# SECONDARY SCHOOL STUDENTS' PERCEPTION OF HOME SCIENCE SUBJECT IN NAIROBI PROVINCE



UNIVERSITY OF NAIROBI EASTAFRICANA COLLECTION

A Research Project Submitted In Partial Fulfillment of the Requirement for the Award of Master of Education Degree in Educational Administration and Planning. University of Nairobi



**OCTOBER 2005** 

### DECLARATION

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

### **GRACE OYIELA WAHOME**

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This research project has been submitted with my approval as university supervisor.

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# DEDICATION

I dedicate this study to my dear husband Solomon, and my children, Beth and Charity. I also dedicate this study to my mother, Tabitha Awinja Obbayi. Thank you dear mother for giving me the zeal for education.

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### ACKNOWLEDGEMENTS

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Appreciation also goes to my employer, the Teachers' Service Commission for granting me study leave, without which the completion of this study would have been impossible. I am also grateful to the home science teachers and students who participated in this study despite their heavy schedule.

My gratitude also goes to my mother who was constantly making a follow up of my study, giving me the zeal to go on. She is my pillar of strength, and I will forever be grateful to her.

I lack words to express my appreciation and gratitude to my beloved husband for his constant support morally, physically, psychologically, and most of all financially, not forgetting his encouragement and belief in me. May the almighty God richly reward him.

Last but not least, to my children, Beth and Charity, for their love, concern and endurance when mummy could not spare time for them. They truly understood and did homework on their own when I was busy with the project.

### ABSTRACT

Home science subject is a very vital area of study. Our day-to-day lives rotate around this subject, mainly being needlework, cookery, and housecraft. Unfortunately, it is not as popular as it should be, and particularly with the boy students.

To this end, specific objectives for this study were arrived at. Sufficient literature was reviewed that helped to concretize the problem under study. The literature developed into the history of home science in Kenya and abroad, the home science curriculum, and attitude of students towards home science based on previous researches.

This research was conducted using an ex-post -facto research design, which is used when data is being classified by major sub-groups of the population. A sample size of 156 respondents was used. Three types of sampling methods were used, for accurate findings from the sub-groups, which were used. These were, purposive sampling, probability sampling and simple random sampling.

Data was gathered through the use of the students' questionnaire. The instruments were pre-tested and their validity established as quite adequate. In addition, consultation and advise mainly from the supervisor was incorporated to increase the validity and reliability of the instruments before giving them to respondents.

The questionnaire return rate was 60%, which, according to central limit theorem is sufficient to enable us draw conclusions on the whole population. Tables, pie charts and

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graphs were employed in data analysis. After discussions of the findings of the study, recommendations were made as well as suggestions for further study.

The major finding of this study was that students were dissatisfied with the government policy to make home science subject an elective subject. In conclusion, since students still value the subject a lot, this study recommended that the government of Kenya should make home science subject a core subject. If not, the government should reduce the number of elective subjects that are grouped together with home science subject.

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# LIST OF ABBREVIATIONS

A.H.E.A	÷	American Home Economics Association
"A" level	-	Advanced Level
B.E.D.		Bachelor of Education
C.P.E.	-	Certificate of Primary Education
C/T		Clothing and Textiles
K.A.P.E	4	Kenya African Preliminary Examinations
K.C.P.E	2	Kenya Certificate of Primary Education
K.C.S.E	-	Kenya Certificate of Secondary Education
K.I.E.	-	Kenya Institute of Education.
M.O.E.S.T		Ministry of Education Science and Technology
"O" level	-	Ordinary Level
T.T.I's	-	Teacher Training Institutions
U.S.A	-	United States of America

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### **CHAPTER ONE**

#### **INTRODUCTION**

#### 1.0 Background to the study

Home economics was started at different times in Britain and North America and made rapid growth during the twentieth century. This made it possible for home economics programmes to be started in the former British colonies in Africa. The early leaders in home economics movement laid a firm foundation on which it has developed and prospered (Nyangi, 1992).

Before the arrival of the Europeans in Kenya, traditional education that existed played an important part in the lives of the Africans. The traditional education was informal in nature and consisted of imparting skills, knowledge, principles and attitudes and practices, which were handed down from one generation to another. It aimed at assisting children to fit in their own society and taught them love and respect for their families, clans, tribes, religions and traditions (Nyangi 1992) quoting Raju (1973).

The art of family living was one of the main areas of this traditional education and it was specifically taught by women. Young women and girls were taught by older women how to care and look after their families.

Nyangi (1992) quoting Sheffield (1964) states that Home economics programmes in Kenya were started at the beginning of the twentieth century initially through the church missionary institutions. Most girls' secondary schools where home science courses were introduced were first built on mission ground. Later on the government through the department of education, community development, agriculture and health administered home economics programmes. Today, the name home science is used to mean home economics subjects or programmes.

The founders of the American Home Economics Association in 1901 stated that the purpose of home economics was basically to improve the conditions of living in the home, the institutional household and the community (Onyango, 1985). It aimed at helping individuals and families to make intelligent decisions concerning all aspects of family life, including social, economics, aesthetic, managerial, health, and ethical aspects of family relations, child development, foods, clothing, and housing (Onyango, 1985).

Home science as a discipline, has undergone a great revolution in definition, academic status, content and scope in many countries of the world. Its' definition has evolved over the years from humble beginnings of cooking and sewing, housecraft, mother care, housewifery, hygiene, domestic science, rural science, domestic economy, and household management to more inclusive and academically sound definitions such as home science and home economics (Mugenda, 1995).

