EFFECTS OF PRIVATE SUPPLEMENTARY TUTORING ON STUDENTS’ ACADEMIC PERFORMANCE: A CASE OF SECONDARY SCHOOLS IN GATUNDU SOUTH DISTRICT, KENYA

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DECLARATION
This research project is my original work and has not been presented in any other university.

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DEDICATION

Dedicated to God Almighty who has brought me this far. Also dedicated to the most important people in my life; My mother Priscilla Ndia, my husband James Kariuki and our three beloved children; Steve, Lily and Jackie for their love, support and encouragement.
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Special thanks to the Almighty God for His love, providence and for giving me wisdom to accomplish my work.

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God bless you all.
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**ACRONYMS AND ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>DEO</td>
<td>District Education Officer</td>
</tr>
<tr>
<td>EFA</td>
<td>Education for All</td>
</tr>
<tr>
<td>FPE</td>
<td>Free Primary Education</td>
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<tr>
<td>FSE</td>
<td>Free Secondary Education</td>
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<tr>
<td>KCSE</td>
<td>Kenya Certificate of Secondary Education</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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ABSTRACT
While private tutoring may have many positive effects, such as increasing human
capital, providing constructive after-school activities for pupils, and generating
additional income for tutors, it may also produce a number of negative effects. To
this end, the purpose of this study is to find out the effects of private
supplementary tutoring in secondary schools in Gatundu South District. The
objectives of the study are to: analyze the scale of private supplementary tutoring
in secondary schools in Gatundu South District; analyze the cost incurred through
private supplementary tutoring per student in secondary schools in Gatundu South
District; examine the effects of private supplementary tutoring on academic
performance of secondary school students in Gatundu South District. The study
carried out a cost-benefit analysis of private supplementary tutoring, by analyzing
the scale, cost, and educational outcomes of holiday tuition in secondary schools
in Gatundu South District. The study employed a survey research design, and was
carried out in Gatundu South District targeting all the 31 head teachers, 362
teachers and 8,149 students in the 31 secondary schools in this district. The study
sample was 10 schools randomly selected from the 31 from which the head
teacher, four teachers and 24 students were selected. This yielded a sample size of
the 10 head teachers, 30 teachers and 240 students. Data was collected using three
types of questionnaires, one for students, one for head teachers and one for
teachers. A pilot study was carried out to establish the reliability and validity of
the instruments. Reliability was determined using the test-retest method. Pearson’s
product moment formula for the test re-test was employed to compute the
correlation coefficient. A correlation coefficient of about 0.7 should be considered
high enough to judge the instruments as reliable. The researcher personally
administered the data collecting instruments to the respondents with prior
arrangements with head teachers of the sampled schools. The study yielded data
that required both qualitative and quantitative analysis techniques. Qualitative data
was analysed by organising it into similar themes and tallying the number of
similar responses and reporting them thematically in line with research questions.
Quantitative data was analysed using descriptive statistics with the help of
statistical package for social sciences (SPSS). Findings were presented using
frequencies, percentages and means. The findings revealed that private
supplementary tuition is widespread in schools in Gatundu South district. The
study also found that students attending private tuition on school holidays spend
an average of Ksh 1000 to Ksh 1750 a week, while those attending during the
school term spend between Ksh 500 and Ksh 1000 per session. The findings also
indicated that private supplementary tuition helps much in improving the
academic performance of students. The study finally indicated that that while
private supplementary tuition may have some academic benefits, it could also
counterproductive as students and teachers become fatigued. The study
recommends; legalizing and regulating the private supplementary tuition by the
government, schools making it accessible even to those unable to meet the cost in
order to enhance equity, teachers to manage the mainstream contact hours
properly so that they can complete the syllabi on time and finally the offloading of
some of the content in the school curriculum to manageable levels. The study
suggests further research to include primary schools, other district in Kenya and
also to find out other effects of private supplementary tuition on students.
CHAPTER ONE

INTRODUCTION

1.1 Introduction
This chapter presents background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, basic assumptions of the study, scope of the study, limitations and delimitations of the study, theoretical and conceptual frameworks and the operational definition of central terms.

1.2 Background to the Study
Education is one of the most fundamental instruments that can be used for bringing change in an individual and society at large. Throughout the history of humanity education has therefore been an important aspect of human life. Education is a cornerstone of economic and social development. It improves the productive capacity of societies and their political, economic and scientific institutions. It helps to reduce poverty by mitigating its effects on population, health and nutrition. It also increases the value and efficiency of the labour offered by the poor. As technology advances, new methods of production depend on well-trained and intellectually flexible labour force. Due to the many benefits of education, governments in both the developed and developing countries allocate much of their resources to education. UNESCO (2005) notes that, this has resulted to considerable growth of educational activities world over, with education being one of the largest sectors in most countries to date.

The heavy investment in education by governments can be seen through Education for All (EFA) initiatives that have resulted in Free Primary Education (FPE) and Free Secondary Education (FSE) programmes in many countries, Kenya included. These
free education programmes have led to increased access, retention and completion rates in primary and secondary levels of education. This has also led to increase in demand for university education, and universities have responded to this by raising the cut-off points for those to be admitted. Consequently, national examinations results are given a central place in all educational institutions in Kenya. Kibui (1995) notes that examinations have been used to determine who continues with education from one level to the next and who does not.

Otieno (2002) argues that examinations tell children how they are succeeding or failing. He contends that education is very important and failure in the national examination especially KCSE spells doom for the students whose life becomes uncertain and full of despair. Academic performance determines whether the students will proceed to university or to other tertiary institutions. Therefore, a student’s life is determined by academic performance in the national examinations. As a result of having an education system that is examination-oriented, Kenyan children are pressured by parents and teachers to work hard to meet examination (not necessarily academic) goals.

The over-emphasis on performance in examinations has also led parents and some schools to force students who perform poorly to repeat a grade. Within countries in sub-Saharan Africa, Ndaruhutse (2008) shows that most of the students who repeat a grade are made to do so due to low academic performance, and this has greatly contributed to increasing school dropout rates. Repetition is the practice of making learners who have not fully mastered the curriculum or achieved a certain academic standard repeat the academic year. Ndaruhutse (2008) reviews literature on the pedagogical, psychological and financial impacts of repetition and finds that repetition practices are embedded within cultural and historical traditions that are not
always pedagogically founded. Ndaruhurstse (2008) concludes that repetition has few pedagogical benefits (with noted exceptions) and is financially inefficient. Ndaruhurstse (2008) recommends that to tackle effectively the problems of repetition, reforms are needed to address the reasons behind poor academic performance, including poor school attendance, the quality and relevance of teaching and lack of sufficient support for teachers.

However, such issues as quality of teaching and teacher support are given inadequate attention (Odhiambo, 2005). Teachers and parents concentrate more on the quantity rather than quality of teaching, and this has led to the rise in private supplementary tutoring. Many parents and teachers in all parts of the country seem to have formed the belief that it is not possible for students to achieve set expectations without adding extra hours of supplementary tuition above the normal school contact hours. Consequently, the trend of private supplementary tutoring has been growing rapidly all over the country. For most of the children in our schools, formal instruction does not end when the school bell rings to signal the completion of the school day.

Many children proceed from their schools, some without a break, to some form of private supplementary tutoring. Some do not even leave their school compounds. Instead, they receive private supplementary tutoring within the same institution and perhaps even in the same classroom and from the same teachers. Many children also receive tutoring on non-school days, that is, at weekends, during vacations and on public holidays. Bray (2007) argues that during the past decade, private tutoring has grown to become a vast enterprise. It employs many thousands of people, consumes massive amounts of money, and demands huge amounts of time from both tutors and pupils. However, few planners and policy makers have adequate data on private
tutoring. In particular, it is not clear whether private tutoring has any real benefits in terms of improving academic performance.

1.3 Statement of the Problem

In the context of educational decentralization and free market reforms in Kenya, should private tutoring be welcomed or controlled? The study explored for answers to this question by carrying out a cost-benefit analysis of private supplementary tutoring, by determining the scale, cost, and educational outcomes of holiday tuition in secondary schools in Gatundu South District. The study was based on the fact that while private tutoring may have many positive effects, such as increasing human capital, providing constructive after-school activities for pupils, and generating additional income for tutors (often under-paid teachers), it also produces a number of negative effects. For example, private tutoring may distort the public school curricula, put undue pressure on pupils, exacerbate social inequities, and facilitate the spread of corruption in the education system. This should be of great concern to education stakeholders and the general public. Despite this state of affairs little has been done to put this industry into perspective and as such huge amounts of household expenditure and time will continue to be used without actually knowing if private tutoring has any positive effects on pupil’s academic performance.

1.4 Purpose of the Study

The purpose of the study was to find out the effects of private supplementary tutoring in secondary schools in Gatundu South District.

1.5 Objectives of the Study

The specific objectives of the study were:
1. To find out the scale of private supplementary tutoring in secondary schools in Gatundu South District.
2. To determine the cost incurred through private supplementary tutoring per student in secondary schools in Gatundu South District.
3. To find out the effects of private supplementary tutoring on academic performance of secondary school students in Gatundu South District.
4. To identify structures that can enable students tap identified benefits of private tutoring while at the same time protecting them from any harmful effects of private tutoring.

1.6 Research Questions

The study sought answers the following research questions:

1. What is the scale of private supplementary tutoring in secondary schools in Gatundu South District?
2. What is the cost incurred through private supplementary tutoring per student in secondary schools in Gatundu South District.
3. What are the effects of private supplementary tutoring on academic performance of secondary school students in Gatundu South District?
4. How can private supplementary tutoring be structured to enable students tap identified benefits of private tutoring while protecting them from any harmful effects?

1.7 Significance of the Study

The study on the effects of private supplementary tutoring on the academic performance of secondary school students is significant to parents, teachers and education planners for the following reasons:
i) The study may be of benefit to parents as the findings will inform parents whether their investment on private tutoring has any benefits in terms of academic performance of their students.

ii) The study may be of benefit to teachers and other educators as the findings will enable them understand the impact that private supplementary tutoring has on academic performance. The study may provide empirical data that may be used to resolve the debate on whether supplementary tutoring should be allowed or not.

iii) The study may be of benefit to the Ministry of Education and the government as it seeks to improve education quality in the era of free secondary education. Recommendations may be made on the necessary guidelines to enable students tap the benefits of private tutoring while protecting them from its harmful effects.

iv) The study may contribute to existing knowledge on private tutoring and its effects on academic performance. The study findings may be used to suggest areas of further research on the topic.

