

**SOCIO-ECONOMIC FACTORS INFLUENCING STUDENTS
PARTICIPATION IN MIDDLE LEVEL COLLEGES IN MACHAKOS
DISTRICT, KENYA**

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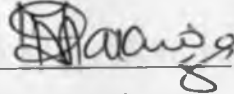
**A Research Project Submitted in Partial Fulfillment for the Requirement for
the Award of Master of Education in Economics of Education**

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DECLARATION

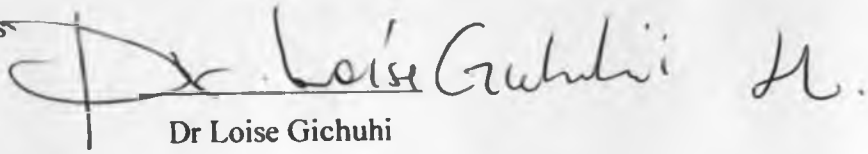
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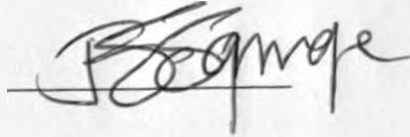
This research project has been submitted for examination with our approval as university Supervisors



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DEDICATION

This research work is dedicated with a lot of love, respect and appreciation to my wife Elizabeth Mutuku, our children Chris, Caro, Maureen and Anthony as an inspiration to their quest for education.

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I wish to appreciate the help of all those without whom this work would not have been completed. It may be impractical to mention all of them individually. I am deeply indebted to my supervisors Dr. Loise Gichuhi and Ferdinand Mbeche who despite their busy schedule found time to read through my work. Their guidance, suggestions, encouragement and moral support culminated in completion of this work. Special thanks go to Dr. Grace Nyagah, Chairman Department of Educational Administration and Planning university of Nairobi, for encouraging me and ensuring that this work is completed.

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ABBREVIATIONS AND ACRONYMS

DEO	District Education Officer
EFA	Education for All
GOK	Government of Kenya
HELB	Higher Education Loans Board
KCSE	Kenya Certificate of Secondary Education
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KNEC	Kenya National Examination Council
MOE	Ministry of Education
NCST	National Council for Science and Technology
SPSS	Scientific Package for Social Studies
TIVET	Technical, Industrial, Vocational and Entrepreneurship Training
TTC	Teachers Training College
UN	United Nations
UNESCO	United Nations Education Scientific and Cultural Organization
UNICEF	United Nations International Children's Emergency Fund

ABSTRACT

In the recent past, there has been mushrooming of middle level colleges both public and private. In these colleges, students register in huge numbers, however, in Machakos district the number is small compared to the neighbouring districts. This study therefore sought to establish the socio-economic factors influencing students' participation. The study was guided by four objectives; on how parental level of education, family financial status, the cost of education and government policy interventions influence the student's participation in middle level colleges in Machakos district. The literature review was in conformity with the research objectives. The theory guiding the study was human capital theory advocated by Schultz. The study adopted descriptive survey design where variables were studied as they were without manipulation. The target population included 15 colleges the total number of study respondent was 539 and they were sampled using total population of the principals' and Krejcie and Morgan table for the tutors and students. Data was collected using questionnaires, content analysis and interview schedule. The data was analyzed using SPSS where questionnaires were coded and fed into the Scientific Package for Social Studies (SPSS) programme to generate frequency tables.

Through data analysis the study established that; 40percent of the students are of age 20-24 years while 30percent are of age 15-19 years. The study establish that 50 percent of the study were pursuing professional certificate course. The professional certificate courses are popular among the students because of hard economic times and high rates of unemployment prompting students to take courses that may enable them get a job soonest possible after the course. However, some take diploma and higher diploma courses in order to pursue degree courses later. On the influence of parental level of education on student's participation in middle level colleges, the study revealed 80percent of the students come from homes whose parents have secondary education and above and 100percent of the students were found to have parents with higher level of education. In general the study established that there are social-economic factors that influence the students' participation in middle level colleges. These factors include, the parents level of education where children from household with educated parents dominates in colleges because parents attach value to education, the financial status of the parents where financially stable parents send their children to school while financially unstable parents are unable to pay college fees making their children rely on well wishers, the church and their relatives to meet college expenses. The other factor includes, the cost of education and the government interventions such as subsidies, loans advanced to the students, setting minimum qualification grade for admission of the students.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Investment in human capital is a key element in achieving long term sustainable economic growth. According to Murphy (2008), education is positively correlated with overall economic growth. He argues that a one year of additional schooling of the labour force can contribute to as much as 9 percent increase in GDP for the first years of schooling and 4 percent a year for the next three years. According to him, development in human capital is one of the surest ways to reduce poverty by improving the quality of life, promoting health, expanding access to paid employment, increasing productivity in market and non-market work and facilitating social and political participation.

According to Asunda (1997), the future of every country depends more on the rapid and effective development of its education system. He argues that the hopes of achieving higher standards of living and even establishing independence in a viable form seems to depend almost on the ability of each county to train its labour force. Most developed countries, invests in middle level colleges because of the belief that educated skilled labour forces is a

necessary condition for sustained economic growth in terms of productivity.

Human capital theory suggests that just as physical capital augment people's economic productivity, so human capital acquired through education improves productivity of individuals (Mayer, 1997).

According to King (1996), low college-going rates globally have been persistent. Lower rates of white-collar employment opportunities, poverty and isolation have resulted in little cultural and economic change in rural areas of most countries. Schwarzschild and Brown (1990) argued that middle level colleges are the best hope for change in rural and impoverished areas. For many rural Kenyan students, middle level colleges are an important link to the majority modern culture, providing an outside view of what needs to happen in order for change to occur.

Although rates of high school completion rate is on the rise, completion of high school in some rural areas is still regarded as a feat, and some students give little thought to college enrollment. High school graduation rates in Appalachian states in West Virginia at 75 percent exceed the national average of 68 percent; however, there is a large discrepancy between graduation rates in rural counties versus the more metropolitan counties. Thus, college-going rates differ

substantially, ranging from 37 percent to 82 percent of students planning to go to college (West Virginia Higher Education Policy Commission, 2002).

Parents and educators in many rural areas still argue about the value of physical labouring work versus technical and professional careers DeYoung, (2002). The best hope for change in the region is through the middle level college training educational system. For some communities in Sub-Saharan Africa, educated individuals have been able to make a difference by establishing businesses or teaching in the middle level colleges of their home towns (Otto, 1986).

Colleges and Universities in the Kenyan region have sought to increase enrollment rates, but the majority of students who wish to attend college do not enroll in the first year due to lack of funds (Muli, 2002). Parents' education and parental expectations have emerged as major factors in the college decision-making process (Conklin & Dailey, 2008). Stage and Hossler (1989) reported that father and mother educational achievement, as well as family income, are important factors affecting parents' educational expectations for their children.

The AAS study (Spohn, Crowther, & Lykins, 1992) revealed that level of parental educational attainment was a factor that influenced whether students could navigate the college application process and whether they witnessed

firsthand the benefits of college education. Similarly, siblings' college attendance influenced enrollment, because older siblings are often role models for their younger brothers and sisters. Low family income and the family's inability to help finance middle level education emerged as inhibiting factors. High school personnel in Appalachia perceived a lack of parental encouragement for students to attend college.

The government of Kenya has been taking over some middle level colleges and converting them into universities in the last few years. To name a few of the colleges which have been taken over, they include Kenya Science Teachers College, Kenya Polytechnic, Mombasa Polytechnic, Chepkoilel Teachers College. These colleges were training the much needed technical manpower but now have been converted into University college denying those students who achieve grades lower than B to C- in KCSE a chance of joining middle level colleges.

1.2 Statement of the problem

Schwarzeller and Brown (2003) argued that middle level colleges are the best hope for change in rural and impoverished areas. According to Eshiwani (1993), middle level colleges are important link to the majority of modern culture, providing an outside view of what needs to happen in order for change to occur. Despite the important role played by middle level colleges on student's development and empowerment, low college-participation rates in Machakos district have been persistent. In Machakos district, middle level college

participation has been low as compared to other neighbouring districts in the same ecological zone as shown in table 1.1

Table 1.1
Machakos, Makueni and Kitui Districts middle level colleges students participation 2006-2012

Year	KCSE grade C-to B-	Percentage enrolment	Percentage transition to 2 nd year	Percentage transition to 3 rd year	Percentage completion of course
Machakos					
2006	20,210	21.39	74.55	51.64	28.27
2007	21,140	23.55	77.9	58.00	37.73
2008	23,240	22.47	78.93	59.96	41.00
2009	24,442	22.99	82.22	64.63	46.93
2010	25,220	26.33	84.79	69.87	
2011	26,450	24.73	83.18		
2012	28,490	24.57			
Makueni					
2006	18,142	26.46	77.11	56.48	35.85
2007	19,120	29.75	80.65	63.24	44.44
2008	20,142	32.47	83.17	67.73	52.59
2009	21,448	33.7	96.34	86.30	72.59
2010	22,449	33.5	86.69	73.50	
2011	23,442	35.03	87.69		
2012	24,445	35.36			
Kitui					
2006	16,342	31.82	80.96	61.90	42.5
2007	17,700	33.88	81.65	63.64	47.13
2008	18,220	35.16	81.25	65.78	50.31
2009	19,110	36.21	85.69	71.39	57.08
2010	20,200	35.20	88.75	74.84	
2011	21,150	37.59	82.39		
2012	22,410	36.59			

(Source DEO Machakos, DEO Makueni and DEO Kitui)

Data showing student participation in middle level colleges indicate that

Machakos district experiences lower participation rate as compared to Makueni

and Kitui district which are in the same ecological zone. It is for this reason that this study sought to explore the socio-economic factors that influence students' participation in middle level colleges in Machakos district.