In the Lake Placid Conference of 1902 in the USA, home economics was defined as the study of laws, conditions, principles and ideas which are concerned on the one hand with mans' immediate physical environment, and on the other hand, with his nature as a social being, and is the study especially of the relation between these two factors (Mugenda, 1995).

In 1959, the American Home Economics Association defined home economics as the field of knowledge and service primarily concerned with strengthening family life through educating individuals for family living, improving the services and goods used

for families, conducting research to determine the changing needs of individuals and families, and the means of satisfying those needs, furthering community, national and world conditions favourable to family living (Mugenda, 1995).

In the late 1970's at the International Federation of Home Economics Council's meeting, the definition of home economics was examined again. The council defined home economics as a discipline that is concerned with using, developing and managing human and material resources for the benefit of individuals and families, institutions, and the community. This involves the study and research in sciences and the arts concerned with different aspects of family life and its interaction with the physical economic and social environment (Mugenda, 1995).

Brown and Paolucci (1979), as quoted by Mugenda (1995) viewed home science as a practical science because of the nature of the body of knowledge and the modes of inquiry involved in its' study. These definitions originated from the west and many African countries teaching home science have heavily relied on them for lack of better local definitions.

Home science initially started as a subject for women and girls in preparation for motherhood. Mugenda (1995) quoting Goodshell (1916) and Parker (1987) reports that the intellectual abilities of women were generally considered inferior if not non-existent. As a result, when they demanded more education, they were offered mostly subjects concerned with the home and family. Domestic science as the subject was known in the early days formed the core of women's formal education (Mugenda, 1995).

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Mugenda (1995) quoting Olaitan and Agusiobo (1981) noted that in Africa, domestic science was taught to older girls in special classes known as brides' class in preparation for their married life. The men to whom they were betrothed paid the fee. This information clearly shows that from the very beginning the subject was given a female gender identity.

On becoming independent, the government of Kenya saw the need to continue teaching home science subject. During the plan period 1970-1974, the government embarked upon a programme for the introduction of applied subjects in secondary schools. The importance of home science was emphasized in this plan period. Since a steady and reliable supply of technologists, technicians and craftsmen is essential for any nation attempting to industrialize and modernize its economy, the government has, since independence, created a technical education structure designed to provide training for a wide range of occupations.

Generally technologists are trained at the university level where degree courses in architecture, surveying, medicine and veterinary sciences are offered. A diploma course in domestic science has also been available. This is now being changed to a degree course at Kenyatta College (Republic of Kenya, 1970).

The development plan of 1974-1978 also reiterated the main objective of technical education (of which home science subject falls under). It stated that the main objective for this sector remained the same as in the 1970-1974 plan, namely to create a technical and applied education structure designed to provide training for a wide range of

occupations in order to assist in the industrialization and modernization of the economy (Republic of Kenya, 1974).

According to the development plan of year 1979-1983, the government again placed emphasis on home science subject, by envisaging expansion of facilities for the teaching of science and applied sciences (Republic of Kenya, 1979). In the development plan of 1997-2001, the government's key objectives and policies related to increasing enrolment and completion rates especially for primary education, streamlining financing of education, and improving the relevance of education within the context of industrialization (Republic of Kenya, 1997). In the current National Development Plan of 2002-2008, the government plans to lay down strategies to develop a national policy on vocational, technical education and training (Republic of Kenya, 2002).

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In an education administration conference report held at Jomo Kenyatta College of Agriculture and Technology in 1987, the then Minister of Education stated that the 8-4-4education programme placed a lot of emphasis on technical education at all levels of education. The curriculum taught was broad based, practically oriented and relevant to the needs of the youth and the country. The education provided would give students graduating at all school levels some scientific knowledge and practical skills that could be utilized for either self-employment, salaried employment or for further education and training.

At the primary school level the arts and crafts and home science subjects have been enriched to provide appropriate practical skills to students. Within secondary schools, industrial education, business education, home science, art and design form part of the practical oriented curriculum, which is offered along with the other subjects (Republic of Kenya, 1988).

#### 1.1 Statement of the Problem

The current KCSE examination awards regulations (of the year 2005) state that candidates must take a minimum of 7 subjects in order to be graded (to obtain an overall mean grade). These subjects are to be taken as follows:

GROUP	SUBJECT NAME	NUMBER OF SUBJECTS	COMMENTS
1	English Kiswahili Mathematics	1 1 1	All compulsory (3) a must
2	Biology Physics Chemistry	1 1 1	Any two (2) a must
3	History & Government Geography Christian religious education Islamic religious education. Hindu religious education. Social education & ethics	1	Any one (1) a must
Total			6 subjects

TABLE 1:Selection of groups 1, 2 and 3 subjects

(Source; KNEC, 2004)

The seventh subject can be obtained from the remaining subjects, that is either; (a) one

### science

Or (b) *one* subject from the remaining subjects in group 3,

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Or (c) *any* other subject from groups 4 and 5

Subjects in group 4

Home science, art and design, agriculture, woodwork, metalwork, building construction, power mechanics, electricity, drawing and design, aviation technology, and computer studies.

### Subjects in group 5

French, German, Arabic, music, accounting, commerce, economics and typewriting with

office practice (KNEC, 2004).

The figure below shows candidature enrolment in KCSE in the years 2002 and 2003, nationally.