1.8 Basic Assumptions of the Study

i. The respondents cooperated and gave honest answers to the questionnaire items.

ii. Students were able to give accurate information regarding the amount of time committed to private supplementary tutoring, and the cost incurred in the process.

iii. There were students who attended private supplementary tutoring and others who did not.

1.9 Scope of the Study
The study was conducted in Gatundu South District. Respondents were drawn from the students and teachers from the public secondary schools in the district. The study sought to find out the scale of private supplementary tutoring, the cost incurred, and the effects of private supplementary tutoring on academic performance of students.

1.10 Limitations of the Study.

The following were the limitations of the study;

i. The study relied on information to be collected from students and teachers in public secondary schools. The responses of the teachers could be influenced by government’s policy on private supplementary tutoring.

ii. The study was carried out in Gatundu South District where private supplementary tutoring is widespread. As such any attempted generalisation to other parts of the country should be treated with caution.

1.11 Delimitations of the study

The study limited itself to the effects of private supplementary tutoring on academic performance. Private supplementary tutoring could also have other non academic effects on students’ behaviour.

1.12 Theoretical Framework

The study was based on the Resource Framework Theory, which was developed by Brooks-Gunn, Brown, Duncan and Moore (1995) to explain how educational outcomes such as academic performance are influenced by an interaction of factors, among them material resources, human capital, social capital, and cultural capital. Brooks-Gunn et al. (1995) describe a resource framework for studying child and
adolescent development. This framework formalizes an emerging tradition of an integrated approach to analyze the effects of poverty on child development and education.

The resource framework can be viewed as unifying various overlapping theoretical arguments that have emerged to explain the relationship between poverty and educational outcomes: 1) “material resource” arguments that indicate that poor children suffer because their parents, communities and schools lack the financial resources that can aid learning and achievement, 2) “human capital” arguments that suggest that poor children suffer because of the poorer endowments and investments they receive from their parents (Mayer 1997), or, by extension, the poorer human resources in the schools that they attend; 3) “social capital/network” arguments which suggest that impoverished parents and children lack supportive social relationships and networks within and outside of the family necessary for aspiring to and achieving success; and 4) “cultural capital” arguments which suggest that children of historically disadvantaged groups suffer because they lack the cultural environment at home that would allow them to connect in the classroom (Bourdieu, 1977).

These four theoretical arguments – material resource, human capital, social capital, and cultural capital – are central in determining demand for private tutoring. The conventional view among economists is that education adds to an individual’s productivity and, therefore, increases the market value of his or her labor (Kim, 2007). The principle reason parents choose private tutoring for their children is the belief that it will increase the probability of their children achieving high scores on examinations, thereby successfully gaining entrance into prestigious universities which, in turn, guarantee a greater return in the future (Jang, 2002; Lee and Kim,
The study will be a cost-benefit analysis of private tutoring to find out whether it is a viable method of developing human capital.

1.13 Conceptual Framework

A conceptual framework is a hypothesized model identifying the concepts under study and their relationships.

The purpose of the conceptual model was to help the reader to quickly see the proposed relationships of study variables (Orodho 2010).

Figure 1.1 below shows the conceptual framework on factors that influence students’ academic performance.

![Conceptual Framework Diagram]

Independent variables

Cost of Education
- Costs incurred through private supplementary tutoring

School-Based factors
- Frequency of attending private supplementary tutoring
  - Holiday tuition
  - Evening
  - Out of class extra teaching

Resource & Socio-cultural Factors
- Adequacy of school resources
- Gender of students
- Social-economic status

Intervening variables
- Better results at KCSE
- Enrolment to choice courses
- Better job opportunities

Dependent variable
The aim of the study was to find out the effects of private supplementary tutoring in secondary schools in Gatundu South District. The variables of the study include scale of private supplementary tutoring and the cost incurred, which are the independent variables of the study, and the effects of private supplementary tutoring on academic performance of students, which is the dependent variable of the study. The study sought to find out whether students who spend more finances and time on private tutoring perform better in school than those who do not; and therefore come up with a cost-benefit analysis of private supplementary tutoring.

As shown in Figure 1.1, the independent variables are the costs incurred through private supplementary tutoring and the frequency of attending private supplementary tutoring. The dependent variable is academic performance of students. There are also a number of intervening variables, which could have a contingent effect on the relationship between independent variables and the dependent variable. These include factors like adequacy of school resources, gender of students, and family social-economic status.
1.14 Operational definition of central terms

**Cost of private tutoring** – This refers to the amount of money that students are expected to pay to attend private tuition sessions.

**Examination**: The process of evaluating how well a student has learnt a particular concept.

**High academic performance** - Those who attain at least C+ and above in examinations

**Low academic performance** – Those who attain below C+ in examinations

**Private Supplementary Tutoring** – Teaching conducted not within the mainstream school hours, either in school or outside schools, and mainly for commercial purposes.

**Scale of private tutoring** – This refers to the extent to which private tuition is offered, in terms of time committed to tuition, subjects covered and number of students attending private tuition.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter covers review of literature related to the study. The chapter covers literature on scale of private supplementary tutoring, cost of private supplementary tutoring, frequency/intensity of private supplementary tutoring, and effects of private supplementary tutoring.

2.2 Scale of Private Supplementary Tutoring
Worldwide, private supplementary tutoring has been a neglected topic for analysis but is increasingly recognized to be of major importance. In some societies it is a major industry, which on the one hand consumes huge amounts of household expenditure but on the other hand provides incomes for the tutors. Private supplementary tutoring may also have major social and educational implications. It appears to exacerbate social inequalities; and while it helps pupils to learn, it can interfere with educational processes in mainstream classes (Bray & Kwok, 2003).

In many settings, private supplementary tutoring is a shadowy phenomenon which is difficult to document (Stevenson & Baker, 1992). Pupils may receive different amounts of tutoring at different seasons and at different stages of their school careers, and may receive different types of tutoring for different subjects. Further, pupils may be unwilling to expose the amounts and types of tutoring that they receive because the tutoring might seem to confer an unfair advantage in competition with their peers. The tutors may also be unwilling to expose their activities, especially when they take on such work unofficially and when their incomes are untaxed (Bray & Kwok, 2003). Also, parents may want tutoring to remain confidential because school teachers could interpret the demand for supplementary tutoring as reflecting parents’ lack of
confidence in the schools. Nevertheless, it is possible to secure some estimates of the scale and nature of private supplementary tutoring, and then to analyze the factors which underlie the demand for such tutoring.

Bray and Kwok (2003) argue that, partly because most supplementary tutoring is unofficial and unwelcoming of attention, data on the topic are scarce. However, a picture can be drawn from scattered studies in a range of settings. In India for example, a 1997 survey of 7879 primary school pupils in Delhi found that 39.2% were receiving private supplementary tutoring (Aggarwal, 1998, p. 65). In Japan, a 1993 survey found that 23.6% of elementary pupils and 59.5% of junior high school pupils attended tutorial schools (Bray, 2007). A 1997 survey added numbers of pupils receiving other forms of tutoring, and found that among primary school children 33.0% attended tutorial schools, 5.7% received help from tutors on a one-to-one basis, 24.5% studied on correspondence courses, and 17.9% received home delivery study materials (Bray, 2007). In urban areas, over 90% of children were receiving some sort of tutoring.

In Malta, a 1997/1998 survey of 1482 pupils in upper primary and lower secondary schools found that 50.5% had received private tutoring at some time (Fenech & Spiteri, 1999). Some had first received tutoring at the age of four, though the largest number had commenced at the age of 10. A 1994 study of Grade 12 pupils in Romania found that 32.0% in rural areas and 58.0% in urban areas received private supplementary tutoring (UNESCO, 2000). In South Korea, a 1997 study indicated that 72.9% of primary students were receiving private tutoring (Kim, 2000). Among middle-school students the proportion was 56.0%; and among high school students it was 32.0%. In Taiwan, government statistics indicate that in 1998, 5536 tutoring
centers had 1,891,096 students (Bray & Kwok, 2003). Other centers were unregistered, so total numbers were even larger.

Private supplementary tutoring is growing in other parts of the world, including North America and Europe. For example in 2000, Canada’s Council of Ministers of Education published a study of science learning based on a sample of 31,000 students from 2000 schools. The study indicated that 10.9% of 13-year-old students and 13.3% of 16-year-old students received 1 hour or more of extra school lessons or tutoring during a normal week (Canada, 2000). Among 16-year-olds, in no province was the proportion below 8%, and in one province it reached 20%. Similarly, Russell (2002, p.10) wrote an article about the UK entitled ‘The Secret Lessons’, where she remarked that “almost unnoticed, a revolution has taken place in state education”, adding that “in London and other big cities, private tutoring is booming. It has become one of the most important, yet also unacknowledged, factors in a child’s performance”.

Baker, Akiba, LeTendre and Wiseman (2001) presented data from national samples in a number of countries on the percentages of pupils in Grades 7 and 8 who reported receiving private tutoring. The proportions exceeded 50% in Czech Republic, Russia, Romania, Slovenia, Philippines and Slovak Republic; and in Latvia the proportion exceeded 90%.

The studies presented above show that private supplementary tutoring is growing in scale in many parts of the world. Consequently, a growing body of literature focuses on this so-called shadow education system. However, as Bray (2003) points out, in almost all societies much more public attention focuses on the mainstream education than on the shadow private tutoring. Tutoring is a huge industry in much of Asia and
is growing fast elsewhere, particularly in North America. It is especially prominent at the transition points at which students are selected for the next stage of education, for example, before the end of primary, lower secondary, and upper secondary schooling (Bray, 2003).

Private supplementary tutoring is also increasing in scope in many African countries. In Egypt for instance, a 1994 survey of 4729 households found that 64.0% of urban primary children and 52.0% of rural ones had received supplementary tutoring (Fergany, 1994). A 1997 study estimated that household expenditures on supplementary tutoring in preparatory, primary and secondary levels accounted for 1.6% of Gross Domestic Product (World Bank, 2002). Elbadawy, Ahlburg, Assaad & Levison (2009) indicate that although private tutoring has long existed in Egypt, it has become widespread over the last few decades. Tutoring in many African countries is largely a by-product of exam-driven systems of education whose goal is to provide students with credentials and as such tutoring is used to acquire exam-taking skills.