1.3 Purpose of the study

The purpose of this study was to assess the socio-economic factors influencing students' participation in middle level colleges in Machakos District-Kenya.

1.4 Research objectives.

The research objectives of this study are:

- i). To determine how parental level of education influence students participation in middle level colleges in Machakos district.
- ii). To establish whether family financial status influences students' participation in middle level colleges Machakos district.
- iii). To assess the extent to which cost of education affect students' participation in middle level colleges in Machakos district.
- iv). To find out the policy interventions that may promote participation in middle level colleges based on the findings.

1.5 Research questions

The study was guided by the following research questions:

- i). How does parental level of education influence student's participation in middle level colleges in Machakos district?
- ii). To what extent does the parental financial status influence students' participation in middle level colleges in Machakos district?
- iii). How does the cost of education affect students' participation to middle level colleges in Machakos district?
- iv). What policy interventions may promote participation in middle level colleges in Machakos district?

1.6 Significance of the study

The study findings may provide policy makers in the Government of Kenya with insights on the critical factors they need to consider when formulating policies meant to enhance students participation to middle level college education and the achievement of universal education for all (EFA).

The study findings may also provide information on the importance of middle level colleges in empowering and developing students to those who wish to join middle level colleges to further their studies after high school education.

Researchers may also benefit from data collected and information gathered that may be a source of new knowledge on students' participation in middle level colleges. The findings of this study may also enrich the pool of knowledge in economics of education by recommending the rational ways of increasing the sourcing of funds by middle level colleges towards enhancing students' participation.

1.7 Limitations of the study

A number of limitations were experienced during the study: one of the aspects of this study sought to determine parental financial status. As such, some respondents among students could hesitate to provide useful information for the study due to embarrassment of exposing their poverty level. The researcher tried to overcome this by assuring the respondents that the findings of this study would be used for academic purposes only. In addition, time factor was a constraint due to the tight college schedules which could affect data collection. The researcher overcame this by making prior booking with the college principals on the dates to visit colleges.

1.8 Delimitation of the study

The study only involved middle level colleges that offer certificates, diplomas and other professional trainings in Machakos district. It did not involve youth polytechnics which offer artisan courses. Further, there are many other challenges that affect students' participation in middle level colleges in Machakos District; however this study only focused on the socio-economic factors that influence students' participation in middle level colleges in Machakos District.

1.9 Basic assumptions of the study

The researcher assumed that middle level colleges in Machakos district have experienced low students' participation. It is also assumed that the target population sampled responded and gave the information required and adequately represents the situation in middle level colleges in Machakos district.

1.10 Definition of significant terms

Access: refers to the students who get right to entrance in the colleges.

Completion: refers to the ability of a learner to go through a stage of an educational system successfully without being referred or dropping out of college.

Dropouts: refer to students who leave the middle level colleges without completing the requirements of the course.

Enrollment: refers to the students who get admitted and take up learning sessions in the middle level colleges.

Grade to grade transition: refers to the movement of a student from one grade to another higher grade as a result of completing the course work and passing the examination for a given grade.

Graduation: refers to attending a ceremony after completing a course where one is conferred a certificate or a diploma.

Middle level colleges: refer to institutions of learning that offer certificate, diploma and higher national diploma qualifications.

Participation: refers to the chances and opportunities that students have for entering and completing middle level colleges. It includes; enrolment, retention, completion and graduation.

Repetition: refers to a situation where a learner remains in the same grade he/she was the previous year.

Socio-economic factors: refers to variables that are economical and social in nature that affect student's participation in middle level colleges.

Subsidy: refers to assistance given by the government to education sector in form of bursaries, grant, school feeding programme and infrastructure funding to reduce a cost of education and increase student participation.

Wastage: refers to loss of resources, materials and human service that were spent on student who have dropped out of college or fail to move to the next grade and opt to repeat the same grade attended the previous year.

1.11 Organization of study

This study is organized into five chapters. The first chapter consisted of the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, assumptions of the study, definition of significance terms and organization of the study.

Chapter two consists of literature review under the following subheadings. introduction, status of middle level college education in developed countries, status of middle level college education in developing countries, Status of

middle level college training in Kenya, family financial status and students participation in middle level colleges, parental level of education and students participation in middle level colleges, cost of education and students participation in middle level colleges, Government Intervention and students participation in middle level colleges, summary of literature review, theoretical framework, conceptual framework.

Chapter three consists of methodology used in this study. This chapter explains the research design, target population, sample size and sampling procedures, research instruments and instrument validity and reliability. It also included data collection procedures and data analysis procedures. In chapter four, the researcher dealt with data analysis, data presentation and discussions while chapter five focuses on summary of the findings, conclusion and recommendations for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature related to middle level training colleges and the socio-economic factors contributing to students' participation in middle level colleges in both public and private middle level colleges. The study looks at the status of middle level colleges training from the global, regional and national level and also reviews studies carried out previously by other authors on the issue of middle level colleges' students' participation. The chapter also summarizes the research gaps.

2.2 Status of middle level colleges training in developed countries

Over the years, there has been pressure to shift financing of tertiary education from the public sector towards more reliance on private sources. Increasingly, concern has also been raised on how tertiary education institutions price and place their services (LessBell, 1999). A study on enrolment responses to tuition changes in private tertiary institutions in USA observed that the short-run effect of shifts in finance from the public to the private sector, in which tuition increases make up public sector shortfalls, are likely to reduce enrolments.

The study noted that tuition elasticities rose from -0.261 to -0.557 while income elasticities of demand increased from 0.493 to 1.093 .

However, despite rising income increasing the income elasticity of demand, the study recommended that any shift to private sector funding should proceed only gradually.

In a framework of shifting tertiary education financing from the public to the private sector, three models are on trial. First is to provide a form of lending that could be done through parental or proxy graduate collateral, as in income-contingent loans; second, is the use of graduate tax; and a third alternative is the creation of an education voucher system (Mingat & Tan, 1992).

The World Bank Report of External Panel on Education (2004), advocates for the first model, also referred to as the standard model, as subsidies to higher education. The main argument for higher education loans is that private returns on higher education are higher than social returns and therefore the beneficiaries should meet the cost of higher education. Higher education loan programmes have relatively succeeded in Kenya despite some management hiccups.

However, this income contingent lending has worked poorly in many other cases, partly due to the variance in future earnings against which lending decisions must be made, and partly because interest rates have not reflected the level of risk.

Lending for middle level colleges is therefore likely to be considered as a risky business by the private sector loan suppliers. In the Kenyan case, the loan supplier is again the public sector, which largely gives more weight to social and equity considerations rather than future economic ability to repay the loan. Failure to give student's loans in middle level colleges by the government has led to low access and participation.

2.3 Status of the middle level college education in developing countries

The middle level colleges share of the education market ranges from 4 percent in Mauritania to 21 percent in Gambia, with Senegal and Côte d'Ivoire at 15 percent and 19 percent, respectively. At some education levels, the middle level is dominant. For example, in 1999 the middle level college education accounted for 28 percent in Senegal, 36 percent in Côte d'Ivoire and 76 percent in Gambia. The number of students in the middle level colleges ranged from 15,000 in Mauritania to over 400,000 in Côte d'Ivoire, while the number of middle level colleges ranged from 80 in Mauritania to over 800 in Senegal.

In developing countries where deliberate efforts have been made through the right 'mix' of policy and regulatory framework, major gains have been recorded on enrolments (LaRocque, 1999). For instance, the number of students in middle

level colleges in Gambia grew by nearly 50 percent between 2003 and 2006. Between 2005 and 2009, the share of the tertiary education market grew from 3 percent to 23 percent and between 2008 and 2011, the number of students in middle level colleges in Senegal grew by over 75 percent (Udry, 1997).

2.4 Status of middle level colleges training in Kenya

Besides general programmes, the Kenyan education system provides a wide range of vocational and apprentice programmes. This is a vital sub-sector that provides parallel opportunities either as alternatives to the general education or as after-school training geared towards preparing students for either self-employment or the world of work. The objectives of TIVET include: providing increased training opportunities for school leavers that enable them to be self-supporting; developing practical skills and attitudes, which lead to income-generating activities in urban or rural areas through salaried or self-employment; providing technical knowledge and vocational skills necessary for the growth of agriculture, industry and commerce; and producing people who can apply scientific knowledge to the solution of environmental problems.

While there are over 800 private and public TIVET institutions in the Kenya, (MOE, report 2008) participation levels and output quality is quite low. Some of the factors responsible for this include the high cost and negative attitudes

towards TIVET by prospective students, parents and society in general. Over 100,000 students are enrolled in some form of TIVET institution annually, including private sector training institutions (Gok, 2003). This number is very small compared to the number of students who completed form four and attain a mean grade of C- to B-. In the year 2011 over 250,000 students who sat for KCSE obtained grade C- to B- (KNEC, 2011).