	2002			2003	
SUBJECT NAME	FEMALE	MALE	FEMALE	MALE	
	No. SAT	No. SAT	No. SAT	No. SAT	
English	91,662	105,478	95,620	110,869	
Kiswahili	91,649	105,473	95,621	110,858	
Mathematics	91,647	105,471	95,615	110,865	
Biology	87,141	90,241	91,108	95,295	
Physics	15,312	38,868	16,094	40,403	
Chemistry	87,725	99,536	92,615	106,132	
Biological Science	20	17	7	20	
History and Government	37,041	47,807	43,047	54,356	
Geography	46,727	60,165	44,870	57,262	
Christian Religious Education	41,651	29,173	44,633	32,481	
Islamic Religious Education	1,466	2,699	1,550	2,709	
Hindu Religious Education	15	13	10	16	
Social Ethics & Education	23,384	24,452	25,677	26,856	
Home Science	9,400	434	9,323	551	
Art and Design	369	654	378	697	
Agriculture	40,515	48,158	43,062	51,651	
Woodwork	28	1,247	13	1,188	
Metalwork	4	360	5	359	
Building Construction	30	847	11	716	
Power Mechanics	5	274	4	319	
Electricity	12	496	22	478	
Drawing and Design	45	1,522	39	1,525	
Aviation Technology	1	26	1	32	

# TABLE 2:CANDIDATES ENROLMENT IN 2002 AND 2003 KCSEEXAMINATIONS IN ALL SUBJECTS

Computer Science	1,143	1,033	1,572	1,390
French	1,165	663	1,318	735
German	253	128	254	99
Arabic	140	324	178	333
Music	893	687	916	663
Accounting	3,253	9,929	3,663	7,099
Commerce	43,684	49,360	42,923	49,651
Economics	119	506	77	332
Typing and Office Practice	732	48	748	43

<sup>(</sup>Source; KNEC 2004)

From the table, in the year 2002, out of the optional subjects according to subjects in groups 4 and 5, commerce took the lead with 93,044 students, followed by agriculture with 88,673, and accounting with 13,182 students. Home science had 9,834 students.

In the year 2003, agriculture enrolled 94,713, followed by commerce with 92,574, and accounting with 10,762 students. Home science had 9,874 students.

The table also reveals that more female students study home science than male students. In the year 2002, 9,400 girls enrolled for home science compared to 434 boys. In the year 2003, 9,323 girls enrolled as compared to 551 boys.

This study was interested in finding out why home science has not been given priority by the curriculum developers as a major subject, although it is such an important subject in the life of everybody. The study also aimed at finding out why home science is not as attractive to students as for example agriculture or commerce, which are also optional subjects. There are factors underlying students' perception of home science subject. Perception deals with the way people interpret sensations, using knowledge and understanding of the world, so that they become meaningful experiences. These factors influence the enrolment of students in homescience subject, as seen in the table above.

### 1.2 The purpose of the study.

The main purpose of the study was to determine secondary school students' perception towards home science subject in Nairobi Province.

### **1.3** Objectives of the study.

- 1. To examine the effect of course content on students' perception towards home science.
- 2. To identify the effect of availability of facilities and equipment on students' perception towards home science.
- To assess the extent of influence of gender, on students' perception towards home science.
- 4. To determine how the extra costs that go directly into the subject affect students' perception towards home science.
- To investigate the influence of peer pressure and the community on students' perception towards homescience.
- 6. To ascertain the role teachers and parents play in the students' perception of home science.
- To investigate the influence of government policy on students' perception towards home science.

#### 1.4 Research questions

The research sought to answer the following questions concerning perception of secondary school students towards home science.

- 1) How does course content affect perception of students towards home science?
- 2) How does the availability of facilities and equipment affect students' perception towards home science?
- 3) To what extent does gender have on influencing students' perception towards home science?
- 4) To what extent do the extra costs that go into home science subject affect the way students perceive home science?
- 5) How does peer pressure and the community influence students' perception of home science?
- 6) What role do teachers and parents play in the way the students perceive home science?
- 7) In what way does government policy affect students' perception towards home science?

#### 1.5 Significance of the study

The research will assist Kenyan curriculum developers, implementers and policy makers in the Ministry of Education Science and Technology in understanding emerging perceptions of students in home science. While education design reforms cannot change society's entire education problem, it is indeed a positive step towards improving the future educational opportunities of home science subject.

Such knowledge will also be used in effective planning and policy formation regarding home science as a subject in Kenyan public secondary schools and teacher training institutions, to make the subject more rewarding and fulfilling to the students. The knowledge will also assist secondary school administrators to see the importance of home science and give it its rightful place in terms of provision of equipment and facilities in schools.

#### 1.6 Basic assumptions

The following were the assumptions of the study:

- The students' responses to the questionnaire items are genuine indicators of their perceptions and feelings towards home science.
- 2) That the respondents are knowledgeable and can completely give accurate responses to the questions raised through the questionnaire, without any bias of fear.
  - 3) That all schools offer home science as an optional subject.
  - 4) Schools are well equipped for the teaching of home science.

#### 1.7 Limitations of the study

Respondents' attitudes were likely to be associated with the way the subject teacher handles home science subject. This was likely to have a significant bearing on the responses.

Respondent bias was likely to be high. Experiences of the respondents on home science subject were to have a significant bearing on their opinions on the subject.

It was hard to prove whether the responses were genuine or not. Most respondents, by virtue of them being students, thought that the school would probe their responses. They might have therefore not given their subjective responses.

### 1.8 Delimitation of the study

The study was confined to public secondary schools in Nairobi Province, which is predominantly urban. The results of the study were therefore to be generalized with caution to the areas outside Nairobi Province, which have their own unique conditions.

#### **1.9 Definitions of significant terms**

The following are the operational meaning of terms and concepts as used in the study.

**Education**: the imparting and acquisition of knowledge, attitudes, and values to enable an individual to become a functional member of the society at the right attitude.