In Kenya, a 1997 national sample of 3233 Standard six pupils found 68.6% receiving tutoring, ranging from 39.0% in North Eastern province to 74.4% in Nyanza Province (Nzomo, Kariuki & Guantai, 2001). A parallel survey in three districts in Kenya indicated that tutoring was much more common in urban than rural areas, and among boys rather than girls (Buchmann 2002), though this finding was not confirmed in subsequent research by Paviot, Heinsohn, & Korkman (2005), who investigated the coverage and growth of extra tuition in Southern and Eastern Africa and its linkages with pupil achievement.
2.3 Cost of Private Supplementary Tutoring

The actual cost of private supplementary tutoring is difficult to establish because most tutors may not be willing to divulge information. This is mainly because tutors are the teachers who may be prohibited from providing such paid tutoring to the children for whom they already have responsibility in the mainstream. However, there are some studies which have given estimates of the costs of tutoring in different countries. Such studies show that tutoring consumes huge amounts of money. For example in Japan, tutoring had annual revenues in the mid-1990s equivalent to US$14,000 million (Russell, 1997). In Singapore, which has a population of only 3 million compared with 125 million in Japan, a study by George (1992) indicated that households were spending about US$200 million on private supplementary tutoring.

A study by Gibson (1992) in Myanmar estimated that mainstream high schools in the capital city consumed 16 per cent of the incomes of the students’ families, and that tutoring raised this figure to 27 per cent. In Cambodia, even at the primary level, supplementary tutoring has been estimated to consume 7 per cent of the total cost of schooling (Bray, 1999); and the costs of tutoring escalate substantially at the secondary level (Asian Development Bank, 1996). Most dramatic of all, parents in the Republic of Korea are reported to have spent US$25,000 million on private tutoring during 1996, which was equivalent to 150 per cent of the government’s budget (Bray, 2007). Typical households spent the equivalent of US$1,950 a year on tutoring for each child in secondary school, and US$1,500 for each child in primary school.

In Egypt, private tutoring was estimated in 1994 to consume 20 per cent of total household expenditures per child in urban primary schools and 15 per cent in rural primary schools (Fergany, 1994). In most cases, the greatest components in these figures are the fees paid to tutors and their agencies. In most settings, charges increase
at higher levels of the education system, and individual tutoring is more costly per person than group work.

In addition to fees, students must pay for books, stationery, and travel. Increasingly, students also have to purchase computers and associated equipment. The Japanese Government estimated that in 1996, 72 per cent of the household expenditures on supplementary learning by upper secondary school students was consumed by fees for tutors, while the remainder was consumed by stationery, books and other items (Bray, 2007). At the lower secondary level, 85 per cent of expenditures were allocated to fees, with 15 per cent being consumed by materials and other items.

Private tutoring also has a substantial opportunity cost, not only for tutors but also for students. The opportunity cost arises from the time spent in lessons and from the time for preparation, administration and travel. One study in Malaysia (Marimuthu et al., 1991) found that although 70 per cent of students receiving tutoring spent less than three hours a week in travel to and from tutors, 17 per cent spent more than six hours a week. The consequence of the figures on direct expenditures is that tutoring gives substantial incomes to large numbers of tutors. Some of them already have other sources of income, e.g. as teachers in mainstream schools, but others have no alternative sources of income. Because tutoring is mostly a shadow activity, much of the revenue received by tutors is beyond the reach of government tax collectors (Bray, 2007).

2.4 Frequency/Intensity of Private Supplementary Tutoring

Not all students, even within particular locations, receive tutoring for the same duration each day or week. Bray (2007) indicates that supplementary tutoring is more common at the secondary than at the primary level, and as African countries expand
their secondary provision they catch up with Asian and Latin-American countries not only in formal schooling but also in supplementary tutoring. Private tutoring is also more evident in systems in which success in examinations can easily be promoted by investment in private supplementary tutoring; and private supplementary tutoring becomes more necessary in systems which are teacher-centred rather than child-centred, and which are intolerant of slow learners.

A study in Sri Lanka by de Silva (1994) showed that the duration of tutoring received by science specialists in Year 13 was almost three times that received by arts specialists and nearly twice that received by commerce specialists. The study also established that the intensity of tutoring varied according to the time of year. In parallel Malaysian research (Marimuthu et al., 1991), 70 per cent of students sampled who were receiving tutoring did so throughout the year, while the others only received tutoring prior to important examinations. Students may attend several tutors for different subjects or even for different components of the same subject. Wijetunge (1994) has remarked with reference to Sri Lanka that students preparing for the Advanced Level examinations commonly feel compelled to seek out the ‘experts’ for various sections or topics within a single subject, to the extent that even four or more tutors per subject no longer raises eyebrows.

An alternative indicator of intensity is the number of subjects in which students receive tutoring. Chew & Leong (1995) analyzed the number of subjects taken by 4,340 primary and secondary students in Malaysia, finding that over half the students received tutoring in only one or two subjects, but nearly 20 per cent received tutoring in five or more subjects. The intensity of private tutoring may also vary because of other factors. As one might expect, children in higher socio-economic groups generally receive more supplementary tutoring than do children in lower socio-
economic groups (Stevenson and Baker, 1992). Some societies also exhibit variations by race. Chew & Leong (1995) elaborated on the Malaysian data by showing a racial breakdown, whereby a higher percentage of Indian students received supplementary tutoring than did Malays, with Chinese students occupying an intermediate position.

In general, the subjects given most attention in private tutoring are the ones most needed for educational and therefore socio-economic advancement. Commonly this means languages, mathematics and science. Kwan-Terry (1991) has highlighted the importance of languages in countries where English is a second language. In such countries, English is essential for advancement, but students must also have competence in another language, such as Kiswahili in Kenya or a mother tongue. In Singapore, Kwan-Terry’s (1991) research found 55 per cent of primary students and 29 per cent of secondary students receiving tutoring in English and/or a second language. Demand for English tutoring was lowest with children from homes where the parents used English, probably because the parents felt that their children already had adequate exposure. However, these children formed the largest percentage receiving tutoring in the second languages. The reason was that the second languages were essential for advancement, the English-medium homes were generally wealthy, and the children would not have had much out-of-school exposure to second languages in the absence of supplementary tutoring. Many children from non-English-medium homes received classes in English to boost their grades, but the proportion from Malay families was relatively low because those families were generally less prosperous (Kwan-Terry, 1991).

2.5 Effects of Private Supplementary Tutoring

Private tutoring can have a number of effects, but the most debated of these is the effect that supplementary tutoring has on academic achievement. This is
understandable because parents enroll their children for private tutoring to improve performance in examinations, which is due to an educational system that puts emphasis almost entirely on examinations. Different studies on impact of private tutoring on academic achievement have reached divergent findings, and Bray (2007) recommends that this domain is in particular need of further research.

In a study carried out by Kulpoo (1998) in Mauritius, a test of reading literacy was administered to a selected sample of Grade 6 pupils, and the results compared with a number of input variables. Extra tuition was shown to be among the strongest factors, together with other factors like the language (English or mother tongue) spoken in the home and the socio-economic level of the family. Supplementary tutoring explained considerably more of the variation in test scores than did the frequency of teachers’ meetings with parents, the location of pupils’ homes, the nature of school furniture, or the access to classroom libraries.

In Greece, Polydorides (1986) conducted a study among senior high school students and found some positive correlations between private tutoring and academic achievement, but they were much weaker and not completely consistent. In Japan, Sawada and Kobayashi (1986) analyzed the effect of private tutoring attendance on mathematics performance of upper elementary and lower secondary students. The study, which covered 375 pupils in eight schools, established that time spent in private tuition gave students greater opportunities to learn, and that this resulted in higher scores in problems requiring arithmetic calculation and algebra. However, the researchers did not find higher scores in arithmetic application and geometry. This may be taken to reflect the types of curricular emphasis which dominated the private tuition sessions.
In Africa, two studies have been conducted in Egypt. In one of these, Fergany (1994) reports a 990/91 survey of 18,000 pupils in the primary and preparatory stages of education. Variables that were found to have no significant effect on pupil achievement included gender, private tutoring and in-school tutoring groups. Fergany conducted follow-up research at the primary level in 1994. This survey focused on three different parts of the country and covered 4,729 households with 7,309 individuals. The researchers again found no statistically significant correlations between private tutoring and achievement (Fergany, 1994).

One conclusion from these mixed results is that more research is needed on the topic. Meanwhile, planners cannot assume that private supplementary tutoring either does or does not necessarily increase academic achievements of pupils. Much presumably depends on: the content and mode of delivery of the tutoring; the motivation of the tutors and the tutees; the intensity, duration and timing of tutoring; and the types of pupils who receive tutoring (Bray, 2007). Logically, one would expect, as noted by Sawada and Kobayashi (1986) that even a minimum of tutoring would provide more time on task and therefore more opportunity to learn. However, the research has not demonstrated that this is always translated into achievement as measured by test scores.

There are also other effects of private supplementary tutoring other than academic achievement. Evidence from a range of contexts shows that private tutoring may affect the dynamics of teaching and learning in mainstream classrooms (Bray, 2007). For example, where all students receive supplementary tutoring, mainstream teachers may not need to work so hard. Where some students receive supplementary tutoring but others do not, mainstream teachers may be confronted by greater disparities within their classrooms than would otherwise be the case. Some teachers respond to
these disparities by assisting the slower learners; but others may take the students who receive tutoring as the norm, and permit the gaps between students to grow. In the latter case, all parents are placed under pressure to invest in private tutoring for their children.

When supplementary tutoring helps students to understand and enjoy their mainstream lessons, it may be considered beneficial. De Silva (1994) observed that supplementary tutoring can enable remedial teaching to be undertaken according to individual needs. Supplementary tutoring may also help relatively strong students to get more out of their mainstream classes, exploring various dimensions in greater depth. Yiu (in Bray, 2007) reported that Hong Kong teachers in his study of upper secondary classes were positive about supplementary tutoring.

Sometimes, however, supplementary tutoring is reported to have a negative effect on mainstream classes. Writing about Kuwait, Hussein (1987) stated that tutoring had caused a great lack of interest on the part of students. Hussein continued to say that students had reached the point of thinking that as long as they can pay someone who will show them how to pass their examinations; they do not need to attend school classes except when they are required to do so by school regulations. Making a related comment with reference to Sri Lanka, Nanayakkara & Ranaweera (1994) indicated that some students do not pay adequate attention to lessons in the mainstream system either because they have already covered the topics with the private tutor, or because they are unimpressed by the teaching styles in the mainstream system. Nanayakkara & Ranaweera (1994) referred to a study that indicated that the majority of students, particularly in the higher grades, felt that the quality of instruction in the tuition class was superior to that in the school.
For many participants, supplementary tutoring also leads to fatigue. Most obviously affected are the pupils who go straight from mainstream school to supplementary class; but also affected are the tutors, especially when they are also mainstream teachers. Concerning Egypt, this was noted by Hargreaves (1997). It was also observed in Sri Lanka, where, according to de Silva (1994), everybody is tired because of the continuous teaching-learning process going on from morning until evening on weekdays and during weekends and school holidays, which denies both teachers and students sufficient rest and recreation. Not only does this produce fatigue in both teachers and pupils, it makes them relax when at school, thereby reducing the productivity of that part of each day.