2.5 Family financial status and students' participation in middle level colleges

Schooling attainment and other choices made during youth reflect the conditions in which children are growing up. Children from poorer backgrounds are generally observed to have lower outcomes (less schooling, more crime, and higher teenage pregnancy rate), however, the mechanism through which household income affects the child's outcomes is still unclear. This is a question of importance in order to adequately determine policies to reduce inequalities. Focusing on schooling achievement, two main theories can be distinguished.

First, as advocated by Becker and Tomes (1962), poorer families are financially constrained which prevents them from investing in the human capital of their offspring. The effect of family income on child's attainment is direct, thus, policies of financial support could be efficient at reducing the differences

between children from different backgrounds. Second, poorer parents may be endowed with characteristics that make them less successful on the labour market and worse at parenting (Mayer, 1997). Additionally, the family background characteristics might affect the motivation, access to career information or the discount rate of the child. Then, the usually observed income effect is an artifact due to the co linearity of the family income and some unobservable family characteristics. Therefore, direct support to the children, in the form of extra educational attention for example, would be more efficient than financial support at reducing inequality in schooling achievements.

2.6 Parental level of education and students' participation in middle level colleges

Hicks (1980), indicated that family background might be analytically separated into at least three distinct components: financial (physical) capital (family income or wealth), human capital (parent education), and social capital (relationship among actors).

With respect to children's educational achievement Doughty (2002) maintained that, there is a direct relationship between parental financial and human capital and the successful learning experience of their children. However, he stressed

that while both of these factors are important determinants of children educational success, there remains a substantial proportion of variation in educational success, which was unaccounted for by these variables alone.

Kim explained this variance by what he called the “social capital” which mediates the relationship between parents' financial and human capital, on the one hand, and the development of the human capital of their children on the other.

2.7 Cost of education and students' participation in middle level colleges

According to Peterson and Peters, (1985) while tertiary education continues to be considered a largely public enterprise, students and their families are making substantial contributions both to the cost of tuition and to other expenses associated with study, in a number of countries. The share of expenditures of tertiary education institutions covered by students and their families now ranges widely, from a negligible amount in Denmark, Sweden and Austria to almost 40 per cent in the United States, and over half in Korea and Japan. The share of spending has been increasing in different ways in different countries, such as new imposition of fees, reductions in subsidies to goods and services bought by students, and a greater rate of enrolment expansion in private than in public

institutions. But the private cost of tertiary education also varies widely for different students and their families within individual countries.

The costs of middle level colleges in Kenya continue to escalate. College fees have been rising over the years yet the government seems to take little measures to cushion students against this increase. This has made many deserving students to fail to enroll in middle level colleges. The HELB finances university students through loans and bursaries but doesn't give loan to tertiary institutions where middle level colleges belong. This makes parents to bear the cost of middle level colleges without any government assistance. Some parents finance their college fees through borrowing from the banks at very high interest rates. Sometime the interest rates are as high as 24% per annum. This is making the cost of middle college education too expensive and unattainable by many students hence reducing student's participation in middle level college.

2.8 Policy interventions and students' participation in middle level college

A study by World Bank (2004), on expansion of middle level college education for Sub-Saharan Africa, found that despite the introduction of subsidized middle level college education in most parts of Sub-Saharan Africa, participation rates for middle level college education remained lower than in other regions of the world, with access biased in favour of the wealthier populations (World Bank,

2004). The study found that lack of access to middle level college education was increasingly seen to constrain countries' abilities to pursue effective economic growth and development strategies.

However, Muli (2002), acknowledged that governments subsidies on middle level college education has increased participation rates from 30 percent in 2004 to 42 percent in 2011. In countries like Botswana, Cape Verde, Mauritius and South Africa, for example, access rates to middle level college education were as high as 80 percent for junior middle level college. On the other hand, countries like Burundi, Burkina Faso, and Rwanda had not even achieved rates of 20 percent.

In Kenya, a research carried out by the Ministry of education (MOE, 2010) revealed that despite gains in secondary school enrollments, Kenya still had low net enrollment rates in middle level college education (estimated at 40 percent by the World bank, 2004). This was largely attributed to the low secondary to middle level college transition rate, which was estimated to be approximately 50 percent. Of the 655,000 students who completed the Kenya Certificate of secondary Education in 2004, only 225,000 (32percent) of these students joined Middle level college education four years later in 2008. These figures clearly indicated that the secondary to middle level college school transition was a major bottleneck in the education system.

In study on education financing in Kenya focusing on the middle level college bursary scheme, Njeru and Orodho (2003) found that although there were students who benefited from bursaries, this had no significant impact on enrolment by the poor. They concluded that because the scheme targeted the already enrolled in middle level college, it missed students who had failed to raise the initial fees, so the scheme ignored students who had not already been able to gain access, despite their academic eligibility. These reports raised critical questions about whether government bursaries reached intended beneficiaries and in so doing expanded access for those who were excluded, or whether the government reinforced the exclusion for the poor by awarding bursaries to financially able groups whose children were already in middle level colleges.

2.9 Summary of literature review

The literature review looked at status of middle level colleges training in developed countries, status of middle level colleges in developing countries and status of middle level colleges in Kenya. In all cases there is more emphasis put by the government to develop the middle level colleges as they are viewed as the pillar for human capital development. Parental level of education, Family financial status, cost of education and government intervention were found to

have impact on student's participation in middle level colleges. There are few studies in Kenya that have focused on the socio-economic factors influencing students' participation in middle level colleges. Earlier studies show the influence of socio-economic factors to student's participation but have not identified how specific factors influence student's enrolment, retention, transition, drop-out, completion and graduation, as it is the aim of this study.

2.10 Theoretical Framework

This study embraced human capital theory, based upon the work of Schultz (1961), and Psacharopoulos and Woodhall (1989). Human capital theory rests on the assumption that formal education is highly instrumental and even necessary to improve the production capacity of a population. In short, the human capital theorists argue that an educated population is a productive population. Human capital theory emphasizes on how education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability which is a product of innate abilities and investment in human beings. The provision of formal education is seen as a productive investment in human capital, which the proponents of the theory have considered as equally or even more equally worthwhile than that of physical capital.

Human capital theory provides a basic justification for large public expenditure on education both in developing and developed nations. The theory was consistent with the ideologies of democracy and liberal progression found in most Western societies. Its appeal was based upon the presumed economic return of investment in education both at the macro and micro levels. Efforts to promote investment in human capital were seen to result in rapid economic growth for society. For individuals, such investment was seen to provide returns in the form of individual economic success and achievement.

The conventional theory of human capital developed by Becker and Toms (1962) views education and training as the major sources of human capital accumulation that, in turn, have direct and positive effect on individuals' life time earnings.

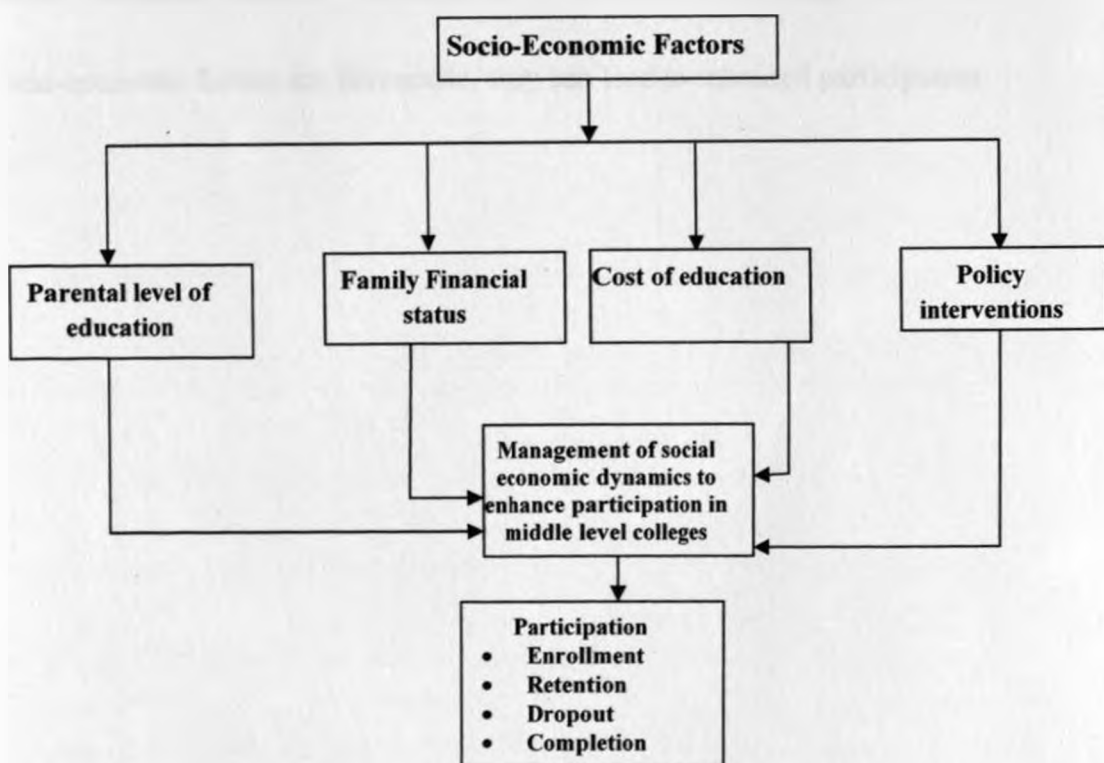
On the other hand, Schultz (1961), emphasized that investments in human capital were a major contributor to economic growth. On the basis of this theory, this study sought to establish the socio-economic factors influencing students' participation in middle level colleges in Machakos district. The human capital theory was adopted by this study because the study sought to establish the social economics factors that may hinder students' participation in middle level colleges hence negatively affecting human capital development.