**Home science**: a discipline that is concerned with using, developing, and managing human and material resources for the benefit of individuals, families, institutions, and the community.

**Knowledge**: the learning that an individual has acquired through interaction with the school, curriculum and other people.

Learning: change in behaviour of the students to a desirable end.

**Perception**: the process by which data from the environment is interpreted to allow us to make sense of it.

Secondary school: a learning institution attended by students who have attained basic education.

**School:** an institution in which not less than ten pupils receive regular instruction or an assembly of not less than ten pupils for the purpose of receiving regular instruction.

**Secondary school curriculum**: the expressed and implied dimension under which a student passes through in order to qualify for KCSE as stipulated in the laws of Kenya.

Sensation: collection of data from the environment by means of senses.

Student: the person who receives the knowledge and learning offered in school, after official admission.

**Teaching**: the process of imparting knowledge, skills and attitudes by an expert using a set syllabus.

**8-4-4 Education system**: refers to the education system adopted in Kenya since 1984, to date and comprises eight years of primary education, four years of secondary education and four years of university education.

#### 1.10 Organization of the study

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The study was organized in five chapters. Chapter one consists of; background to the problem, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, basic assumptions, delimitations of the study, limitations of the study, definitions of significant terms, and organization of the study. Chapter two focuses on literature review, which is discussed as follows: perception, history of home science in Kenya, history of home science abroad, the home science curriculum, the summary and the conceptual framework. Chapter three describes the research methodology that was used in the study. This is divided into the following topics; research design, target population, sample and sampling technique, research

instruments, reliability of instruments, validity of instruments, data collection procedure, and data analysis procedure. Chapter four consists of findings from data analysis. Chapter five consists of a summary of the research findings, conclusion, recommendations and suggestions for further research in the area. The last section of the study included the bibliography and appendices.

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### **CHAPTER TWO**

#### LITERATURE REVIEW

According to Mugenda (1999), literature review involves the systematic identification, location and analysis of documents containing information related to the research problem being investigated. In this chapter, literature related to the study is reviewed under the following categories:

(1) Perception

(2) History of home science in Kenya

(3) History of home science abroad

(4) The home science curriculum

(5) Attitude of students towards home science.

#### 2.0 Perception

According to Malim and Birch (1998), perception can be said to be the process by which data from the environment is interpreted to allow us to make sense of it. In dealing with perception, consideration is given to sensation because they are used concurrently. Sensation relates to the collection of data from the environment by means of the senses. Perception relates to people's interpretation of this data, and it takes into account experiences stored in people's memory, the context in which the sensation occurs and the internal state (emotions and motivators). Connel and Philipchalk (1992) define perception as the psychological process by which one makes sense out of one's sensory inputs, in the light of experience, motivation and emotion, and contextual factors. According to Stewart and Wickens (1997), perception is the process through which sensations are interpreted, using knowledge and understanding of the world, so that they become meaningful experiences. Thus perception is not a passive process of simply absorbing and decoding incoming sensations. If it were, peoples' understanding of the environment would be poor indeed. The visual scene would be a constantly changing, confusing mosaic of light and colour. Instead, people's brains take sensations and create a coherent world, often by filling in missing information and using past experience to give meaning to what is seen, heard, or touched. By sharing experience, perceptions influence thoughts, feelings and actions (Stewart and Wickens, 1997).

This section discusses a number of theories, which have been advanced about perception. They include Gestalt approach, Gibsonian approach, the Empirical approach and the Information processing approach.

#### The Gestalt Approach

The Gestalt Movement began in Germany, around 1912. It was started by several psychologists who believed that perception was determined by the interaction between the physical properties of the external stimulus and various innately determined psychological principles or laws. For example, one of these innate principles, called the law of Pragnanz, holds that we tend to perceive the simplest and most stable figure of all the possible alternatives (Schiffman, 1990).

Connell and Phillipchalk (1992) quoting Arnheim (1986) state that, according to the Gestalt position, it is always the interaction between external stimulus and internal

psychological principles that determines what you actually perceive. That ones' mind imposes a kind of psychological order on the inputs one gets from the outside world.

### The Gibsonian Approach.

Psychologist James Gibson took the opposite point of view. He held that perception is direct and immediate. He further believed that sensory inputs impose order on ones' mind (Connell and Phillipchalk, 1992). According to Gibson ones' brain is hard wired to see the world as it really is. Put more precisely, Gibson believed that people can explain almost all perceptual experiences in terms of information to be found in the stimulus itself. Therefore what should be studied is stimuli, not internal processes.

According to Connell and Phillipchalk (1992), Gibson believed that there's a one-to-one correspondence between sensory inputs and perceptual experiences and that the genes determine this correspondence. Gibson didn't ask what goes on inside ones' head but rather asked what kind of stimulus world inside ones' head was made of.

#### The Empirical Approach

To be empirical is to rely on observation and experimental data more than on theory. Both Gibson and the Gestalt psychologists took the genetic (or naturist) viewpoint. But the more traditional viewpoint puts greater emphasis on learning (nurture) than on nature (Connel and Phillipchalk, 1992). According to the empirical position, perception is determined by two independent factors; present sensations and mental images of past experiences.

That is, Perception = sensory inputs + memories.

The empirical position holds that nobody was born with the innate knowledge that a coin is round, or with the ability to make use of the sensory stimuli coming from the coin. Rather, one learned through empirical observations that these types of inputs are typically associated with a class of round objects called coins. From the empirical point of view, one acquired the ability to see the world the way one sees it, including the roundness of coins (Coren and Ward, 1989)

#### The Information Processing Approach.

Information processing is the scientific study of how information inputs are received by the nervous system, processed, stored and how they lead to various decisions and response outputs. Information processing theories say that one typically perceives only certain critical features of the stimulus input. One then constructs a perception of a stimulus from these critical features. But it is ones' construction of the "coin"- not the "coin" itself that one perceives (Connel and Phillipchalk, 1992).