Another factor, especially prominent in systems where supplementary tutoring is provided by teachers who already have responsibility for their tutees (students) in the mainstream system, concerns coverage of the syllabus. In a Moroccan survey by Caillods (in Bray, 2005), 62 per cent of science teachers at the junior secondary school level stated that the syllabus was so full that they could not cover all of it during normal school hours. Allied to this was the fact that 34 per cent of science teachers at this level provided supplementary tutoring. In the senior secondary schools, 70 per cent of teachers said that they could not cover the curriculum during normal hours, and an equivalent proportion indicated that they provided supplementary tutoring.

One major problem with this situation is that teachers might have an incentive to describe the curriculum as too full, and, as already noted, might deliberately slow down their pace of delivery in order to ensure that they have a market for the after-school supplementary classes. This is said to be a widespread practice in Bangladesh, Cambodia and Egypt, where, according to Bray (2007), some teachers even
deliberately omit from their mainstream lessons parts of the curriculum which they know are essential for success in examinations. Such teachers also have a vested interest in a harsh examination system and in the possibility of pupils repeating grades, and are thus likely to favor features of the education system which are not necessarily in the interests of the pupils.

2.6 Summary
This chapter has presented literature on the scale, cost, frequency, and effects of private supplementary tutoring. The literature reveals that data on supplementary tutoring is scarce, partly because most private tutoring is unofficial. The little existing data show that private tutoring is widespread. The literature shows that the trend is widespread in countries like Malta, South Korea, Taiwan, North America and Europe. Private supplementary tutoring is also increasing in scope in many African countries, such as Egypt, where Fergany (1994) established that 64.0% of urban primary children and 52.0% of rural ones were receiving supplementary tutoring. In Kenya, a few studies on the topic were identified, including Nzomo, Kariuki & Guantai (2001) whose studies were conducted in North Eastern and Nyanza Provinces; Paviot, Heinsohn, & Korkman (2005), who investigated the coverage and growth of extra tuition in Southern and Eastern Africa and its linkages with pupil achievement; and Buchmann (2002), who compared the scale of private tutoring in urban than rural areas. These past studies did not analyze the effects of private supplementary tutoring on academic performance of the students. The researcher did not come across any similar studies in Gatundu South district. To fill these research gaps, the study will find out the effects of private supplementary tutoring in secondary schools in Gatundu South District.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the procedures that were used to conduct the study. The chapter focuses on research design, target population, sample and sampling procedures, research instruments, data collection and analysis procedures.

3.2 Research Design

The study employed a survey research design to assess the effects of private supplementary tutoring on academic performance in Gatundu South District. According to Kothari (1985), survey concerns describing, recording, analyzing and reporting conditions that exist or have existed. The survey design is relevant to this study as the researcher only reported the state of affairs in the schools without manipulating variables.

3.3 Location of the Study

The study was carried out in Gatundu South District, one of the districts in the Kiambu County in the republic of Kenya. Majority of the residents of Gatundu south small scale coffee, tea and dairy farmers. Majority of the parents are able to invest in the education of their children.

Singleton (1993) argues that the ideal setting for any study should be easily accessible to the researcher and should be that which permits instant rapport with the informants. Gatundu South District was chosen because it is easily accessible to the researcher in terms of communication and convenience. The district was also chosen because despite the heavy investment in education, it continues to perform poorly compared to other districts in the Kiambu County and has been ranked at the bottom in national
examinations in the formerly central province. Private supplementary tutoring is widespread in this district, yet the national examinations results are less than satisfactory. It is therefore not clear whether parents and teachers in the district are aware of the actual advantages and disadvantages of private supplementary tutoring. To the best of the knowledge of researcher no similar studies have been conducted in the district to show whether the academic performance of those attending private supplementary tutoring is different from those who do not attend. The researcher, having come from the area, has special interests in education trends in the district. This makes the district a suitable location for the study.

3.4 Study Population

According to Borg and Gall (1989), population is defined as the members of a real or hypothetic set of people, events or objects the researcher wishes to generalize the results of the research. The target population was all the 31 secondary schools in Gatundu South District which have 31 head teachers, 362 teachers and the 8,149 students.

3.5 Sample Size and Sampling Procedures

Sampling is a means of selecting a given number of subjects from a defined population as representative of that population. Orodho (2010) defines sampling as the procedure a researcher uses to gather people, places or things to study. Any statements made about the sample should also be true of the population. It is however agreed that the larger the sample the smaller the sampling error.

Since the research cannot cover all the 31 secondary schools in Gatundu South District, a sample was selected to take part in the study. Out of the 31 secondary schools, the researcher employed simple random sampling to select 10 schools. The
10 schools were 32.2% of the target population, which is higher than the recommended minimum sample size of 10% (Gay, 1992). Stratified random sampling was used to ensure that all categories of schools are selected, that is, boys only, girls only and mixed gender schools.

From each of the 10 schools, random sampling was used to select 8 students from form two, 8 from form three and eight from form four, giving a total of 24 students. In mixed gender schools, stratified random sampling was used to ensure that equal number of boys and girls are selected.

Stratified random sampling was used to select three class teachers from each school, giving a total of 30 teachers. The three class teachers were selected from among the forms two, three and four class teachers. Head teachers from the 10 schools under study were involved. As such, the total sample size for the study was 240 students, 30 teachers and 10 head teachers making a total of 280 respondents.

3.6 Research Instruments

The study utilized questionnaires (appendices A, B& C) for data collection. Three types questionnaires were used, one for students, one for teachers and the other for head teachers. The questionnaire was used for data collection because, as Kiess and Bloomquist (1985) observe, it offers considerable advantages in the administration: it presents an even stimulus potentially to large numbers of people simultaneously and provides the investigation with an easy accumulation of data. Gay (1992) maintains that questionnaires give respondents freedom to express their views or opinion and also to make suggestions.

The questionnaires collected data from head teachers, teachers and students on the effects of private supplementary tutoring performance. The questionnaire for students
had three sections. Section A consisted of the students’ personal details, including their gender, class, age, and academic performance. Section B gathered data on attendance of private supplementary tutoring, while Section C collected data on performance of students in previous teacher-made tests, and their views on the extent to which private tutoring helps them improve academic performance.

The questionnaires for teachers and head teachers (appendices B & C) had two sections. The first section gathered background information of the respondents such as academic qualifications and work experience. Section two had items for respondents to assess the effects of private tutoring on academic performance.

3.7 Pilot Study

According to Mugenda and Mugenda (1999), piloting refers to pre-testing of the research instruments by administering to a selected sample which is similar to the actual sample which the researcher plans to use in the study. Piloting of research instrument was carried out in two schools randomly sampled from the non-sampled schools before the commencement of the study.

The purpose of the pilot study was to help identify misunderstanding and ambiguity in the research instrument. This helps affirm the validity and reliability of the research instrument.

3.7.1 Reliability of the Instruments

Mugenda and Mugenda (1999) define reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trial. In order to improve the reliability of the instrument, the researcher, with the help of her supervisors, critically assessed the consistency of the responses on the pilot questionnaires to make a judgement on their reliability. Test-retest technique of
reliability testing was employed; whereby the pilot questionnaires were administered twice to the respondents, with a one week interval, to allow for reliability testing. Then the researcher examined the research instruments for appropriateness of items so as to identify any ambiguous and/or unclear items. Such items were restated to ensure that the respondents clearly understand them.

The Pearson’s product moment correlation coefficient formula was used to determine the correlation coefficient (r) between the two sets of scores. This involved administering similar test to same group after some period of time has passed, and then the two scores are tested for correlation using the following 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 X = first set of scores; Y = second set of scores; \(\sum X\) = the sum of the first set of scores; \(\sum Y\) = the sum of the second set of scores; \(\sum X^2\) = the sum square of the first set of scores; \(\sum Y^2\) = the sum square of second set of scores; \(\sum XY\) = the sum of cross product of X and Y and n = total number of respondents. To obtain the corrected coefficient, Spearman-Brown prophecy formula will be applied.

\[
Re = \frac{2r}{1+r}
\]

Where Re = reliability coefficient between the two sets of scores. Reliability coefficient of above +0.6 will be considered appropriate as recommended by Gay (1999).

### 3.7.2 Validity of the Instruments

Validity is defined as the accuracy and meaningfulness of inferences, which are based on the research results (Mugenda & Mugenda, 1999). In other words, validity is the degree to which results obtained from the analysis of the data actually represents the
phenomena under study. Borg and Gall (1989) define validity as the degree to which a
test measures what it purports to measure. Face validity refers to the likelihood that a
question will be misunderstood or misinterpreted, thus, will help to iron out
ambiguity. Pre-testing a survey is a good way to increase the likelihood of face
validity. According to Borg and Gall (1989), content validity of an instrument is
improved through expert judgment. Content validity refers to whether an instrument
provides adequate coverage of a topic. Expert opinions help to establish content
validity (Wilkinson, 1991). As such, the researcher sought assistance from her
supervisors and other experts from the University, in order to help improve content
validity of the instrument.

3.8 Data Collection Procedure
The researcher first sought a permit from the Ministry of education to carry out the
study. The Gatundu South District Education Officer (DEO) was requested to provide
data on the number of schools in the area out of which the study sample was selected.
A preliminary visit to the sampled schools was made and the head teachers were
informed about intention to carry out the study in their schools. A date to administer
the instrument was agreed upon by the researcher and the head teachers. On the
agreed dates, the researcher visited the sampled schools to administer the instruments.
The researcher conducted sampling of the subjects in each school as described in
section 3.5. The questionnaires were personally distributed to the respondents in a
normal school day. This direct method is preferred because in case a problem arises it
would be dealt with immediately. The method also enhances face to face
communication with the respondents and the researcher was able to explain the
importance of the study and the necessity for the respondents to give genuine and
honest response. The respondents were also assured that the information they would
give would be treated with confidentiality and used only for the study. The researcher gave all the necessary directions to the respondents to ensure that they understand how to fill the questionnaires. As the respondents filled in the questionnaires, the researcher was available to clarify any misunderstood questions. The researcher allowed sufficient time for respondents to react to the items on the questionnaire after which the questionnaires were collected at an appropriate time. The data collection exercise took a period of two weeks.

