsibility. They must cultivate a positive attitude towards the education of their children.

Through PTAs, churches, counseling agencies and grassroots administration, households and communities must be sensitized and educated against negative attitudes and values that tend to undermine the progress of students' education such as child labour, forced marriages and rituals like circumcision that keep victims away from schools for unduly lengthy periods. Strictly enforce the adherence to the Education Act that has provisions that compel parents and communities to send and facilitate retention of students in schools or risk legal sanctions.

A need to continuously strengthen and restructure the quality control system in the ministry of education, redefining it's' role, focus, modalities and staffing. In this way it will effectively monitor operations in schools including those that relate to activities between schools and parents and the community. They will ensure that mechanisms exist that require the maximum involvement of parents and communities in the education affairs and progress of students in schools.

Suggestions for Further Study

What levels of internal efficiency exist in secondary private day schools? Given that the private sector is a significant supplier of secondary school education, this question is more pertinent.

- i) It is suggested that research be conducted to determine the status of dropout and retention rates in private day secondary schools in Kenya.
- ii) There is also a need to carry out a study on institutional based factors that affect dropout and retention rates in public day secondary schools in Kenya.

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APPENDICES

Appendix I: Introductory Letter

KIRUI KIPNGETICH GODFREY,

P.O BOX 231 – 20200,

KERICHO

Dear sir /madam,

RE: INTRODUCTORY LETTER.

I am a Master of Education student in the Department of Educational Administration, Planning and Management at University of Kabianga. I am doing research on Effects of Socio-Economic Factors on Dropout and Retention Rates in Public Day Secondary Schools in Chepalungu Sub County, Bomet – Kenya and your school has been chosen to help the researcher achieve the objectives of the study.

The research will involve questionnaire for both the class teacher and student and document analysis for the class teacher. I assure you that the findings will purposely be used for research and all information received will be treated with confidentiality and anonymity.

Looking forward to your co-operation

Yours faithfully,

KIRUI KIPNGETICH GODFREY

PGC/EEP/001/2017

Appendix II: Instruments

Questionnaires

Questionnaire for the Class Teachers

The purpose of this study is to examine the Effects of Socio-Economic factors on dropout and Retention Rates in Public Day Secondary Schools in Chepalungu Sub-County, Bomet, Kenya. The information obtained will be treated with utmost confidentiality and only be used for analytical purposes of the study. Please be as honest as possible in your responses.

Please tick (✓) where applicable or fill in the required information on the spaces provided.

Part A: Background Information

1. (a). What is your gender? Male () Female ()

(b) Teaching experience? Below 1 year () 2-5 years ()
5-10 years () 10 years and above ()

(c) Academic qualification P1 Certificate () Diploma () Degree () Masters ()

Any other (specify) _____

2. Indicate the number of boys and girls who dropped out in every class.

Boys [] Girls []

Part B: Parental level of education influence on dropout and retention rates

3. Do you attribute dropping out of students from school to low levels of their parents' education in your class? Yes () No ()

4. How has been general academic performance in your class?

Excellent () Good () Average () Below Average () Poor ()

5. What are the other causes of students drop-out from your class?

.....

Part C: Parental income levels influence on dropout and retention rates

6. Students in your class drop out of school due to the following. Indicate the number attached to the correct answer. **5-(SA)** Strongly Agree, **4-(A)** Agree, **3-(UN)** Undecided, **2-(D)** Disagree, **1-(SD)** Strong Disagree

Statements	SA	A	UN	D	SD
Students who drop out of school come from poor families					
Students who repeat a class decide to drop out of school					
Students are absent to assist their parents with work at home.					

Part D: Effect of family structure on dropout and retention rates

7. The following statements are associated with different types of family structures that affect students' performance in schools and their completion rate. Indicate the number attached to the correct answer below; **5-(SA)**Strongly Agree, **4- (A)** Agree, **3-(UN)** Undecided, **2-(D)** Disagree, **1-(SD)** Strong Disagree

Statements	SA	A	UN	D	SD
Students living with both parents have lower drop-out rate.					
Students from single parents are more likely to drop out of school.					
Students from smaller households have higher completion rate in school.					