#### The four viewpoints compared

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The Gestalt and Gibsonian positions emphasize the innate properties of perception. The empirical and information processing theories focus on those aspects of perception that are learned. Gibson made the stimulus the most important part of perception. The empirical and the information processing views emphasize internal processing.

Gibson saw sensation and perception as being pretty much the same thing. The gestalt and empirical theorists believe that sensation and memory are totally independent processes, but that both influence perception. However, the information processing

theorists hold that sensation, perception, memory and cognition are all part of the same global process by which people construct representation of external reality. The individual processes cannot be separated because each affects the other (Best, 1989).

Each position begins with different assumptions about how people experience the world; each position approaches the study of perception differently. Nevertheless, people will see that each position has contributed to their understanding of the process of perception.

All the four viewpoints above will apply to this study. This is because, some students have the innate need to study home science subject, since they believe it is vital for individuals, families, and the society. The Gestalt and Gibsonian approaches apply here. On the other hand, other students perceive home science subject depending on their experience in the world, and how they have been socialized to the subject by their immediate environment, for example their parents, teachers, and peer group. Here, the empirical and information processing theories apply.

#### 2.1 History of homescience abroad

Home economics did not come into being suddenly. Nor was it the idea of any one person or group. It represents the results of many peoples' search for solutions to problems affecting individuals and families. Socrates was the first to advocate home economics.

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Xenophon, a Greek writer who lived four centuries before Christ wrote a dialogue called "economicus" which supposedly took place between Socrates and a young Greek (Tate, 1961). The dialogue discussed home and farm management and analyzed the means that led to success in such management. Infact, the modern science of economics began as household economics, as shown by the fact that the original meaning of "economics" was the management of the household or "home management".

The early colonists who settled in America had little if any, concern for the education of women. The lives lived by women did not demand formal education. The girl participated with the mother in the household work and management. Her work in the colonial days consisted mainly of keeping the home and raising the children .The woman did the spinning, weaving, preserving and canning. She was the butcher, the baker and the candlestick maker. She made soap, carded and dyed the yarn and styled and made the clothing for the family. She was the laundress, and family-life teacher. Education for homemaking in that day was in the home itself (Tate, 1961).

The earliest schools for girls were taught a little needlework and cooking. The dame schools flourished in America during 1700s and in many places became the primary schools (Tate, 1961).

In addition to the dame schools, the so-called finishing schools for girls became rather prominent in New England during the 1700's. In these schools, girls were taught mending, knitting, and other housewifery duties. Many private schools developed for girls. However, public schools for girls were very few until the later part of the 1800's.

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The development of the academies in the 1800's gave great impetus to women's education.

Practical work in cooking and sewing in USA developed early in the public schools. As early as 1798 in the Boston public schools, girls spent part of their time on needlework. Two of the earliest educators' were Mrs. Emma Hart Willard and Miss Catherine Beecher. Mrs. Willard discovered domestic science and art (home economics) as a school subject, and Miss Beecher developed it (Tate, 1961).

In 1822, Miss Beecher saw the need for teaching "domestic economy" and did much to get the work into the schools. Mrs. Mary Hemenway was another leader who did much to get domestic science into the public schools in Boston and as a result, in 1872, the Massachusetts legislature passed an act, making sewing and other industrial education subjects legal throughout the state (Tate, 1961).

In a few years, cooking, sewing, housekeeping and laundering were offered as school subjects. By 1890, some form of domestic science was taught in the public schools of the large cities in America. In 1887 the Boston normal school of cookery was established. It was the first school for training teachers of the new subject of domestic science. In 1887, the New York College for training teachers, which was later to become Teachers College of Columbia University, was established. One purpose of the school was to train teachers of domestic science (Tate, 1961).

Later on there were many movements, which contributed to the development and expansion of home economics as a field. In the 1<sup>st</sup> half of 1800's, philanthropic organizations, interested in social problems such as the churches and women's clubs

found the teaching of cooking sewing and home sanitation, an invaluable aid in their work. They opened classes outside the schools and sponsored activities in housekeeping and homemaking for children and adults (Tate, 1961).

The kitchen garden movement began in 1877 and it emphasized the need for practical education in the schools and is largely responsible for the vocational programmes in home economics in elementary and secondary schools in USA today. Cooking schools became popular in 1800's (the better known ones being New York, Boston and Philadelphia cooking schools). They demonstrated the practical value of learning to prepare and serve food at small expense. These schools were one factor in influencing the creation of magazines devoted to the solution of household problems for example Good Housekeeping-1885, Everyday Housekeeping 1894-1908, and Home Science Magazine, 1903-1908 (Tate, 1961).

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Early scientists also contributed to the development home economics. According to Tate (1961), Edward, L. Youmans, a chemist, made an effort to apply chemistry to the home. Benjamin Thompson, an outstanding physicist, devoted his time to the study of heat in relation to household problems. Wilbur, O. Atwater, a chemist was in charge of nutrition investigations in the office of the experiment stations in US department of agriculture. In 1886, Charles and Carrie Thwing published a book on the family, which discussed family relationships and relationships between husband wife, parents, children and the rights of children.