3.9 Data Analysis Plan

The data collected was screened at the end of each day in order to determine inaccurate, incomplete, or unreasonable data and then improve the quality through correction of detected errors and omissions. After the screening, the data was coded and entered in the computer for analysis. Data analysis procedures employed involved both quantitative and qualitative procedures. Quantitative data was analysed using descriptive statistics such as frequency counts, means and percentages. Quantitative data analysis required the use of a computer spreadsheet, and for this reason the Statistical Package for Social Sciences (SPSS) was used. Martin and Acuna (2002) states that SPSS is able to handle large amount of data, and given its wide spectrum of statistical procedures purposefully designed for social sciences, it is also quite efficient. Qualitative data was analyzed qualitatively using content analysis based on analysis of meanings and implications emanating from respondent information and comparing responses to documented data and literature on private tutoring and academic achievement. The qualitative data was presented thematically in line with the objectives of the study. The quantitative results of data analysis were presented using frequency distribution tables, bar graphs and pie charts.
CHAPTER FOUR
DATA ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter presents the results of the study based on analysis of data collected from the field. The chapter presents data analysis and discussion of the study findings on the effects of private supplementary tutoring in secondary schools in Gatundu South District. First, the chapter gives the background data of the study participants, after which results of the study are presented per each research objective.

4.2 Background Data of the Study participants

The study was conducted using a sample comprising of 240 students, 30 teachers and 10 head teachers making a total of 280 respondents. Among the 240 students, 149(62.1%) were boys while 91(37.9%) were girls. Table 4.1 shows the age distribution of the students.

Table 4.1: Age distribution of the students

<table>
<thead>
<tr>
<th>Age in years</th>
<th>No. of students</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-16</td>
<td>49</td>
<td>20.4</td>
</tr>
<tr>
<td>17-18</td>
<td>162</td>
<td>67.5</td>
</tr>
<tr>
<td>Above 18</td>
<td>29</td>
<td>12.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.1 shows that there were 162(67.5%) students who were aged between 17-18 years, 49(20.4%) who were between 15-16 years and 29(12.1%) were aged above 18 years.

Among the 30 teachers, 18 (60%) were female while 12 (40%) were male. There were 7 (70%) male headteachers and 3 (30%) female headteachers. Table 4.2 shows the work experience of the teachers and headteachers.
Table 4.2: Work experience of teachers and headteachers

<table>
<thead>
<tr>
<th>Work experience</th>
<th>Teachers</th>
<th></th>
<th>Head teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>5 years or more</td>
<td>17</td>
<td>56.7</td>
<td>8</td>
<td>80.0</td>
</tr>
<tr>
<td>2 – 5 years</td>
<td>8</td>
<td>26.7</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>1 year and below</td>
<td>5</td>
<td>16.7</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>10</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.2 shows that majority of the headteachers (80%) and teachers (56.7%) had work experience of 5 years and above. None of the headteachers had less than 1 year of work experience. This means that they had served in their schools long enough to know the scale, cost and effects of private supplementary tuition.

Table 4.3 shows the highest academic qualifications attained by headteachers and teachers.

Table 4.3: Academic qualifications of teachers and head teachers

<table>
<thead>
<tr>
<th>Academic qualifications</th>
<th>Teachers</th>
<th></th>
<th>Head teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Masters degree</td>
<td>6</td>
<td>20.0</td>
<td>3</td>
<td>30.0</td>
</tr>
<tr>
<td>Bachelor of education</td>
<td>23</td>
<td>76.7</td>
<td>7</td>
<td>70.0</td>
</tr>
<tr>
<td>B.A with PGDE</td>
<td>1</td>
<td>3.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
<td>10</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.3 shows that majority of the teachers (76.7%) and headteachers (70%) had Bachelor of Education Degrees while the rest had Masters Degrees.

4.3 Scale of Private Supplementary Tutoring

The first objective of the study was to assess the scale of private supplementary tutoring in secondary schools in Gatundu South District. To address this objective, the students were asked to indicate whether they had ever attended private supplementary tuition or not. Figure 4.1 below shows their responses.

![Pie chart]

Figure 4.1: Proportion of students attending private tuition

As shown in Figure 4.1, majority (95.0%) of the students in the study indicated that they had been attending private supplementary tuition, with only 5.0% not attending. All the 30 (100%) teachers and 7 (70%) head teachers agreed that their schools offered private supplementary tuition to students. This is an indication that private supplementary tuition is widespread in the schools. Baker, Akiba, Le Tendre and Wiseman (2001) indicate that supplementary tuition is widely attended by majority of
pupils, with 50% pupils attending in Czech Republic, Russia, Romania, Slovenia, Philippines and Slovak Republic; and in Latvia the proportion found that 68.6% of pupils were receiving tutoring, ranging from 39.0% in North Eastern province to 74.4% in Nyanza Province.

Table 4.4 shows the periods of time when the students attend private supplementary tuition.

**Table 4.4: Periods when private tuition is attended**

<table>
<thead>
<tr>
<th>Period of attendance</th>
<th>Students</th>
<th></th>
<th>Teachers</th>
<th></th>
<th>Headteachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>During school term on weekends</td>
<td>184</td>
<td>76.7</td>
<td>5</td>
<td>16.7</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>During school holidays</td>
<td>31</td>
<td>12.9</td>
<td>22</td>
<td>73.3</td>
<td>8</td>
<td>80.0</td>
</tr>
<tr>
<td>During school term in the evening</td>
<td>13</td>
<td>5.4</td>
<td>3</td>
<td>10.0</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>Never attended/ offered tuition</td>
<td>12</td>
<td>5.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>240</td>
<td>100.0</td>
<td>30</td>
<td>100.0</td>
<td>10</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.4 shows that 184(76.7%) of the students attend private supplementary tutoring during school term on weekends, 31(12.9%) attend during school holidays, 13(5.4%) during school term in the evening and 12(5.0%) did not attend. The table further indicates that majority of the teachers (73.3%) and headteachers (80%) indicated that tuition in their schools is offered during school holidays.

Another indicator of the scale of private supplementary tuition is the number of times that students attend per week. The students were asked to indicate how often they attend private tutoring, to which they responded as shown in Figure 4.2 in the following page.
Figure 4.2: Rate of attendance of private tuition

As shown in Figure 4.2, majority of the students (74.1%) attended private tuition once a week, with a few attending daily (8.8%). Among the 12 students not attending tuition, 9(3.8%) indicated they would like to be attending while 3(1.3%) would not wish to attend. Six (2.9%) students failed to attend tuition because they cannot afford the private tuition fees while 3(1.3%) cannot because no one is offering tuition near their home area. Table 4.5 shows when the students started attending private supplementary tuition.

Table 4.5: Class at which students started attending private tuition

<table>
<thead>
<tr>
<th>Class</th>
<th>No. of students</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>In form two</td>
<td>126</td>
<td>52.5</td>
</tr>
<tr>
<td>In form three</td>
<td>93</td>
<td>38.8</td>
</tr>
<tr>
<td>In form one</td>
<td>9</td>
<td>3.8</td>
</tr>
<tr>
<td>Never attended</td>
<td>12</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.5 indicates that 126(52.5%) of the students started attending private tutoring in form two, 93(38.8%) started in form three, 9(3.8%) started while they were in form one and 12(5.0%) did not attend in any form. This is a clear indication that private tutoring in some instances is attended right from the time students join secondary education, a continuation of private tuition that takes place in primary schools. The
study established that 217(90.4%) of the students were attending private tutoring even in primary school.

The study also sought to establish the subjects in which students were attending private tutoring. This is presented in Table 4.6.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Students</th>
<th>Teachers</th>
<th>Headteachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>All subjects</td>
<td>180</td>
<td>75.0</td>
<td>4</td>
</tr>
<tr>
<td>Sciences</td>
<td>39</td>
<td>16.3</td>
<td>18</td>
</tr>
<tr>
<td>Languages</td>
<td>7</td>
<td>2.9</td>
<td>6</td>
</tr>
<tr>
<td>Humanities</td>
<td>2</td>
<td>0.8</td>
<td>2</td>
</tr>
<tr>
<td>Not attending/offering</td>
<td>12</td>
<td>5.0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

As shown in Table 4.6, 180(75.0%) of the students attended supplementary tutoring for all the subjects, 39(16.3%) attended tuition for science subjects, 7(2.9%) attended tuition for languages while 2(0.8%) attended tuition for the humanities. The table also shows that most of the teachers (60%) and headteachers (50%) indicated that tuition was offered in sciences. It therefore emerges that majority of the students were attending tuition for all subjects. Previous research by Kwan-Terry (1991) indicated that the subjects given most attention in private tutoring are languages, mathematics and science, since they are the ones most needed for educational and therefore socio-economic advancement. That most students were attending tuition in all subjects could be explained by the fact that private supplementary tuition is taking an economic as opposed to academic angle, whereby teachers offer tuition for economic gain, as noted by Bray & Kwok (2007).
Another question of importance to this research was the persons who conduct private supplementary tuition. It was important to understand whether teachers or non-teachers, and whether the teachers were from the same schools as students or from different schools. Out of the 30 teachers, 26 (86.7%) indicated that they had participated in offering private tuition. Table 4.7 shows the responses of students regarding persons who conduct private tuition.

<table>
<thead>
<tr>
<th>Who offers tuition?</th>
<th>No. of students</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers from my school</td>
<td>197</td>
<td>82.1</td>
</tr>
<tr>
<td>Teachers from other schools</td>
<td>20</td>
<td>8.3</td>
</tr>
<tr>
<td>Non-teachers</td>
<td>11</td>
<td>4.6</td>
</tr>
<tr>
<td>Not attending tuition</td>
<td>12</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.7 clearly shows that 197(82.1%) of the students were attending private supplementary tutoring conducted by teachers from their schools, 20(8.3%) were attending tuition offered by teachers from another school, while 11(4.6%) were attending tuition conducted by non-teachers. While it is important that supplementary tuition be offered by a teacher who has been with students in regular classes as they understand the weaknesses of such students, this could also introduce inequity for those who cannot attend tuition. Bray (2007), based on his research indicates that private tuition is often offered by the same teachers who teach students during regular classes.