2.11 Conceptual Framework

The conceptual framework illustrates the relationship between the independent and the dependent variables in a diagrammatical presentation.

Figure1.1: Conceptual Framework

Conceptual framework of the socio-economic factors that influence students' participation in middle level colleges.



The conceptual framework of the study is based on the fact that participation of students in middle level colleges is a function of parental level of education, family financial status, cost of education and government intervention.

According to Gay (1992) independent variables are the “causes” which make a difference while the dependent variables are the “effects” which are determined

to occur or not to occur. Parental level of education, family financial status, cost of education and government intervention are the independent variables. If these factors are well managed there will result to enhanced students participation as shown by increased retention, completion, graduation and reduced dropout rates. It is the view of the researcher that socio-economic factors influence students' participation in middle level colleges and if the socio-economic factors are favourable, they can lead to enhanced participation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the researcher focuses on the methodology used in the study.

This chapter covers the research design, the target population, sample size and sampling techniques, research instruments, data collection and data analysis techniques.

3.2 Research design

The research design has been defined as the process of creating an empirical test to support or refute a knowledge claim. Borg and Gall (1989) define research design as a plan showing how the problem under investigation was solved. The study employed descriptive survey. The choice of this design is based on the fact that the purpose of the study is to explore the social economic factors influencing student's participation in middle level colleges. Best and Kahn (1990) observes that descriptive survey is concerned with practices that prevails, believes, points of view, attitude that are held, processes that are going on, effect that are being felt, or trends that are developing.

3.3 Target population

Borg and Gall (1989) define the target population as the population to which the researcher wants to generalize the result of the study. Machakos district has 15 middle level colleges, 280 college tutors with an enrolment of 7,000 students. The target population for this study comprised of the 15 college principals, 280 tutors and 7000 students.

3.4 Sampling technique and sample size

The study target 13 middle level colleges; the 13 principals were targeted. When the population is small, the whole population is taken as the sample. 2 principals were not involved in the final study because they were used in the pilot study. To get the lecturers and students, the researcher used Krejcie and Morgan table (Mulusa, 1988). The use of this table gave 162 tutors i.e. 56 percent and 364 students. This number was divided by the number of colleges (13) yielding 12 tutors and 24 students per college. The study sample in total consisted of a sample of 539 respondents.

3.5 Research instruments

The research instruments used were questionnaires, interview schedule and document analysis. According to Oppenheim (1992) a questionnaire offers considerable advantages in its administration. It can be used for large numbers of population simultaneously and also provide the investigation with an easy accumulation of data. (Gay 1992) maintains that questionnaires give respondents freedom to express their views or opinions and also make suggestions.

Interview schedule enables the researcher to collect detailed information.

Documents such as admission registers, fees registers and class registers were used to counter check the dropout, transition, retention and completion rates among the enrolled students. Both questionnaires and interview schedule was used to collect both quantitative and qualitative data. The questionnaires collected background information in section A, parental level of education in section B, family financial status in section C, cost of education section D and policy intervention in section E. The interview schedule collected information about parent's level of education, family financial background, and student's level of retention in college, fees payment, and cost of education and policy interventions. The document analyzed included admission registers, class

attendance registers and fees registers. These documents showed at the enrollment, class attendance and fees payment.

3.6 Validity of the research instruments

Validity indicates the degree to which an instrument measures what it is purports to measure. That is the extent to which differences found in the measuring instrument reflect true differences among those who have been tested Kothari (2004). To ascertain the validity, the instruments were analyzed by the supervisors. They assessed the relevance of the content used in the instruments, developed and made structural changes for purpose of improvement and reinforcement of the instrument before embarking on actual data collection. A pilot study was done in Machakos District using two middle level colleges. Two principals were targeted in the pilot study, five tutors and ten students. The pilot study enabled the researcher to check whether the instruments used were valid and reliable. It also enabled correction, check level of language and any other ambiguities.

3.7 Reliability of the research instrument

Mugenda and Mugenda (2003) define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trial.

To enhance reliability of the instruments, a pilot study was conducted in two middle level colleges in Machakos District. In order to improve the reliability of the instrument, the researcher employed test-retest technique for the

questionnaire. This involved administering the same questionnaires twice to the respondents in the pilot sample after two weeks.

The spearman rank correlation coefficient was used to determine the extent of correlation.

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum^2 - (\sum X)^2][N \sum^2 - (\sum Y)^2]}}$$

A correlation coefficient of between 0.8 was established which was considered reliable according to Mugenda and Mugenda, (2003).

3.8 Data collection procedures

The researcher sought research permit from the National Council for Science and Technology (NCST) before embarking on the study. The researcher then paid a courtesy call to the District Commissioner and the District Education officer Machakos and explained his intention to carry out the research. The researcher then made appointment with the middle level college principals. On arrival at the colleges on the agreed dates, the researcher created rapport with the principal, tutors and students and explained the purpose of the study and then administered the research instruments to them. According to Best and Kahn (1990) the person administering the instrument has an opportunity to establish rapport, explain the purpose of the study and the meaning of items that may not be clear. The respondents were assured that strict confidentiality would be maintained in dealing with their identity. The researcher personally administered the research instruments to the respondents. The college's tutors accompanied the researcher in their classes, introduced him to the students and

allowed him to administer the questionnaires. The researchers then collect the questionnaires immediately after they have been filled.

3.9 Data analysis techniques

This is the process of summarizing the collected data and putting it together so that the researcher can meaningfully organize, categorize and synthesize information from the data collecting tools. Data gathered was coded for analysis. This was done after editing and checking out whether all questions have been filled in correctly.

Quantitative data was analyzed using Statistical Package for Social Sciences and the results were presented using frequency tables, pie charts, bar graphs and percentages to make meaningful conclusions. This was deemed to be easy in interpretation and was convenient in giving general overview of the problem under study. Qualitative data was analyzed through content analysis which in turn was analyzed by organizing data into themes, patterns and sub-topics. The researcher came up with conclusions of the content and data analysis of instruments that could not be quantified.

CHAPTER FOUR

ANALYSIS AND INTERPRETATION OF DATA

4.1 Introduction

This chapter focuses on the questionnaire return rate, demographic information of the respondents, data presentation, interpretation and discussion of findings. The presentation was done based on the research questions.

4.2 Questionnaire return rate

Questionnaire return rate is the proportion of the questionnaires that were returned after they were administered in the field. Out of 377 questionnaires administered to the students and the college principals 300 of them were returned making a questionnaire return rate of 80percent. This questionnaire return rate is acceptable and did not negatively affect the results of the study. According to Mugenda and Mugenda (2003) a questionnaire return rate of 70 percent is acceptable.

4.3 Demographic information of respondents

This section deals with the demographic information of the respondents who constitute the college principals and the students. The demographic information captured data on age, gender, level of education and academics qualification of the respondents.

4.4 Gender of the principal

The respondents were asked to indicate their gender, this aimed at establishing whether the study was gender sensitive while seeking the view of the students and the college principals and to ensure that every individual was given a chance to give views regardless of the gender. The gender distribution of the respondents was as indicated in figure 4.1

Figure 4.1 Gender distributions of the respondents

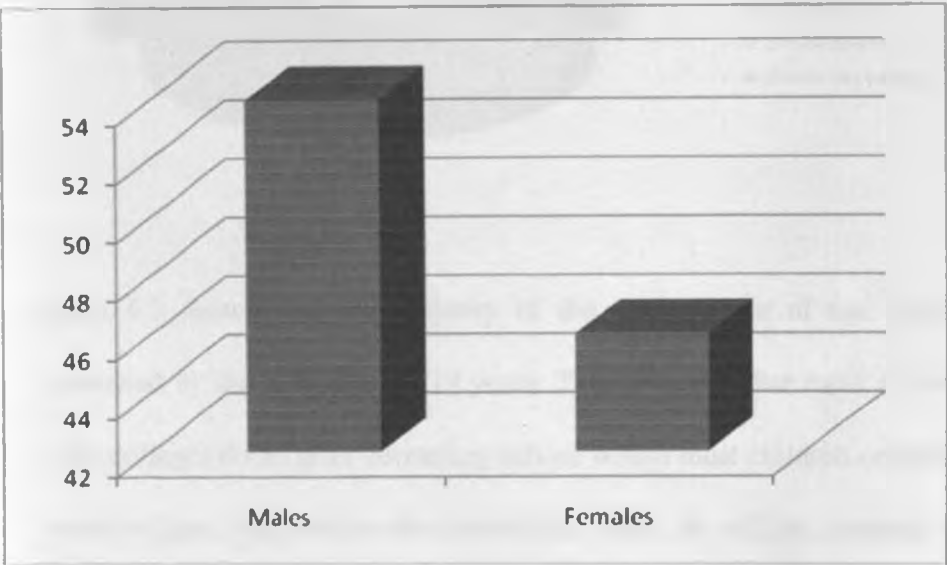


Figure 4.1 indicates that male students dominate the female students in colleges in Machakos district at 54 percent. The gender representation was 54 percent for males and 46 percent for females. This is an indication that there is fair distribution of gender in the study. This could be due to affirmative action taken by the government.

4.5 Age of the respondents

The study also sought to establish the age of the respondents to find out if the respondent are in the right college going age i.e. after secondary school going age.