No one single experience had as much influence in charting the course of home economics as did the Lake Placid Conferences. It started with about eleven persons in 1899 that met in the bathhouse of the Lake Placid club, and grew to thirty members by July 1900. By 1908, (the 10<sup>th</sup> conference), membership grew to 201. One of the major accomplishments of the 10<sup>th</sup> conference was the laying of the plans for a national home economics organization, and that home economics groups be started in different states to work for rapid growth of the new organization. The group then launched the American Home Economics Association (Tate, 1961).

Today, home economics has grown to the point where over half of the junior and senior colleges and universities in USA admitting women have home economics offerings, with over 76,000 men and women enrolled in these courses. Home economics has become the largest professional endeavour for women in USA. The American Home Economics Association, which formally recognized home economics as a profession was formed in 1909 and its' membership in 50 years has grown from less than 100 to approximately 25.000 (Tate, 1961).

#### 2. 2 History of homescience in Kenya

Home economics was started in Kenya by wives of British missionaries who were mainly interested in teaching practical skills of home keeping to African women. This was around 1904 at Kikuyu. According to Anderson (1970), records show that some notable individuals were concerned about education for home living on African women and girls in the early 1900's.

These individuals included Marion Stevenson whose work started in 1912 at Tumutumu. Miss Moller worked at Ng'iya in Western Province at the same time. As the educational system took shape, teaching of these skills was introduced in schools. According to Kithimba et al. (1997), quoting Kwaku (1991) the early home economics programmes were therefore based on British models of education with little relevance to local needs.

In 1904, domestic science became part of the normal school curriculum. And in 1955, domestic science was an examinable subject at the end of standard eight in the Kenya African Preliminary Examination, (KAPE). However, it is important to note that the teachers were mostly untrained and that after only 2 years in 1957, the subject was removed from the KAPE syllabus, because its goal was not achieved. The goal was to prepare young women for their role as future wives (Sigot, 1987).

It was observed that even after independence, although home science was being taught in primary schools, it was not an examinable subject in the CPE for sometime and it was taught to girls only. Home science was taught haphazardly, and there was a lot of laxity on the part of teachers. In addition, the teachers were hampered by a serious lack of teaching resources. These are indications of the low value and consequently, indifferent attitude the society and education system had in this female subject (Mugenda, 1995). The syllabus included needlework, domestic science, housecraft and cookery, words which are obviously very gender biased. Perhaps this is part of what led to a recommendation in the Bessey report of 1972 that domestic science be taught to both boys and girls under a different name. Racho (1994) rightly notes that this

was introduced in Kenya.

Mugenda (1995) quoting Kavilu (1991) reports that in 1967, the home science revised syllabus was implemented, and the subjects' name was changed from domestic science to

recommendation did not get implemented until 1985 when the 8-4-4 educational system

home economics through a conference that was held by women educationists in Limuru. This conference made many other recommendations which included training more home economics teachers. During the same period, home economics was accepted as an academic subject at university level and some schools offered home economics at "A" level.

The period 1975 to 1984 was marked by more expansion of schools that offered home economics at "O" and "A" levels. At the same time, the syllabus for teacher training colleges was revised. There was also notable increase in numbers of teachers and extension workers who were trained at Egerton College, Kenya Polytechnic and Kenyatta University College. These developments took place as a result of the report of the National Committee on Educational Objectives and Policies (Gachathi report, 1976). By the end of this period, there was a change in home economics tradition when the first men enrolled in home economics programme at degree level at Kenyatta University. The fact that this discipline is based on women's work and relates this work to the home raises very serious constraints for social and academic recognition of the discipline and its' practitioners (Mugenda, 1995).

Emphasis on the home economics theory and practice in Kenya has been based on the British and North American situations and experiences. As a result, the profession in Kenya has retained a foreign trend and in so doing, has failed to address the needs of the Kenyan families. There is a discrepancy between training received and the intended impact on the beneficiaries. This realization has evoked calls to change the content and practice for African home economists for the last few years (Kithimba et al, 1997).

As a follow up to this challenge, Kwaku, an African economist from Ghana, wrote a concept paper in 1991, sensitizing home economists in Africa on the need to re-examine home economics profession in the continent with a view to re-orienting it to be more relevant to Africans (Kithimba et al, 1997).

# 2.3 The homescience curriculum in Kenya

According to Nyangi (1992), home economics is a family oriented area of study which attempts to help the individual realize and solve family problems as well as adapt more easily to the changing conditions in the home, community and society as a whole. It has undergone various stages of development in history. This implies that it has witnessed tremendous changes and growth. The changes that have occurred are seen in programmes at all levels of Kenya's education system. The programmes have become more specialized and geared towards serving the needs of the wider community focusing on issues beyond home making.

In 1985, the new system of education, referred to as 8-4-4 was implemented. Under this new system, home economics was made compulsory to all pupils at primary level. Home economics covered all the branches of the subject namely; foods and nutrition, clothing and textiles, childcare, home management, and consumer education. At the same time, the subject became examinable at primary and secondary school levels. These developments appear to have made home economics gender balanced at least in theory, although the practice is a different matter altogether. The theory is not matched by

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practice, mainly because these positive developments have not done much to change the undesirable attitude regarding this subject as a female domain (Mugenda, 1995).

In Kenya, the primary syllabus refers to home science as, a family centered area of study consisting of food and nutrition, health education and home management. This simple definition is just a reflection of where the discipline is at this level of education. Mugenda (1995) quoting Mc Fadden (1993) states that the Home economics definition cited above show that the discipline was started in a gendered female role of women as nurturers and careers of the family, and by extension, of the society.