It was also important to understand where private supplementary tuition is offered, that is, at school or outside the school. Table 4.8 presents data on this.
Table 4.8: Place where private tuition is offered

<table>
<thead>
<tr>
<th>Place</th>
<th>Students</th>
<th>Teachers</th>
<th>Headteachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>In my school</td>
<td>208</td>
<td>86.7</td>
<td>24</td>
</tr>
<tr>
<td>In a private/rented room</td>
<td>15</td>
<td>6.3</td>
<td>2</td>
</tr>
<tr>
<td>In another school</td>
<td>3</td>
<td>1.3</td>
<td>1</td>
</tr>
<tr>
<td>At student’s home</td>
<td>2</td>
<td>0.8</td>
<td>3</td>
</tr>
<tr>
<td>Not attending/offering tuition</td>
<td>12</td>
<td>5.0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>240</td>
<td>100.0</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 4.8 indicates that private supplementary tutoring was conducted at the students’ schools for 208 (86.7%) students, in a private /rented room for 15(6.3%) students, in another school for 3(1.3%) students, and for 2(0.8%) students it is done in their homes. The table also shows that majority of the teachers (80%) and headteachers (70%) indicated that tuition took place at their schools. Previous studies have shown that students receive private supplementary tutoring within the same institution and perhaps even in the same classroom and from the same teachers. Many children also receive tutoring on non-school days, that is, at weekends, during vacations and on public holidays (Bray, 2007).

The other indicator of the scale of private supplementary tutoring was the length of tuition sessions.

Table 4.9 shows the length of time that an average supplementary tuition session lasts.
Table 4.9: Average time per session

<table>
<thead>
<tr>
<th>Average time</th>
<th>Students</th>
<th></th>
<th>Teachers</th>
<th></th>
<th>headteachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Over two hours</td>
<td>202</td>
<td>84.2</td>
<td>23</td>
<td>76.7</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>One and a half hours</td>
<td>9</td>
<td>3.8</td>
<td>4</td>
<td>13.3</td>
<td>1</td>
<td>10.0</td>
</tr>
<tr>
<td>One hour</td>
<td>8</td>
<td>3.3</td>
<td>1</td>
<td>33.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Two hours</td>
<td>7</td>
<td>2.9</td>
<td>2</td>
<td>6.7</td>
<td>7</td>
<td>70.0</td>
</tr>
<tr>
<td>Less than one hour</td>
<td>2</td>
<td>0.8</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Not attending/offering tuition</td>
<td>12</td>
<td>5.0</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
<td><strong>10</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

This table shows that 202(84.2%) students go for an average time of over two hours per session, 9(3.8%) students go for one and a half hours, 8(3.3%) for one hour, 7(2.9%) attended for two hours while 2(0.8%) went for less than one hour. The table shows that 76.7% of the teachers agreed that a typical session takes on average over two hours, while 70% of the headteachers indicated two hours. This shows that in most instances a session of private supplementary tuition will take over two hours. A study in Canada indicated that 10.9% of 13-year-old students and 13.3% of 16-year-old students received 1 hour or more of extra school lessons or tutoring during a normal week (Council of Ministers of Education, Canada, 2000).

4.4 Cost of Private Supplementary Tutoring

The second objective of the study was to analyze the cost incurred through private supplementary tutoring per student in secondary schools in Gatundu South District. To address this objective, the study participants were asked to indicate how much they are charged for private tuition. Most of the teachers and headteachers declined to reveal how much they charged the students for tuition, and therefore they were excluded from this analysis.
The responses of the students are as shown in Table 4.10.

Table 4.10: Amount of money charged for private tuition

<table>
<thead>
<tr>
<th>Amount in Ksh</th>
<th>No. of students</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 per week</td>
<td>127</td>
<td>52.9</td>
</tr>
<tr>
<td>1500 per week</td>
<td>81</td>
<td>33.7</td>
</tr>
<tr>
<td>1750 per week</td>
<td>3</td>
<td>1.3</td>
</tr>
<tr>
<td>500 per session</td>
<td>15</td>
<td>6.3</td>
</tr>
<tr>
<td>1000 per session</td>
<td>2</td>
<td>0.8</td>
</tr>
<tr>
<td>Not attending tuition</td>
<td>12</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As shown in Table 4.10., 127 (52.9%) of the students were paying Ksh 1000 per week for private tuition, 81 (33.7%) were paying Ksh 1500 per week, while 3 (1.3%) were paying Ksh 1750 per week. Another 15 (6.3%) of the students were paying Ksh 500 per session while 2 (0.8%) were paying Ksh 1000 per session. The cost of private tuition differs from country to country. For instance, in Japan, tutoring had annual revenues in the mid-1990s equivalent to US$14,000 million (Russell, 1997). In Singapore, a study by George (1992) indicated that households were spending about US$200 million on private supplementary tutoring. In Egypt, Fergany (1994) estimated private tutoring to consume 20 per cent of total household expenditures per child in urban primary schools and 15 per cent in rural primary schools. No comparative studies were identified for Kenya.

The students were asked to indicate who pays for their private tuition fees, to which they responded as shown in Table 4.11.
Table 4.11: Persons who pay for private tuition fees

<table>
<thead>
<tr>
<th>person</th>
<th>No. of students</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent/guardian</td>
<td>222</td>
<td>92.5</td>
</tr>
<tr>
<td>Relative</td>
<td>6</td>
<td>2.5</td>
</tr>
<tr>
<td>Not attending tuition</td>
<td>12</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.11 indicates that the private tutoring fees for 222(92.5%) students are paid by their parents/guardian and for 6(2.5%) students are paid by their relatives. Normally it is the parent or guardian who pays for tuition as the government does not allocate financing for private tuition, which is also illegal.

Another issue of importance to the study was whether the students were always able to pay fees for private tuition; this is presented in Table 4.12.

Table 4.12: Ability to meet the classes cost

<table>
<thead>
<tr>
<th>Ability to pay</th>
<th>Students</th>
<th>Teachers</th>
<th>Headteachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Always</td>
<td>127</td>
<td>52.9</td>
<td>18</td>
</tr>
<tr>
<td>Sometimes</td>
<td>101</td>
<td>42.1</td>
<td>12</td>
</tr>
<tr>
<td>Not attending/offering tuition</td>
<td>12</td>
<td>5.0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

As shown in the table, out of the total respondents 127(52.9%) are always able to meet the private classes cost while 101(42.1%) meet their classes cost sometimes. It also emerges from the table that most of the teachers (60%) and headteachers (50%) reported that students were always able to pay fees for tuition. However, quite a significant proportion indicated that students were not always able to pay. The teachers indicated that those who are not able to pay are normally allowed to attend and pay when paying school fees for the next term (70%), while 30% indicated that
such students are not allowed to attend. When some students cannot afford to pay fees charged for private tuition, the outcome would be inequity in education provision, with the rich being favored by the system (Bray, 2007).

Table 4.13 shows the time when students are required to pay fees for private tuition.

**Table 4.13: Period when payments are done**

<table>
<thead>
<tr>
<th>Period of payment</th>
<th>No. of students</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before sessions begin</td>
<td>162</td>
<td>67.5</td>
</tr>
<tr>
<td>During each session</td>
<td>16</td>
<td>6.7</td>
</tr>
<tr>
<td>When money is available</td>
<td>50</td>
<td>20.8</td>
</tr>
<tr>
<td>Not attending tuition</td>
<td>12</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As shown in Table 4.13, payments of private tutoring for 162 (67.5%) students are required before sessions begin, for 50 (20.8%) students payment are required when money is available and for 16 (6.7%) students, payment is done during each session.

It was also important to establish the proportion of schools which had made private supplementary tuition compulsory. Therefore the respondents were asked whether their schools had ever made it compulsory for students to attend private supplementary tuition during school holidays, to which they responded as shown in Table 4.14.

**Table 4.14: Proportion of schools having compulsory tuition**

<table>
<thead>
<tr>
<th>Status of tuition</th>
<th>Students</th>
<th>Teachers</th>
<th>Head teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Tuition is compulsory</td>
<td>210</td>
<td>87.5</td>
<td>21</td>
</tr>
<tr>
<td>Tuition not compulsory</td>
<td>18</td>
<td>7.5</td>
<td>9</td>
</tr>
<tr>
<td>Not attending/ offering tuition</td>
<td>12</td>
<td>5.0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
The table 4.14 indicates that 210(87.5%) of the students have compulsory supplementary tuitions in their schools while 18(7.5%) attend voluntary supplementary tuition. In agreement, 7 (70%) headteachers and 21 (70%) teachers indicated that their schools require students to attend private tuition during school holidays. It therefore emerges that holiday tuition is compulsory in most of the schools. This is despite the fact the government has declared private tuition illegal.

4.5 Effects of Private Supplementary Tutoring

The third objective of the study was to examine the effects of private supplementary tutoring on academic performance of secondary school students in Gatundu South District. The respondents were asked how much they would consider private supplementary tuition to help students perform better in examinations, to which they responded as shown in Table 4.15.

Table 4.15: Students’ views on how private tuition helps in better performance

<table>
<thead>
<tr>
<th>Response</th>
<th>Students</th>
<th></th>
<th>Teachers</th>
<th></th>
<th>headteachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Helps much</td>
<td>214</td>
<td>89.2</td>
<td>23</td>
<td>76.7</td>
<td>7</td>
<td>70.0</td>
</tr>
<tr>
<td>Helps a little</td>
<td>23</td>
<td>9.6</td>
<td>6</td>
<td>20.0</td>
<td>3</td>
<td>30.0</td>
</tr>
<tr>
<td>Does not help at all</td>
<td>3</td>
<td>1.3</td>
<td>1</td>
<td>3.3</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>240</td>
<td>100.0</td>
<td>30</td>
<td>100.0</td>
<td>10</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.15 shows that 214(89.2%) students believe that the private tutoring helps much for better academic performance, 23(9.6%) of the students reported that it helps a little while 3(1.3%) felt that it does not help at all in academic performance of the students. The table also shows that majority of the teachers (76.7%) and headteachers (70%) concurred with their students that private tuition helps much in improving
academic performance. A number of studies have shown that some amount of private tuition improves academic performance. In Greece for instance, Polydorides (1986) found some positive correlations between private tutoring and academic achievement. In Japan, Sawada and Kobayashi (1986) established that time spent in private tuition gave students greater opportunities to learn, and that this resulted in higher scores in problems requiring arithmetic calculation and algebra.

However, there are researchers who have found negative outcomes of private tuition. One of them is Bray (2007), who finds that private tutoring may affect the dynamics of teaching and learning in mainstream classrooms. For example, where all students receive supplementary tutoring, mainstream teachers may not need to work so hard. In Kuwait, Hussein (1987) stated that tutoring had caused a great lack of interest on the part of students, while Nanayakkara & Ranaweera (1994) indicated that some students do not pay adequate attention to lessons in the mainstream system either because they have already covered the topics with the private tutor, or because they are unimpressed by the teaching styles in the mainstream system.

The respondents were asked to rate the performance of students attending private tuition and those not attending, to which they responded as shown in Table 4.16.