Figure 4.2 Age of respondents

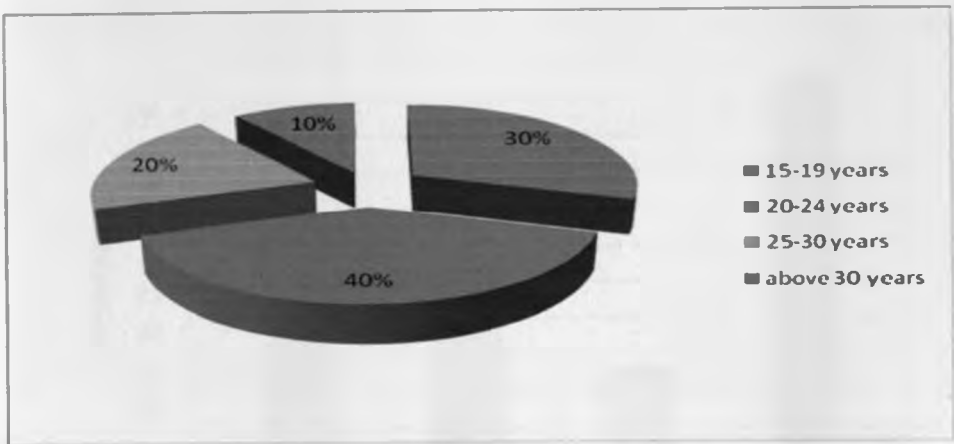


Figure 4.2 shows that the majority of the students are of age 20-24 years followed by those of age 15-19 years. This indicates that most of those who join colleges do so after secondary school which most children complete at 18 years of age. The results also shows that there are college students who are over 30 years and this can be attributed to liberalized education system in Kenya and the current wave to advance knowledge with anticipation of getting a job or promotion in the work place. This concurs with Mwabu and Justin (2011), who asserted the introduction of the education policy like free primary education, subsidized secondary education and introduction of module (ii), which have created vacancies for enrollment in middle level colleges for students of 50 years and above.

The study also sought to establish the level of education of the students; this aimed at establishing whether socio-economic factors have more influence on one level of education than other levels. The results are as in figure 4.3

Figure 4.3 The current education level of the students

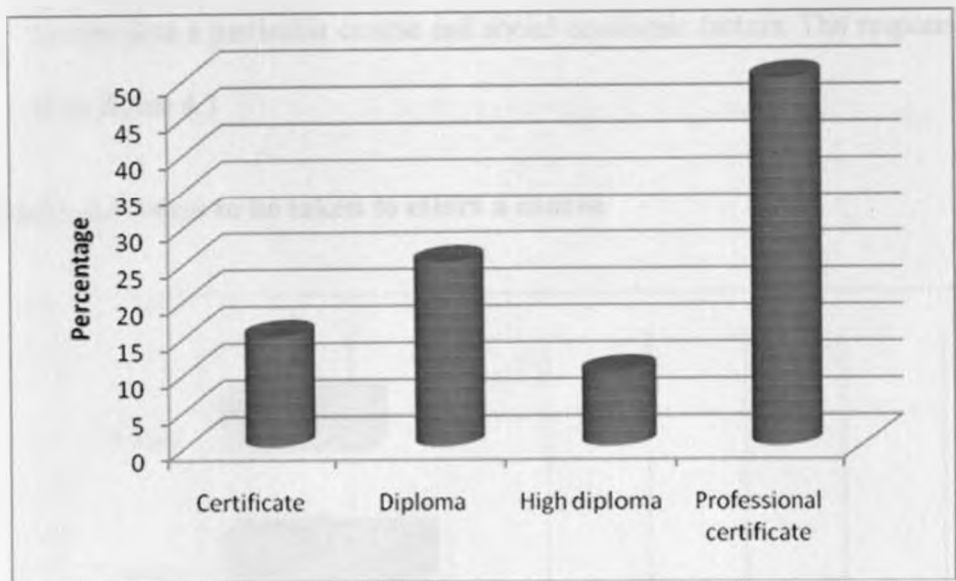


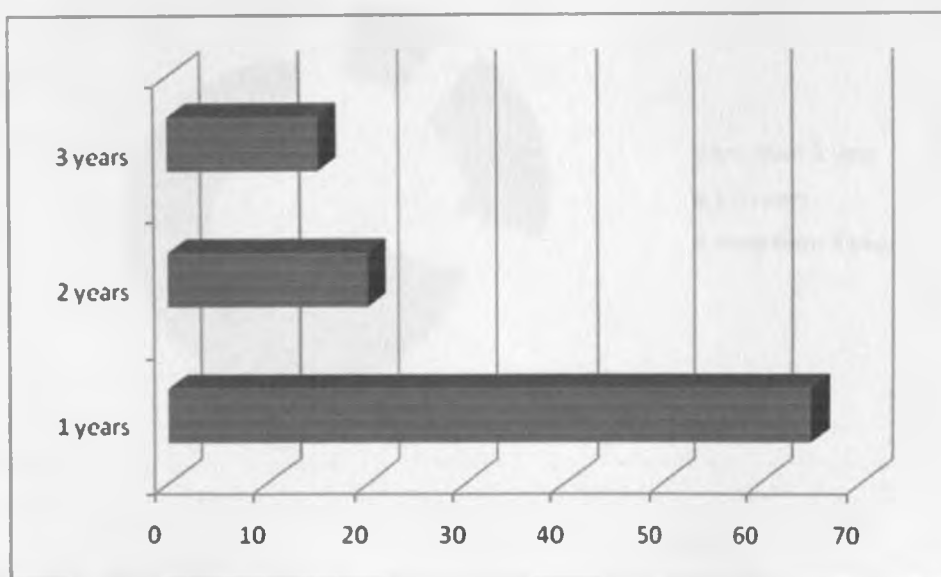
Figure 4.2 indicates that the majority of the students are pursuing professional certificate courses. This was as attested by 50 percent of the students who said that they are pursuing a professional certificate course. Upon further probing the students pursuing professional courses said that they are motivated by hard economic times and high rates of unemployment therefore need to take a course that takes shortest time possible and a course that will enable one to get a job soonest possible after completion of the course. However, the rest were

of the view that they are taking diploma and high diploma courses in order to pursue degree courses later.

The study sought to establish the time taken to complete a particular course.

This aimed at establishing whether there is relationship between the time taken to complete a particular course and social economic factors. The responses are as in figure 4.3

Figure 4.4 Years to be taken to clears a course



As shown in table 4.3 more courses are taking one year and below. These short courses are more popular to the students than the one taking more years. This is as indicated by 65 percent of the students who said that their coursed takes one year or less. This is due to hard economic times and quest to finish the course and look for employment.

The college principals were asked to indicate the number of the years they have been in particular college. This was based on the assumption that if a particular principal has been in one college for many years, they have internalized the socio-economic factors influencing students' participation in middle level colleges and therefore give an informed response. The results are as shown in figure 4.4

Figure 4.5 numbers of years taken by college principals in one college

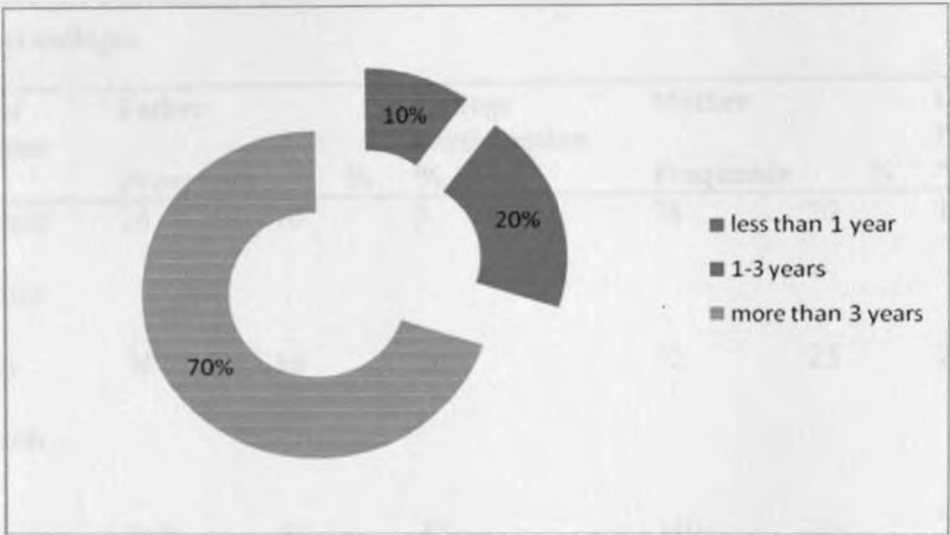


Table 4.4 shows that most of college principals have been in one college for more than three years. This is an indication that they are aware of the socio-economic factors influencing students' participations in middle level colleges. However, some of the college principals have been in one college for less than one year and others for a period between one to three years.