Home science in secondary schools is offered in all classes in girl schools and the syllabus consists of five major areas, which according to K.I.E, comprises of home management, foods and nutrition, clothing and textiles, consumer education, and child care (Republic of Kenya, 1985). In forms one and two, all girls are exposed to the subject. However, when they reach form three, students choose the subject to pursue for Kenya Certificate of Secondary Education. The girls have to choose between home science and other subjects in school curriculum. This choice attracts many students to other fields of study resulting in very few girls doing the subject to the end of the four-year course.

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Among boy schools, only a few offer home science. The course is offered in forms one and two, and by form three, nearly all boys stop taking the subject. This trend makes home science a subject for girls only and accounts for the situations in tertiary institutions and at the university level where only a few men have graduated with a bachelor of education degree in home economics (Mugenda, 1995).

# 2.4 Attitude of students towards homescience

The attitude towards home science has been that it is a female domain, a subject for the less gifted children and an easy subject. Nyangi (1992) quoting Muthui (1981) in a study on "the teaching of clothing and textiles in secondary schools" revealed that the most disliked area of home science was clothing and textiles because there were no commercial patterns available.

A study conducted by Nyangi (1992) on "factors that influence the trend of student enrollment in Nairobi secondary schools", indicated that there was a sudden decrease of students enrollment after 1990 due to lack of facilities in the schools, wide selection of optional subjects offered against home science, schools not well established in home science and content, especially in the area of clothing and textiles, being too wide to cover adequately within the allocated time. Lack of facilities and resources discouraged teachers enrolling large number of students in home science.

Another study conducted by Mutiso (1986) on "a survey of the factors that cause student satisfaction and dissatisfaction when studying home economics at Kenyatta University" indicated that majority of the students in the home economics department were not satisfied with the attitudes held by students from other departments who think that home economics as a subject is too easy (Mutiso, 1986).

Under gender disparities, according to research carried out by Mwikali (1990), on "a survey of the factors that affect the teaching and learning of home science in Nairobi secondary schools", the study revealed that by 1926, no men were trained in home

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science since the subject was only seen as a female domain. This had already been implanted in people's minds. This attitude still has an impact on home science education. A good example was seen when some three men decided to take degree courses in home science at Kenyatta University in 1984. Although they completed the courses, they were subject to ridicule, embarrassment and abusive language from their male counterparts. When one of the men was interviewed on his feelings about home science and men by Kasuku (1984), he said, that for a long time he was an object of derision for other male students. People said it was a woman course and other students discouraged those who had tried to get into it.

The above-mentioned students were the first male students to study home science at degree level at a University in Kenya (Mwikali, 1990). Because home economics remains essentially identified with woman's work, it continues to be identified with women's reproductive roles and is therefore faced with more deeply academic stigmatization as a discipline. It is not uncommon to hear a university female colleague ask her home economist friend, "Are you still in that department? I shall come for recipes and cakes" (Mugenda, 1995).

Mugenda (1995) states that the gender heritage of home economics is a historical phenomenon and must be challenged, if the discipline is to move beyond its present status and appeal to both men and women equally. Some parents complained that it was not right for boys to be taught how to cook and knit.

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Mugenda (1995) quoting Mac Kay (1984) revealed that Mac Kay had to support the introduction of home science in primary schools by arguing that it was not meant to turn boys into women but to help them be more self-reliant in taking care of themselves. As the level of schooling goes higher, the numbers of boys taking home science decreases as other alternative subjects become available and choices are allowed. By the time boys reach university their enrollment is negligible. Between 1975 and 1995, only less than thirty men graduated with a BED degree in Home Economics Department at Kenyatta University compared to hundreds of girls who went through the programme.

It is sad to note that although more men are training as nutritionists, extension workers, hoteliers and small-scale businessmen in home economics related activities, home economics is still viewed as a female domain (Mugenda, 1995). From this discussion, there is clear gender imbalance in home economics at all levels of education in Kenya.

On the area of equipment, Karingithi (1988) conducted research on "a survey of teaching aids used by teachers teaching home science in schools in the Northern Division of Nairobi District". It was discovered that many schools lacked almost all the essential home science teaching resource materials and teaching aids.

The cost of technical education is beyond the reach of many Kenyan families. The curriculum is not rationalized, and inquiries show that comparatively few secondary schools have any workshops or art rooms and therefore any facilities for the training of the hand and eye. (Republic of Kenya, 2003).

A study conducted by Kithimba et. al (1997) on "reconceptualizing the home economics profession in Kenya, the following table on challenges of home economics at work was formulated:

Challenge	Number	%
Broad syllabus	12	5.1
Inadequate facilities	88	37.1
Expensive practicals	7	3.0
Negative student attitude	17	7.2
Inadequate training	16	6.8
Work overload	7	3.0
Low motivation	5	2.1
Conservatism	6	2.5
Too much expectation	9	3.8
Irrelevant curriculum	3	1.3
No maintenance of facilities	1	0.4
Lack of community mobilization	13	5.5
Inadequate research	1	0.4
Improvisation	2	1.6
Lack of support by administration	2	1.6
No response	44	18.6
Total	233	100.0

Table 3:Challenges of Home Economics at Work

Source: (Kithimba et al 1997).

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This table depicts that inadequate facilities is the most common challenge faced by home economics teachers, as indicated by 37.1% of the sample. This was followed by negative

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student attitude towards the subject, 7.2% and by inadequate training of the teachers with 6.8%.

A recent study conducted by Nyangi (1992) on "factors that influence the trend of student enrollment in Nairobi secondary schools", indicated that teachers felt the need for revision of the home science syllabus especially in the clothing and textiles unit which they felt was too involving and required more time for teaching (Nyangi, 1992).