<table>
<thead>
<tr>
<th>Performance</th>
<th>Students</th>
<th>Teachers</th>
<th>Headteachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Those who attend perform well</td>
<td>202</td>
<td>84.2</td>
<td>26</td>
</tr>
<tr>
<td>All are the same</td>
<td>37</td>
<td>15.4</td>
<td>4</td>
</tr>
<tr>
<td>Those who do not attend perform well</td>
<td>1</td>
<td>0.4</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
As shown table 4.16, 202(84.2%) of the students indicated that those students who attend private tutoring perform well compared to those who do not attend, 37(15.4%) indicated that they are all the same while only 1(0.4%) felt that those who do not attend perform well compared to those who do. Majority of the teachers (86.7%) and headteachers (80%) agreed with their students that students who attend private tuition perform better.

The students were also asked to compare their school teachers with those offering tuition, to which they responded as shown in Table 4.17.

Table 4.17: Comparison of tuition and regular class teachers

<table>
<thead>
<tr>
<th>Comparison</th>
<th>No. of students</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>School teachers teach better</td>
<td>112</td>
<td>46.7</td>
</tr>
<tr>
<td>All are the same</td>
<td>82</td>
<td>34.2</td>
</tr>
<tr>
<td>Private tuition teachers teach better</td>
<td>46</td>
<td>19.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>240</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.17 shows that 112(46.7%) of the students rated their regular class teachers teach better than those of the private tuition teachers, 82(34.2%) indicated that they are all the same and 46(19.2) found the private tuition teachers to be better. There are studies that show that teachers tend to offer better quality instruction during private tuition than in mainstream classes to strengthen their case for the income-generating private tuition. For example, Nanayakkara & Ranaweera (1994) reported that the majority of students felt that the quality of instruction in the tuition class was superior to that in the school.
4.6 Suggestions on Private Supplementary Tutoring

The fourth study objective was to identify structures that can enable students tap identified benefits of private tutoring while at the same time protecting them from any harmful effects of private tutoring. The teachers and headteachers were asked to give their opinion on whether schools should encourage or discourage private supplementary tuition or not. In response, 25 (83.3%) teachers and 4 (40%) headteachers indicated that it should be encouraged while the rest indicated that it should be discouraged. Table 4.18 shows the reasons given by the teachers and headteachers for their views.

Table 4.18: Reasons why tuition should be encouraged or discouraged (N=40)*

<table>
<thead>
<tr>
<th>Reasons why tuition should be encouraged</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>It improves academic performance</td>
<td>21</td>
<td>52.5</td>
</tr>
<tr>
<td>Helps teachers cover the syllabus</td>
<td>16</td>
<td>40.0</td>
</tr>
<tr>
<td>Assists students to prepare adequately for final exams</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>More contact hours are created</td>
<td>1</td>
<td>2.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reasons why tuition should be discouraged</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students and teachers are overworked</td>
<td>8</td>
<td>20.0</td>
</tr>
<tr>
<td>Poor parents cannot afford the fees</td>
<td>7</td>
<td>17.5</td>
</tr>
<tr>
<td>Infiltration by inexperienced tutors who offer poor quality tuition</td>
<td>2</td>
<td>5.0</td>
</tr>
<tr>
<td>Commercializes teaching</td>
<td>1</td>
<td>2.5</td>
</tr>
</tbody>
</table>

*Values are for teachers and headteachers combined

Those teachers and headteachers who felt that private tuition should be encouraged argued that it improves academic performance, it helps teachers cover the syllabus, more contact hours are created, and that it assists students to prepare adequately for final exams. On the other hand, those who felt that it should be discouraged argued that private tuition leads to students and teachers being overworked, poor parents
cannot afford the fees, there is infiltration by inexperienced tutors who offer poor quality tuition, and it commercializes teaching.

The teachers and headteachers were asked what else schools and the government should do to improve academic performance in schools. In response, the reported that:

- The government through the Ministry of Education should revise the syllabus to lower academic workload in secondary education. This way, teachers can cover the syllabus on time without having to offer private tuition.
- The government should recognize private tuition but develop a policy to ensure all students benefit from it.
- Schools should not turn down those who cannot afford to pay fees for private tuition.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of study, conclusion, recommendations and suggestions for further studies.

5.2 Summary of the Study

The goal of the study was to find out the effects of private supplementary tutoring in secondary schools in Gatundu South District. Data for the study was collected from 240 students, 30 teachers and 10 head teachers making a total of 280 respondents. Given below is a summary of the findings of the study.

On the scale of the private supplementary tutoring, the findings showed that private supplementary tuition is widespread in the schools. The Majority of the students indicated that they had been attending private supplementary tuition, with only a few not attending. All the teachers and majority of the head teachers agreed that their schools offered private supplementary tuition to students. It was established that most of the students attended private supplementary tutoring during school term on weekends while others attended during school holidays, majority of the teachers and headteachers indicated that tuition in their schools is offered during school holidays.

Majority of the students attended private tuition once a week, with a few attending daily. Even those who do not attend indicated that they would wish to attend if given the chance to do so. Only a negligible percentage of students indicated that they would not wish to attend the tuition. The study further found out that students started attending the private supplementary tuition as a soon as they joined high school. However the majority started attending in form three. Another finding of the study is
that majority of the students were attending tuition for all subjects, with 180(75.0%) of the students attending supplementary tutoring for all the subjects, 39(16.3%) attending tuition for science subjects, 7(2.9%) attending for languages while 2(0.8%) attended tuition for the humanities. That most of the teachers (60%) and headteachers (50%) indicated that tuition was offered in sciences.

Private supplementary tutoring was conducted at the students’ schools for 208 (86.7%) students, in a private /rented room for 15(6.3%) students, in another school for 3(1.3%) students, and for 2(0.8%) students it is done in their homes. Majority of the teachers (80%) and headteachers (70%) indicated that tuition took place at their schools. Another key finding was that 202(84.2%) students go for an average time of over two hours per session, 9(3.8%) students go for one and a half hours, 8(3.3%) for one hour, 7(2.9%) attended for two hours while 2(0.8%) went for less than one hour.

Regarding cost of supplementary tutoring, some of the students were paying Kshs 1000 per week for private tuition, while the majority was paying Kshs 1500 per week, while the least percentage was paying Ksh 1750 per week. Another 15 (6.3%) of the students were paying Ksh 500 per session while 2 (0.8%) were paying Ksh 1000 per session. Private tuition fees for the majority of the students were paid by their parents/guardian A few others had their fees paid by relatives. Further, the study established that biggest percentage of the students are always able to meet the private classes cost and only 101(42.1%) meet the tuition cost sometimes. Most of the teachers and head teachers reported that students were always able to pay fees for tuition.

Holiday tuition was found to be compulsory in most of the schools. Majority indicated that the tuition was compulsory in their schools and only a few were attending
voluntarily. In agreement, majority of head teachers and teachers indicated that their schools require students to attend private tuition during school holidays.

Regarding effects of supplementary tuition, the study established that most students believe that the private tutoring helps much for better academic performance. Only a few of the students felt that it does not help at all in academic performance of the students. Majority of the teachers and headteachers concurred with their students that private tuition helps much in improving academic performance. Majority of the students indicated that those students who attend private tutoring perform well compared to those who do not attend, 15.4% indicated that they are all the same while only 0.4% felt that those who do not attend perform well compared to those who do. On their part, most of the teachers and headteachers agreed with their students that students who attend private tuition perform better.

Majority of the teachers and of the headteachers indicated that private tuition should be encouraged, arguing that it improves academic performance, it helps teachers cover the syllabus, more contact hours are created, and that it assists students to prepare adequately for final exams. On the other hand, a few of them felt that it should be discouraged since it leads to students and teachers being overworked, poor parents cannot afford the fees, there is infiltration by inexperienced tutors who offer poor quality tuition, and it commercializes teaching.

5.3 Conclusions

Based on the findings of the study as summarized above, it can be concluded that private supplementary tuition is widespread in schools. Most of the schools in Gatundu South District were offering private supplementary tuition despite the fact that the government has declared it illegal. The study also concludes that students
attending private tuition spend an average of Ksh 1000 to Ksh 1750 a week, while those attending during the school term spend between Ksh 500 and Ksh 1000 per session. This is high considering that most Kenyans live below the poverty line. It can also be concluded that students attend private tuition for all subjects, meaning private tuition is not being offered only for the areas where students are weak. This is probably due to an overloaded curriculum, making schools to offer supplementary tuition to enable teachers complete the syllabus on time. The study also shows that private supplementary tuition has positive effects since respondents indicated that it helps much in improving academic performance. The study finally concludes that while private supplementary tuition may have academic benefits, too much of it may be counterproductive as students and teachers become fatigued.

5.4 Recommendations

Based on the findings of the study, the researcher recommends that the ministry of education should come up with a way of regulating private supplementary tuition instead if making it illegal. Teachers should only offer supplementary tuition in subjects where students have difficulties as opposed to all the subjects. At the same time schools should emphasize on remedial teaching which aims at addressing the individual student’s areas of weakness instead of teaching all students enmasse. Secondly the schools should make the tuition accessible by charging the parents levies that are affordable by all the students. Students who are unable to pay should be allowed to attend so that they can also reap the benefits of this tuition. Thirdly, teachers should endeavor to maximally utilize the mainstream contact hours with students since majority of students believe that more contact time with the teachers helps improve academic performance. This could also minimize the scale of the commercial dimension of the private supplementary tuition. Finally, the re-evaluation
of the school curriculum with a view to offloading some of the content will protect students from too much academic work which is difficult to cover within the mainstream time. This could also protect them from commercially inclined tutors who hide under the cover of the wide and intense syllabi to exploit students and their hapless parents.

5.5 Suggestions for further studies.

- The study was conducted in only one district. Further research could extend to other districts in Kenya.

- The research focused on secondary schools. Studies could also be carried out in primary schools to determine the effects of private supplementary tuition on academic performance.

- The study focused on effects of private supplementary tutoring on academic performance. Further research could look out for the effects of the supplementary tuition on other behavior aspects of students.
REFERENCES


APPENDIX A

STUDENTS’ QUESTIONNAIRE

Introduction
This research is meant for academic purposes. Kindly you are requested to provide answers to these questions as honestly and precisely as possible. Responses to these questions will be treated as confidential. Do not write your name or that of your school anywhere on this questionnaire. Please tick [✓] where appropriate or fill in the required information on the spaces provided.

Part A Background Information
1. Your gender
   i) Male [ ]
   ii) Female [ ]
2. Your age in years. ………………. yrs
3. Form
   i) Form 2 [ ]
   ii) Form 3 [ ]
   iii) Form 4 [ ]

GENERAL QUESTION
1. Have you ever attended private supplementary tutoring?
   [ ] Yes
   [ ] No

Important Notes
*If you have ever attended Private Tuition, Continue with Part C and D

*If you have never attended Private Tuition, Jump to Part D and E
PART B: SCALE OF PRIVATE SUPPLEMENTARY TUTORING

(For those who attend private tutoring)

2. When do you attend private tuition sessions? (tick all that apply)
   [ ] During school holidays
   [ ] During school term in the evenings
   [ ] During school term on weekends
   Others (specify) ......................................................