4.6 The influence of parental level of education on students' participation in middle level colleges

One of the objectives of the study was to establish the influence of parental level of education on students' participation in middle level colleges. The respondents were asked to indicate the educational level of the parents. The results are as in table 4.1

Table 4.1 Parental level of education and student participation in middle level colleges

Level of education	Father		College participation %	Mother		College Participation %
	Frequency	%		Frequency	%	
No formal education	36	10	5	74	20	10
Primary education	36	10	10	92	25	20
Secondary	110	30	35	110	30	26
Middle level college	147	40	42	74	20	40
University	36	10	8	14	5	4

As shown in table 4.1 70 percent of the students in colleges have parents with secondary education and above. This is as attested by 80percent of the students who said that their fathers have post primary education. In the same

When asked the student were asked to indicate whether parents' level of education influences their participations in middle level colleges. All the students 100percent said that parents' level of education influences their participation in middle level colleges. The reasons given in support of the opinion is that the higher the level of education for the parents the more they value education and therefore they will be ready to send their children to college. Others expressed their opinion that parents with low level of education may consider education to be of less value hence failing to enroll their children in colleges.

This implies that the parent's level of education influences the students' participation in middle level college education.

This study established that 75percent of the parents in Machakos district have up to secondary level of education and this minimizes the chances for children to participate in education beyond secondary education level. The low levels of parents' education in Machakos district therefore influences children participation in middle level colleges in that those children from parents with low level of education participate lowly in middle level colleges and children from household with children with high level of education highly participate in middle level colleges.

The college principals were asked to indicate whether the level of parents' education influences the students' participation in middle level colleges. The

results indicate that 100% of the college principals said that education level of the parents influences students' participation in the middle level college. The principals were also asked to indicate the level at which they strongly agree, agree, are neutral, disagree or strongly disagree to the statement related to the parents level of education. This is as summarized in table 4.2

Table 4.2 College principals' opinion on the relationship between students' participation in middle level college and Parents level of education

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
• Parents education increases the child performance	80	10	10	0	0
• More educated parents invest in their children.	70	20	10	0	0
• More educated mothers spent less time with their children.	50	30	10	10	0
• Genetic endowments determine children's academic performance.	50	10	10	30	0

Figure 4.2 indicates that the parents level of education influences students level of education. This is as indicated by 80% of the college principals who supported the statement that the parents' education increases the children

participation in education and the 70% of the college principals who said that more educated parents are likely to invest in their children. Hence increasing students' participation in middle level colleges.

The results on the principals opinion on the relationship between parental level of education and students participation in education, concurs with Research done by UNICEF, (2007) which indicated that women who went to school usually manage to increase the household income hence enhancing the schooling of their children.

4.7 The influence of family financial status on students' participation in middle level colleges Machakos district.

The other objective of the study was to establish the influence of family financial status on students' participation in middle level colleges. The students were asked to indicate their parents' financial status. The results are as indicate in figure 4.5

Figure 4.6 Parents financial status

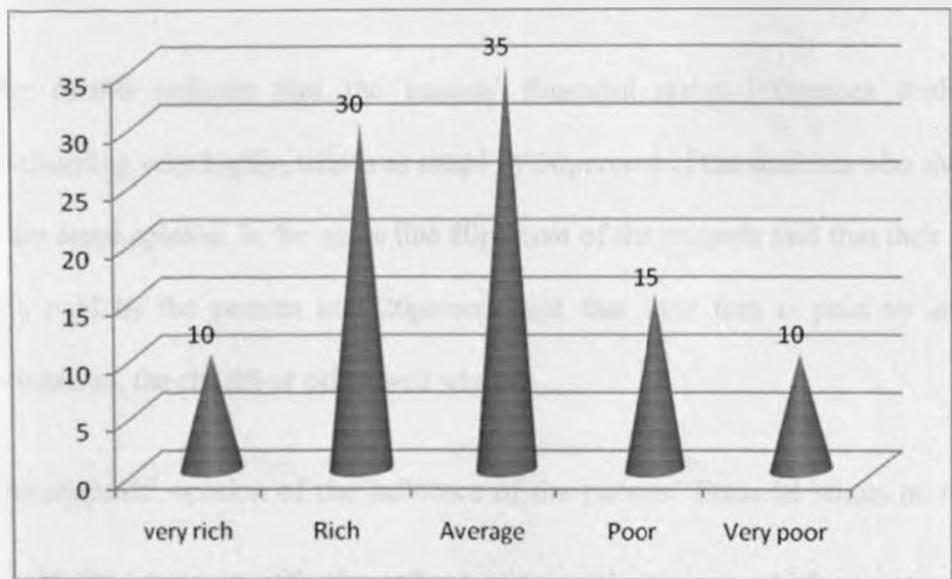
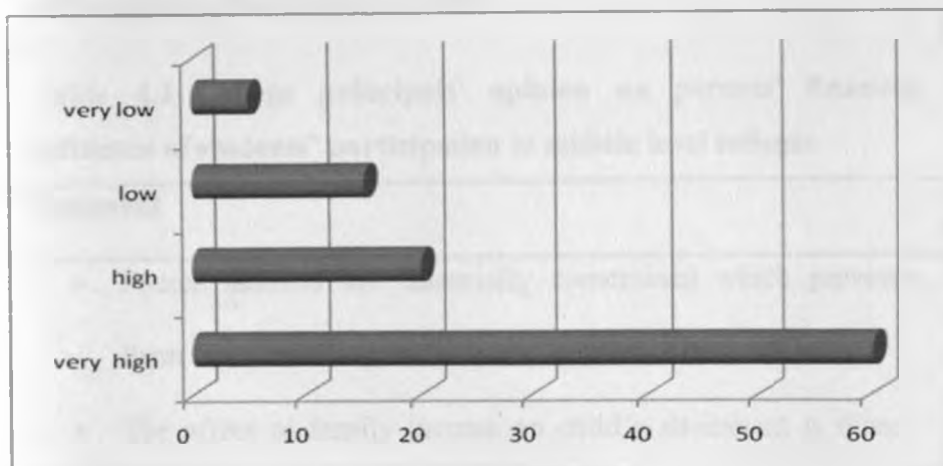


Figure 4.6 indicates that 75 percent of the students rate themselves to have come from either average, rich or very rich households and 25percent of the students who rated themselves to have come from poor and very poor families. The students were asked whether the financial status of the parents influences their participation in middle level colleges. All the students 100percent said that their parental financial status influences their schooling.

Figure 4.7 Students opinion on the extent to which parents financial status influence their education



The results indicate that the parents' financial status influences students schooling very highly, this is as stated by 60percent of the students who shares the same opinion. In the same line 80percent of the students said that their fees is paid by the parents and 20percent said that their fees is paid by either relatives, the church or other well wishers.

The students' opinion of the influence of the parents' financial status on their schooling concurs with the college principals' opinions which indicate that

parents’ financial status influences students’ participation in middle level college. This was as indicated by 100percent of the college principals who said that parents’ financial status influences students schooling. This concurs with a study done by Becker and Tomes (1962).

The college principals were asked their opinion concerning parents’ financial status and students schooling by indicating the extent to which they support or disapprove some statement concerning parents’ financial status and students’ participation in middle level college.

Table 4.3 College principals’ opinion on parents’ financial status influence of students’ participation in middle level colleges

Statement	Yes %	No %
<ul style="list-style-type: none"> Poorer families are financially constrained which prevents them from investing in the human capital of their offspring 	100	0
<ul style="list-style-type: none"> The effect of family income on child’s attainment is direct, thus, policies of financial support could be efficient at reducing the differences between children from different backgrounds 	100	0
<ul style="list-style-type: none"> Direct support to the children, in the form of extra educational attention would be more efficient than financial support at reducing inequality in schooling achievements 	90	0
<ul style="list-style-type: none"> The family financial background might affect the motivation, access to career information or discount rate of the child 	100	0

Table 4.2 shows that all the college principals 100percent concurred that poverty prevents parents from investing in the human capital of their offspring an indication that parental financial status influences student's participation in middle level colleges.

The results of this study indicate that household poverty level is critical factors affecting student's enrolment and participation (KIPPRA, 2003). According to Psacharopoulos and Woodhall (1985), the most powerful influences on demand for secondary and higher education and even on primary school enrolment rates in some developing countries is the level of family income. For instance, In India, most parents do not take their children to school because they cannot afford to pay school uniform and notebooks (Psacharopoulos & Woodhall, 1985).

The finding of this study is in line with other studies carried out in Kenya which shows that, In Kenya most of household live below poverty line. According to Abagi (1997) in 1996 46.8percent of people in Kenya were living below poverty line.

The populations living below poverty line kept on increasing as evidenced by the study conducted by KIPPRA in 2004, which shows that 56percent of the Kenyan populations were living below the poverty line, that is, they were surviving on \$1 a day or less. These high rates of poverty have contributed to keeping most students out of school either by not enrolling or by dropping out of school. Poverty therefore has been identified by Psacharopoulos and Woodhall (1985).

Gregg, (1999) also noted that, children from poorer backgrounds are generally observed to have lower outcomes (less schooling, more crime, and higher teenage pregnancy rate), however, the mechanism through which household income affects the child's outcomes is still unclear.

The study therefore concludes that the parents' financial status influences students participation in middle level colleges, this is as indicated by 60percent of the students who said that their parents pay school fees and 75percent of the students who said that they come from households whose financial status is above average household.

4.8 The extent to which cost of education affect students' participation to middle level colleges in Machakos district

The extent to which cost of education affect students' participation in middle level colleges in Machakos district formed one of the objectives of the study, all the respondents, students, college principals and college tutors were asked to indicate whether the cost of education influences the student's participation.

Through analysis it was established that all the three categories of the respondents held the view that the cost of education influences the students schooling in middle level colleges. In line with the cost of education in middle level colleges students were asked to indicate the cost they incur when pursuing college education. Among the cost incurred include, transport cost, tuition fees,

administrative fees, accommodation cost, meals cost, cost in books and reading materials as well as cost to access internet when doing assignment.