8. State common reasons for students' absenteeism in your class.

i).....

ii).....

iii).....

iv).....

9. The following are the likely causes of dropouts of students in school. Tick the reasons applicable in your school.

(a) Household duties at home []

(b) Inability to pay school levies []

(c) Family structures []

(d) Poor academic performance []

(e) Influence of low levels of parental education []

10. How often are children sent home for the following reasons in your school?

Reasons	Quite Often	Often	Never
Lack of examination money	[]	[]	[]
No uniform	[]	[]	[]
Lack of money for PA Teachers	[]	[]	[]
Money or food for lunch program	[]	[]	[]

11. The following statements are associated with parental support on the retention of learners in your institution. Indicate the number attached to the correct answer below;

5-(SA) Strongly Agree, **4-(A)** Agree, **3-(UN)** Undecided, **2-(D)** Disagree, **1-(SD)** Strongly Disagree

S/N	Parental Support and Retention Levels	SA	A	UN	D	SD
1	Timely fees payment					
2	Attendance of school organized meetings					
3	Encouragement of learners					
4	Monitoring learners' progress					
5	Involvement in school management					
6	Positive attitude to education					
7	Disciplining of learners					
8	Guidance on careers					
9	Counselling of learners					

Thank you for your cooperation

Students Questionnaire

Academic performance in public day secondary schools can be influenced by several factors. This questionnaire seeks to investigate in particular the influence of socio-economic factors on dropout and retention rates in public day secondary schools. The information obtained will be treated with utmost confidentiality and only be used for analytical purposes of the study.

Please be as honest as possible in your responses.

Part A: General information

1. What is your gender? Male () Female ()

2. How long have you been in this school years

3. How many students are enrolled in your class? Boys () Girls ()

4. What is your parents' occupational status?

Self-employed []

Employed []

Unemployed []

5. Please indicate the type of your family.

(i) Nuclear family []

(ii) Extended family []

(iii) Polygamous family []

(iv) Single family []

(v) Foster family []

(vi) Any other, please specify

Part B: Parental level of education influence dropout and retention rates

3. What is the level of education of your parents? (Tick where applicable)

	Mother	Father	Guardian
Never went to School	[]	[]	[]
Completed Primary School	[]	[]	[]
Completed Secondary School	[]	[]	[]
Completed College/University	[]	[]	[]

4. How has been general academic performance in your class?

Excellent () Good () Average () Below Average () Poor ()

5. What are the other causes of students drop-out from your class?

.....

6. How often are your students absent from your class?

(a) Very regularly [] (b) Regularly [] (c) Never []

Part C: Effect of family structure on dropout and retention rates

7. How many children are you in your family?

Boys [] Girls [] Total []

8. Has any of your brother or sister dropped out of school? Yes [] No []

Give the reason for the above if the answer is 'Yes' _____

9. The following statements are associated with different types of family structures that affect students' performance in schools and their completion rate. Indicate the number attached to the correct answer below; **5-(SA)** Strongly Agree, **4- (A)** Agree, **3-(UN)** Undecided, **2-(D)** Disagree, **1-(SD)** Strong Disagree

Statements	SA	A	UN	D	SD
Students living with both parents have lower drop-out rate.					
Students from single parents are more likely to drop out of school.					
Students from smaller households have higher completion rate in school.					

Part D: Effects of Parental income on dropout and retention rates

10. What is the main source of your parent's or guardian's income?

- (a) Salary []
- (b) Business []
- (c) Subsistence Farming []
- (d) Any other, (specify)

11. The following statements are associated with different parental incomes that affect internal efficiency of education in schools. Indicate the number attached to the correct answer below; **5-(SA)** Strongly Agree, **4- (A)** Agree, **3-(UN)** Undecided, **2-(D)** Disagree, **1-(SD)** Strong Disagree

Statements	SA	A	UN	D	SD
I am often sent home for school fees and other levies					
I seek external support to meet my education needs since my parents cannot afford					
My parents/guardians pay for my school fees in time					
My academic performance is affected because of absenteeism due to lack of fees					