3. How often do you attend private tuition?
   [ ] Daily  [ ] 4 – 5 days a week
   [ ] 2 – 3 days a week  [ ] Once a week
   Others (specify) ......................................................

4. When did you start attending private tuition?
   [ ] In form one  [ ] In form two
   [ ] In form three  [ ] In form four

5. Were you attending private tuition when in primary school?
   [ ] Yes  [ ] No

6. For which subjects do you attend private tuition? (tick all that apply)
   [ ] Mathematics  [ ] Chemistry
   [ ] English  [ ] Biology
   [ ] Kiswahili  [ ] Physics
   [ ] Religious education  [ ] Accounts
   Others (specify) ......................................................

7. Who are involved in conducting the private tuition classes that you attend?
   [ ] Teachers from my school
   [ ] Teachers from other schools
   [ ] Non-teachers

8. Where is the private tuition sessions conducted?
   [ ] In my school  [ ] In another school
   [ ] At my home  [ ] In a private/rented room

9. How long does a private tuition session last on average
   [ ] Less than one hour  [ ] One hour
   [ ] One and a half hours  [ ] Two hours
   [ ] Over two hours
PART C: COST OF PRIVATE SUPPLEMENTARY TUTORING

(For those who attend private tuition)

10. How much are you charged for the private tuition?
   KShs --------------- Per month
   KShs --------------- Per session
   KShs --------------- Per week

11. Who pays for your private tuition fees?
   [  ] Parent/guardian
   [  ] Relative
   Others (specify) ....................................

12. Are the persons indicated above able to meet the cost of private tuition for you?
   [  ] Always          [  ] Sometimes

13. When are you required to make payments for private tuition?
   [  ] Before sessions begin
   [  ] During each session
   [  ] When money is available
   Others (specify) ..............................

14. Has your school ever made it compulsory for students to attend holiday tuition?
   [  ] Yes          [  ] No

15. If YES, how much did the school charge for the tuition?
   KShs--------------------

PART D: EFFECTS OF PRIVATE TUITION ON PERFORMANCE

(For both those attending and those not attending private tuition)

16. Indicate the class position and grade obtained during last term’s end of term examinations
   Grade obtained..............
   Class position............... Out of............

17. How much would you consider private tuition to help students perform better in examinations?
   [  ] Helps much    [  ] Helps a little    [  ] Does not help at all
18. How would you rate the performance of students who attend private tuition with those who do not attend?
[ ] Those who attend perform well
[ ] Those who do not attend perform well
[ ] All are the same

19. How would you compare your school teachers with those who offer private tuition?
[ ] School teachers teach better
[ ] Private tuition teachers teach better
[ ] All are the same

PART E: REASONS FOR NOT ATTENDING PRIVATE TUITION
(For those not attending private tuition)

20. Would you like to be attending private supplementary tuition?
[ ] Yes [ ] No

21. If yes, why have you not been attending?
[ ] I cannot afford
[ ] No one is offering tuition near my home area
[ ] My parents/guardians refused
Others (specify)…………………………

22. If No, why do you find it not necessary to attend?
[ ] I perform well in exams
[ ] It does not add value to my learning
[ ] Am simply not interested
[ ] It is a waste of time and money
[ ] Others (specify)……………………………………

Thank You for Your Co-Operation
APPENDIX B

QUESTIONNAIRE FOR TEACHERS

This research is meant for academic purpose. Kindly you are requested to provide answers to these questions as honestly and precisely as possible. Responses to these questions will be treated as confidential. Do not write your name or that of your school anywhere on this questionnaire. Please tick [✓] where appropriate or fill in the required information on the spaces provided.

Part A: Background Information

1. Your gender
   [ ] Male [ ] Female

2. Your age in years
   - Below 30 yrs [ ]
   - Between 31-35 yrs [ ]
   - Between 36-40 yrs [ ]
   - Between 41-50 yrs [ ]
   - Above 50 yrs [ ]

3. Tick below your teaching experience in years
   - 5 years and above [ ]
   - 2 - 5 years [ ]
   - 1 year and below [ ]

4. Which is your highest academic achievement?
   - Masters Degree [ ]
   - Bachelors Degree [ ]
   - Diploma [ ]
   - Others (specify) ..........................................................

5. How long have you been teaching in this school?
   - 1 – 3 years [ ]
   - 4 – 6 years [ ]
   - 7 – 10 years [ ]
   - Over 10 years [ ]
Part B Scale of Private Supplementary Tutoring

6. Does your school require students to come to school for private supplementary tutoring during weekends?
   [ ] Yes   [ ] No

7. Does your school require students to come to school for private supplementary tutoring during school holidays?
   [ ] Yes   [ ] No

8. Have you ever participated in offering private supplementary tutoring for students in your community?
   [ ] Yes   [ ] No

9. If YES,
   a. For which subjects did you offer private tutoring?
      [ ] Mathematics   [ ] Chemistry
      [ ] English   [ ] Biology
      [ ] Kiswahili   [ ] Physics
      [ ] Religious education   [ ] Accounts
      Others (specify)………………………………………………..

   b. Where were the private tutoring sessions held?
      [ ] In the school   [ ] In another school
      [ ] At my home   [ ] In the students’ homes
      [ ] In a private/rented room

   c. When were the private tutoring sessions conducted?
      [ ] During school holidays
      [ ] During school term in the evenings
      [ ] During school term on weekends
      Others (specify)………………………………………………..

   d. How long did tuition sessions take?
      [ ] Daily   [ ] 4 – 5 days a week
      [ ] 2 – 3 days a week   [ ] Once a week
      Others (specify)………………………………………………..
e. How long did the private tuition sessions take?

[ ] Less than one hour
[ ] One hour
[ ] One and a half hours
[ ] Two hours
[ ] Over two hours

**Part C: Cost Incurred through Private Tutoring**

10. On average how much did you charge for private tuition?

   Amount per hour…………………

11. Did all you students afford the fees charged for private tuition?

   [ ] Yes  [ ] No

12. If NO, what did you do about those who could not afford?

   [ ] Allowed to attend session and pay later
   [ ] Were not allowed to attend session
   [ ] Charged a cheaper rate

   Others (specify)…………………………………………………………………….

**Part D: Effects of Private Supplementary Tutoring**

13. How much would you consider private tuition to help students perform better in examinations?

   [ ] Helps much
   [ ] Helps a little
   [ ] Does not help at all

14. How would you rate the performance of students who attend private tuition with those who do not attend?

   [ ] Those who attend perform well
   [ ] All are the same
   [ ] Those who do not attend perform well
Part E: Recommendations and Way Forward

13. In your opinion, should schools encourage or discourage private supplementary tutoring for students?

[  ] Encourage it  [  ] Discourage it

Briefly explain your answer

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14. What else should schools and the government do to improve academic performance in secondary schools?

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Thank You for Your Co-Operation
APPENDIX C

QUESTIONNAIRE FOR HEAD TEACHERS

This research is meant for academic purpose. Kindly you are requested to provide answers to these questions as honestly and precisely as possible. Responses to these questions will be treated as confidential. Do not write your name or that of your school anywhere on this questionnaire. Please tick [✓] where appropriate or fill in the required information on the spaces provided.

Part A: Background Information

15. Your gender
   [ ] Male  [ ] Female

16. Your age in years
   Below 30 yrs  [ ]  Between 31-35 yrs  [ ]  Between 36-40 yrs  [ ]  Between 41-50 yrs  [ ]  Above 50 yrs  [ ]

17. Tick below your teaching experience in years
   5 years and above  [ ]  2 - 5 years  [ ]  1 year and below  [ ]

18. Which is your highest academic achievement?
   Masters Degree  [ ]  Bachelors Degree  [ ]  Diploma  [ ]  Others (specify) ..................................................

19. How long have you been the head teacher in this school?
   1 – 3 years  [ ]  4 – 6 years  [ ]  7 – 10 years  [ ]  Over 10 years  [ ]
Part B Scale of Private Supplementary Tutoring

20. Does your school require students to come to school for private supplementary tutoring during weekends?
   [ ] Yes    [ ] No

21. Does your school require students to come to school for private supplementary tutoring during school holidays?
   [ ] Yes    [ ] No

22. Have you ever participated in offering private supplementary tutoring for students in your community?
   [ ] Yes    [ ] No

23. If YES,
   a. For which subjects did you offer private tutoring?
      [ ] Mathematics     [ ] Chemistry
      [ ] English         [ ] Biology
      [ ] Kiswahili       [ ] Physics
      [ ] Religious education [ ] Accounts
      Others (specify)………………………………………………..

   b. Where were the private tutoring sessions held?
      [ ] In the school         [ ] In another school
      [ ] At my home           [ ] In the students’ homes
      [ ] In a private/rented room

   c. When were the private tutoring sessions conducted?
      [ ] During school holidays
      [ ] During school term in the evenings
      [ ] During school term on weekends
      Others (specify)………………………………………………..

   d. How long did tuition sessions take?
      [ ] Daily         [ ] 4 – 5 days a week
      [ ] 2 – 3 days a week  [ ] Once a week
      Others (specify)………………………………………………..
e. How long did the private tuition sessions take?

[ ] Less than one hour  [ ] One hour
[ ] One and a half hours  [ ] Two hours
[ ] Over two hours

Part C: Cost Incurred through Private Tutoring

24. On average how much did you charge for private tuition?

Amount per hour....................

25. Did all you students afford the fees charged for private tuition?

[ ] Yes  [ ] No

26. If NO, what did you do about those who could not afford?

[ ] Allowed to attend session and pay later
[ ] Were not allowed to attend session
[ ] Charged a cheaper rate

Others (specify).................................................................

Part D: Effects of Private Supplementary Tutoring

27. How much would you consider private tuition to help students perform better in examinations?

[ ] Helps much
[ ] Helps a little
[ ] Does not help at all

28. How would you rate the performance of students who attend private tuition with those who do not attend?

[ ] Those who attend perform well
[ ] All are the same
[ ] Those who do not attend perform well
Part E: Recommendations and Way Forward

15. In your opinion, should schools encourage or discourage private supplementary tutoring for students?

[   ] Encourage it   [   ] Discourage it

Briefly explain your answer

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16. What else should schools and the government do to improve academic performance in secondary schools?

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Thank You for Your Co-Op