The students were asked whether these costs affect their schooling. The results indicates that 100percent of the students said that these costs affects their schooling because it is too much and the parents cannot be able to afford hence keeping some students off and others being forced to share like books, accommodation rooms and live on one meal per day and this affect their performance in examinations. For the college principals they were asked to indicate whether the cost of education differs from one college to another. The results indicate that 100% of the college principals said that the cost differs from one college to another. The reason for the differences include, the duration of the course, the nature of the course for instance medical courses being more expensive, the type of the colleges that is public verses private, the services offered where those with better services are more expensive, land ownership where colleges on rented premises charge more than the ones on own land and non adherence to educational policies that streamline fees charged in the colleges.

The college principals were also asked to indicate the extent to which they strongly agree, agree, are neutral, disagree or strongly disagree to some statements related to the cost of education in middle level colleges in Machakos

Table 4.4 college principals opinion on statement related to cost of education

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
• Tertiary education is considered mainly a public enterprise.	100	0	0	0	0
• The student fees and other educational expenses differ among countries depending on government policy	100	0	0	0	0
• The costs of education are influenced by the mode of study either part time or full time.	100	0	0	0	0
• Mature students who have established their households prefer part-time courses.	100	0	0	0	0
• Those who enroll part-time or in private institutions bear higher costs?	60	30	0	10	0

Table 4.5 shows that, 100percent of the college principals were of the opinion that Tertiary education is still considered a mainly public enterprise yet involves a substantial and growing degree of private financing for its visible costs.

This is as indicate by the high fees paid and yet the education is subsidized.

The table also shows that 100percent of the college principals were of the opinion that the amount incurred by students for fees and other educational related expenses differs among countries depending on taxation and spending policies and the willingness of the government to support students. The results of this study indicates that cost of education influences students participation in the middle level colleges in that the courses charging high fees are avoided by the students, this explains why many students settle for short courses in order to save on the cost. Earlier studies by Abagi (1997), Government of Kenya (1995) and UNESCO (2004) indicated that the cost sharing policy in Kenya reduced the number of children enrolled in education hence making some students drop out of school. This study established that the fees charges in colleges vary from one college to another and one course to another and hence making students choose courses which are cheap and taking shorter time to minimize cost.

4.9 Policy interventions that may promote participation in middle level colleges based on the findings.

The study also sought to establish the policy interventions that can promote middle level colleges. The college principals were asked to indicate whether government policy intervention influence student access to middle level college.

The results show that 100% of the college principals said that the government policies influences access to middle level colleges. In line with the government interventions the results shows that strategies like, subsidies, education policies like regulating fees and the minimum college entry and controlling the number of colleges established in a given area plays a role in influencing the students participation in middle level colleges.

This study is in line with the studies done elsewhere, according to World Bank, (2007), despite the introduction of subsidized middle level college education in most parts of Sub-Saharan Africa, participation rates for middle level college education remained lower than in other regions of the world.

The findings of this study indicates that despite the effort made by the government of Kenya to Subsidize college fees a high number of students from poor families lowly participate in middle level colleges compared to the children from households with financial status above average.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the study and presents conclusions, recommendations and suggestions for further research.

5.2 Summary of the study

This study sought to establish the socio-economic factors influencing students' participation in middle level colleges in Machakos District-Kenya. It was guided by four objectives that focused on how parental level of education, family financial status and the cost of education affect students influence the student's participation in middle level colleges in Machakos district and policy interventions that can be put in place to promote students participation in middle level colleges based on the findings.

The literature review focused on Status of middle level colleges training in developed countries, status of the middle level college education in developing countries, Status of middle level colleges training in Kenya, family financial status and students' participation in middle level colleges, parental level of education and students participation in middle level colleges, cost of education and students participation in middle level colleges, policy interventions and students participation in middle level college, summary of literature review and Theoretical Framework.

The study adopted descriptive survey design where variables were studied as they were without manipulation. The target population included 15 colleges and data was collected using questionnaires, content analysis and interview schedule. The data was analyzed using SPSS where questionnaires were coded and fed in the SPSS programme to generate frequency tables.

On the influence of parental level of education on student's participation in middle level colleges, the study revealed 80percent of the students come from homes whose parents have secondary education and above and 100 percent of the students said that parents' level of education influences their participation in middle level colleges because educated parents value education more than the parents with minimal education and therefore they are more ready to send their children to school.

The college principals also supported the notion that parents' level of education influences the students' participation in middle level colleges where 100percent of the college principals were of this opinion. On the other hand, 80percent of the college principals said that the parents' education level increases the children performance while 70percent of the college principals said that educated parents are likely to invest in their children through books and finances hence increasing students' participation in middle level colleges. The study revealed that 85

percent of the students who participated in middle level colleges had fathers with secondary education and above and 70 percent had mothers with secondary education and above.

The study also established that parental financial status influences students' participation in colleges as indicated by 75 percent of the students coming from either average, rich or very rich families compared to 25percent of the students who rated themselves to have come from poor and very poor families. This implies that the children from poor families have low chances to access middle level colleges.

The study also established that, all the students 100percent hold the opinion that parental financial status influences their schooling through payment of school fees. On fees payments 80percent of the parents pay school fees for their children. 100percent of the college principals' were of the opinion that parents' financial status influences students schooling because poorer families are financially constrained preventing them from investing in education of their children. Poor parents were unable to enroll and retain their children in colleges hence reducing the participation rate in middle level colleges.

Through analysis it was established that students spend money on transport, tuition fees, administrative fees, accommodation, meals, books and reading materials as well as cost to access internet when doing assignment. These costs have implication on students schooling because they bar many children from accessing college education hence making it too costly for the poor parents to afford hence keep some students off and others being forced to share like books, accommodation rooms and live on one meal per day hence compromising students' performance in examinations.

The study also revealed that the fees paid in colleges differ from college to college, this was attributed to the duration of the course where short courses are less costly, the nature of the course for instance more practical courses being more expensive, the type of the colleges that is public verses private, the services offered where those with better services are more expensive, land ownership where colleges on rented premises charge more than the ones on own land and non adherence to educational policies that streamline fees charged in the colleges.

On the other hand 100percent of the college principal held the opinion that Tertiary education is still considered a mainly public enterprise but it involves a

substantial and growing degree of private financing for its visible cost and the amount incurred by students for fees and other educational related expenses.

On the matters of the influence of government policies in education, 100percent of the college principals said that the government policies influence access to middle level colleges. Some of the government strategies that influence students participation in middle level colleges include subsidies, education policies like regulating fees and the minimum college entry and controlling the number of colleges established in a given.

5.3 Conclusions

From the foregoing, discussion it is clear that there are social-economic factors that influence the students' participation in middle level colleges. These factors include, the parents level of education where children from household with educated parents dominates in colleges because they attach value to education, the financial status of the parents where financially stable parents send their children to school while financially unstable parents are unable to pay school fees making their children rely on the well wishers, the church and the relatives to meet college expenses. The other factor was cost of education the study found out that the higher the cost of education the lower the participation rate at the middle level colleges. The government interventions such as subsidies, loans

advanced to the students, setting minimum qualification grade for admission of the students were found to have impact on student participation in middle level colleges.

5.4 Recommendations

In the view of the research findings, the researcher recommends the following:

- i). There is need to establish more middle level colleges in order to increase access to college education.
- ii). The government should introduce loan programmes on colleges to enable the poor students be able to pay college fees.
- iii). There is need for the government to standardize the fees paid in colleges to minimize discrepancies on the fees levied in colleges.
- iv). The college management team should come up with programme that enable student to do menial jobs within college and the money they raise to be used to pay fees of the students.

The government should not upgrade middle level colleges to university status because this minimizes the chances of the students with lower grade to access college education.

The other recommendation is that, students from poor families should be given bursaries to supplement the money they get from the well wishers.

5.5. Suggestions for further research

Based on the findings of the study the researcher makes the following suggestions for further research;

- i). A research need to be carried on socio-economic factors influencing students participation in middle level colleges in other districts in Kenya in order to compare results with those of this study since every district may be experiencing unique challenges.
- ii). There is need to carry a study on social cultural factor influencing students participation in middle level colleges in Kenya.

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APPENDICES

APPENDIX I: LETTER TO THE PRINCIPALS

John Mutuku Makenga
University of Nairobi,
P.O. Box 1584 -90100,
Machakos.
0728 159495

THE PRINCIPAL.....

Dear Sir/Madam,

RE: PERMISSION TO CONDUCT A RESEARCH IN YOUR COLLEGE

I am a post graduate student at the University of Nairobi currently carrying out a research on socio-economic factors influencing student's participation in middle level colleges in Machakos District, Kenya.

Your college has been selected to take part in the study. I kindly request your authority to gather the required information from a few of your tutors and students through questionnaires and interview schedule.

The questionnaires and interview schedule are specifically meant for this study and therefore, no name of a respondent or that of your school will be required.

Your assistance and support on this matter will be highly appreciated.

Yours faithfully,


John Mutuku Makenga

APPENDIX II:
LETTER OF INTRODUCTION TO RESPONDENT

John Mutuku Makenga

University of Nairobi

P.o Box 1584-90100

Machakos.

0728 159495

Dear Sir/Madam,

RE: REQUEST TO FILL QUESTIONNAIRES FOR RESEARCH

PURPOSE

I am a post graduate student in the University of Nairobi, department of educational administration and planning and I am carrying out a research on socio-economic factors influencing student's participation in middle level colleges in Machakos District, Kenya.