Thank you for your cooperation

Document Analysis Guide

Year	Class Enrolled	No of Boys	No. of Girls	Boys	Girls
2018	Form 1			Continuing students ()	Continuing students ()
				Repeaters ()	Repeaters ()
				Drop outs ()	Drop outs ()
				New students ()	New students ()
2019	Form 2			Continuing students ()	Continuing students ()
				Repeaters ()	Repeaters ()
				Drop outs ()	Drop outs ()
				New students ()	New students ()
2020	Form 3			Continuing students ()	Continuing students ()
				Repeaters ()	Repeaters ()
				Drop outs ()	Drop outs ()
				New students ()	New students ()
2021	Form 4			Continuing students ()	Continuing students ()
				Repeaters ()	Repeaters ()
				Drop outs ()	Drop outs ()

Appendix III: Krejcie and Morgan Determination Table

The table below is derivative from the sample size calculation which is expressed as below equation (Krejcie and Morgan, 1970).

$$s = \frac{X^2 NP(1 - P)}{d^2(N - 1) + X^2 P(1 - P)}$$

Where,

S = Required Sample size

X² = the table value of chi – square for 1 degree of freedom at the desired confidence level

N = the population size

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

N	S
2600	335
2800	338
3000	341
3500	346
4000	351
4500	354

D = the degree of accuracy expressed as a proportion (0.50).

Krejcie and Morgan's Sample Size Determination Table

Therefore 346 students were needed to represent the population under study.

Appendix IV: Pearson's Product Moment Formula

$$\text{Retention Rate} = \frac{(N_{t+1}^{k+1} - R_{t+2}^{k+1}) + R_{t+1}^k}{N_t^k}$$

Where

N_{t+1}^{k+1} are the students in the subsequent grade in the subsequent year

R_{t+2}^{k+1} are repeaters of the subsequent grade in the subsequent year t+2

R_{t+1}^k are repeaters of the same grade in the subsequent year t+1

N_t^k is the total enrolment in the previous year

APPENDIX V: Board of Graduate Studies Approval Letter



UNIVERSITY OF KABIANGA
ISO 9001:2015 CERTIFIED

OFFICE OF THE DIRECTOR, BOARD OF GRADUATE STUDIES

REF: PGC/EEP/001/2017

DATE: 11TH NOVEMBER, 2021

Godfrey Kipngetich Kirui,
EAPM,
University of Kabianga,
P.O Box 2030- 20200,
KERICHO.

Dear Mr. Kirui,

RE: CLEARANCE TO COMMENCE FIELD WORK

I am glad to inform you that the Board of Graduate Studies during its meeting on 11th August 2021 approved your research proposal entitled "**Effects of Socio-Economic Factors on Internal Efficiency of Education in Public Day Secondary Schools in Chepalungu Sub-County, Bomet, Kenya**".

I am also acknowledging receipt of your corrected proposal via email and hard copies. You are now free to commence your field work on condition that you obtain a research permit from NACOSTI.

Please note that, you are expected to publish at least one (1) paper in a peer reviewed journal before final examination (oral defense) of your Masters thesis.

Thank you.


Yours Sincerely,


A handwritten signature in black ink, followed by the date '11 NOV 2021' written in blue ink.

Prof. J. K. Kibell
DIRECTOR, BOARD OF GRADUATE STUDIES.

cc 1. Dean, SEASS
2. HOD, EAPM
3. Supervisors

Appendix VI: Research Clearance Permit



REPUBLIC OF KENYA


NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: 178896

Date of Issue: 17/November/2021

RESEARCH LICENSE



This is to Certify that Mr. Kirui Kipngetich Godfrey of University of Kabianga, has been licensed to conduct research in Bomet on the topic: EFFECTS OF SOCIO-ECONOMIC FACTORS ON INTERNAL EFFICIENCY OF EDUCATION IN PUBLIC DAY SECONDARY SCHOOLS IN CHEPALUNGU SUB-COUNTY, BOMET, KENYA for the period ending : 17/November/2022.


License No: NACOSTI/P/21/14445

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Appendix VII: Chepalungu Sub-County Map