You are therefore kindly requested to respond to the items in attached questionnaires to the best of your knowledge. The information gathered is for research purpose and will be treated with confidentiality.

Yours faithfully



John Mutuku Makenga

APPENDIX III:

QUESTIONNAIRE FOR PRINCIPALS

The questionnaire below is used to collect data for purely academic purposes on the socio-economic factors influencing students' participation in middle level colleges in Machakos District. Please fill in all the blank spaces provided.

SECTION A: BACKGROUND INFORMATION

1. What is your gender? Male [] Female []

2. What is your age?

25-35 years [] 35- 45 years [] 45-55 years [] Above 55 years []

3. What are your academic qualifications?

Masters in Education [] Bachelors Degree in Education []

Diploma in Education [] other

(specify).....

4. How many years have you been a principal?

.....

.....

5. How many years have you been in this college?

Less than one year []

One year-three years []

Over three years []

SECTION B: PARENTAL LEVEL OF EDUCATION

6. According to you, how can you rate the educational level of
students' parents?

Very high [] High [] Average [] Low [] Very low []

7. In your opinion, does the parental level of education have influence
on students' enrollment in college?

Yes []

No []

Below are statements related to parental level of education, please tick appropriately	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Parents education increases the child performance					
More educated parents are likely to invest in their children.					
More educated mothers spent less time with their children.					
Genetic endowments determines children's academic performance.					

SECTION C: FAMILY FINANCIAL STATUS

8. How can you rate the students' retention rate in this college?

Very high [] High [] Low [] Very low []

9. In your own opinion, how can you rate the students' family financial background?

Very rich [] Rich [] Average [] poor [] very poor []

10. Does the students' family financial background have influence on their college retention?

Yes []

No []

11. If yes, to what extent does the students' family financial background influence their retention college?

Very high [] High [] Low [] Very low []

12. According to you, how can you rate the retention rate of students in your college for the last five years?

Very high [] High [] Low [] Very low []

13. Do you agree with the following statements?

Statement	Yes	No
Poorer families are financially constrained which prevents them from investing in the human capital of their offspring		
The effect of family income on child's attainment is direct, thus, policies of financial support could be efficient at reducing the differences between children from different backgrounds		
Direct support to the children, in the form of extra educational attention would be more efficient than financial support at reducing inequality in schooling achievements		
The family financial background might affect the motivation, access to career information or discount rate of the child		

SECTION D: COST OF EDUCATION

14. According to you, to what extent do you rate the cost involved in the middle level college education?

Very high extent [] High extent [] Not at all [] Low extent []

Very low extent []

15. Does cost of education differ from college to college?

Yes [] No []

16. If yes, please state the possible reasons

.....

.....

.....

.....

17. Below are statements related to students cost of education, please tick appropriately:

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
• Tertiary education is considered mainly a public enterprise.	100	0	0	0	0
• The student fees and other educational expenses differ among countries depending on government policy	100	0	0	0	0
• The costs of education are influenced by the mode of study either part time or full time.	100	0	0	0	0
• Mature students who have established their households prefer part-time courses.	100	0	0	0	0
• Those who enroll part-time or in private institutions bear higher costs?	60	30	0	10	0

SECTION E: POLICY INTERVENTION

18. Does government policy intervention influence student access to middle level college?

Yes [] No []

19. . If yes, please

explain.....

.....

20. In what ways does government policy intervention influence student's access to middle level? You may tick more than one.

a) Through subsidies []

b) Through educational policies []

c) Through regulating the minimum college entry []

d) Through limiting the number of colleges by converting some to universities []

e) Others (please specify.....

22. Which government policy enhances participation in middle level colleges?

.....

.....

.....

.....

APPENDIX IV:

QUESTIONNAIRE FOR STUDENTS

The questionnaire below is used to collect data for purely academic purposes on the socio-economic factors influencing students' participation in middle level colleges in Machakos District. Please fill in all the blank spaces provided.

SECTION A: BACKGROUND INFORMATION

1. What is your gender? Male ☐ Female ☐

2. What is your age?

15-19 years ☐ 20-24 years ☐ 25-30 years ☐ Above 30
years ☐

3. What level of education are you pursuing?

Certificate ☐ diploma ☐ higher diploma ☐ professional certificate ☐

Other (specify).....

4. How many years does your course take?

1 year ☐

2 years ☐

3 years ☐

Other (specify).....

SECTION B: PARENTAL LEVEL OF EDUCATION

5. What is your parents' level of education?

Father.....

Mother.....

6. In your opinion, does your parents' level of education have influence on your college participation?

Yes [] No []

7. If Yes please explain

.....

.....

.....

.....

SECTION C: FAMILY FINANCIAL STATUS

8. In your own opinion, how can you rate your family financial background?

Very rich [] Rich [] Average [] poor [] very poor []

9. Does your family financial background have influence on your college retention?

Yes [] No []

10. If yes, to what extent does your family financial background influence your college retention?

Very high [] High [] Low [] Very low []

11. Do your parents pay your colleges fees?

Yes [] No []

12. If no, who pays your college fees?

- a) Sponsor
- b) Well wishers
- c) Relatives
- d) Other (specify.....)

SECTION D: COST OF EDUCATION

13. Please list the costs you normally incur in accessing the college education

.....

.....

.....

.....

14. Do the above mentioned costs affect your college education in any way?

Yes [] No []

15. If yes, please explain how

.....

.....

16. In your opinion, what do you think can be done to manage these costs so as to enhance students' participation in middle level colleges?

.....

.....

.....

.....

SECTION E: POLICY INTERVENTION

17. According to you, does the government policy intervention have any positive influence to your college access?

Yes ☐ No ☐

18. If yes, in what ways does the government policy influence your access to college? (You may tick more than one)

- a) Through subsidizing my college fees
- b) Through bursary allocation
- c) Through physical college equipment
- d) Through educational loans
- e) Other (specify.....)

19. Has the government through its educational structural policies and changes ever affected your college education?

Yes ☐ No ☐

20. If yes, please give an explanation to how the policies interventions and educational structural change affected your college education

.....
.....
.....
.....

THANK YOU FOR YOUR PARTICIPATION

APPENDIX V

INTERVIEW SCHEDULE FOR TUTORS

1. In your view, how can you rate the student's parent's level of education?
2. Do you think the level of education of parents influence students college Participation in any way?
3. How can you rate the student's family financial background?
4. How is the student's level of retention in this college?
5. What level does lack of fees payment by students influence their participation?
6. How do you rate cost of college education?
7. Does government intervene in supporting the college level education?
8. In your opinion do you think government policy intervention help to enhance students' participation?
9. What do you think should be done by the government to improve student's participation in middle level colleges?

APPENDIX VI

CHECKLIST OF DOCUMENTS ANALYZED

1. Admission register
2. Fees register
3. Attendance register

APPENDIX VII

LIST OF MIDDLE LEVEL COLLEGES IN MACHAKOS DISTRICT

(RESEARCH MAP)

<u>COLLEGE</u>	<u>CATEGORY</u>
1. Medical Training College Machakos	Public
2. Machakos Technical Training Institute	Public
3. Machakos Teachers Training College	Public
4. Machakos Technical Institute	Private
5. Machakos Institute of Development Studies	Private
6. Catholic Technical Training Institute	Private
7. Machakos Institute of Technology	Private
8. Machakos Institute of Guidance and Counseling	Private
9. Kenya Institute of Management	Private
10. Machakos Medical Training Institute	Private
11. Century Park College	Private
12. Mwalimu Technical Centre	Private
13. Pivot Center	Private
14. Mumbuni Technical Training College	Private
15 M. I. T. Teachers Training College	Private

RESEARCH AUTHORIZATION LETTER

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349

254-020-310571, 2213123, 2219420

Fax: 254-020-318245, 318249

When replying please quote

secretary@ncst.go.ke

P.O. Box 30623-00100

NAIROBI-KENYA

Website: www.ncst.go.ke

NCST/RCD/14/012/860

29th June 2012

Our Ref:

Date:

John Mutuku Makenga

University of Nairobi

P.O. Box 30197

Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Socio-economic factors influencing students participation in middle level colleges in Machakos District Kenya*" I am pleased to inform you that you have been authorized to undertake research in Machakos District for a period ending 31st August, 2012.

You are advised to report to the District Commissioner and the District Education Officer, Machakos District before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

A handwritten signature in dark ink, appearing to read 'M. K. Rugutt'.

DR. M. K. RUGUTT, PhD, HSC.

DEPUTY COUNCIL SECRETARY

Copy to:

District Commissioner

District Education Officer

Machakos District.

RESEARCH PERMIT

PAGE 2

THIS IS TO CERTIFY THAT:

Prof./Dr./Mr./Mrs./Miss/Institution
John Mutuku Makenga
of (Address) University of Nairobi
P.O.Box 30197-00100, Nairobi.
has been permitted to conduct research in

**Machakos
Eastern**

**Location
District
Province**

on the topic: Socio-economic factors Influencing
students' participation in middle level colleges
in Machakos District, Kenya.

for a period ending: 31st August, 2012.

PAGE 3

Research Permit No. NCST/RCD/14/012/860

Date of Issue 29th June, 2012

Fee received KSH. 1,000



**Applicant's
Signature**

**Secretary
National Council for
Science & Technology**