Being a practical subject, teachers find it hard to complete the syllabus on time. A study by Sigot (1987) on "an evaluation of high school home science curriculum in Kenya" indicated that home science, being a practical subject, is not given the time it deserves in the high school curricula. It is very wide but time allocation is short. Some schools have minimized the time allocation for home science and allocated more time to other subjects (Sigot, 1987). Murray (1991) asserts that since home science was imported into Africa rather than transformed within Africa by African professionals, there are still vestiges of foreignness existing within the practice of the profession (Mugenda, 1995).

On rationalization, many home economists have been trained in Europe, US, and Canada. Hence, the emphasis on the content has been based on the European and North American experience. Consequently, the home economics profession in Africa has retained a foreign trend and has failed to adequately address the needs of Kenyan individuals and families. Moreover, the present content continues to limit the scope of teaching and practice of home economics (Kithimba et al, 1997).

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# 2.5 Summary of the literature review

This chapter reviewed literature on the student's perception towards home science. Selected key areas related to the subject content were discussed. These include perception, history of home science in Kenya, history of home science abroad, home science curriculum in Kenya and attitude of students towards home science. On perception, various theories according to Gestalt approach, Gibsonian approach, the empirical approach and the information processing approach were tackled. Looking at the history of home science in Kenya, it was mainly started as a concern for home living on Africa women and girls in the early 1900's. After independence, it was not an examinable subject. It was taught haphazardly and with laxity among teachers. Looking at the history of home science abroad, the idea stressed was that it did not come into being suddenly but represents the results of many people's search for solution to problems affecting individuals and families. As early as 1798 in the Boston Public schools, girls spent part of their time on needlework. Today home economics has grown to the point where over half of the junior and senior colleges and Universities in USA admitting women have home economics offerings, with over 76,000 men and women enrolled in these courses.

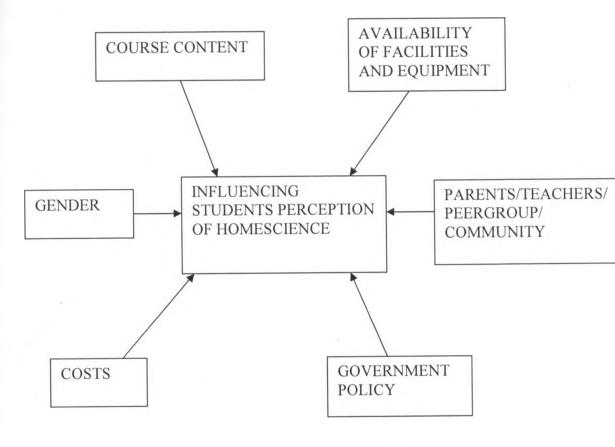
The chapter also reviewed literature on home science curriculum in Kenya with a milestone being realized in 1985 in the 8-4-4 system of education, which made home economics compulsory to all pupils at primary level. In secondary most of the schools, which offer home science, are girl schools, with a few boy schools.

On students' attitude towards-home science, various reasons may affect their attitude, like lack of facilities in the schools. This study sought to establish any other factors that deter

or encourage the students to choose home science subject among the other elective subjects.

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# **CHAPTER THREE**

# **RESEARCH METHODOLOGY**

# 3.0 Introduction

This section provides a brief overview of various steps and methods that were used in this research in an attempt to meet the research objectives. These include the Research Design, Population and sample size, Data collection instrument and Data Collection Procedure, Research Instruments and Data analysis.

# 3.1 Research design

Kothari (2003) defines a research design as an arrangement of conditions for collection and analysis of data in a way that intends to combine relevance to the research purpose with economy in procedure. This research was conducted using an ex-post-facto research design. This method is used when data is being classified by major sub-groups of the population. For this study, perceptions of students towards Home Science subject were not amenable to researcher's control. The study sought to establish the effect of certain variables under investigation.

# 3.2 Target population

A target population, or the universe, is the population to which the researcher would like to generalize his/her results (Mugenda and Mugenda, 1999). The population of this study consisted of all the 1,560 students taking home science subject in Nairobi Province. There are a total of 26 schools in Nairobi province offering home science, and the 1,560 students are all from the 26 schools.

### 3.3 Sample and sampling technique

A sample size is the number of items to be selected from the universe to constitute a sample. The sample size selected for any study should be optimum (one that fulfills the requirements of efficiency, representativeness, reliability and flexibility). It is a subject of a particular population whose characteristics are represented of the entire population (Kothari, 2003).

A total of 15 schools were used in this study. 2 schools were used in the pilot study while the remaining 13 schools were used for the main study. The 13 schools were manageable and they fulfilled the requirements of efficiency, representativeness, reliability and flexibility. Due to financial, physical and social constraints, more schools could not be sampled. Research objectives were achieved, with reduced resources.

Out of the 26 schools that offer home science, 18 are girl schools, 6 are mixed schools and 2 are boy schools. This study used purposive sampling for the boy schools and therefore selected both boy schools. Purposive sampling involves a selection of a sample based on judgment and knowledge (Keya et. al, 1989). The study used both purposive and probability sampling for the mixed schools and selected all the 6 mixed schools so as to include more boys, since there were only 2 boy schools offering home science. Probability sampling provides us with an efficient system of capturing, in a small group, the variations for heterogeneity that exist in the target population (Mugenda and Mugenda, 1999). Simple random sampling was used to select 5 girl schools from the 18

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girl schools. This method gives every element of the population an equal chance of being included in the sample (Keya et. al, 1989). Hence the total came to 13 schools.

The target population of this study was 1,560 students taking home science subject in Nairobi Province, as at July year 2005. A sample percentage of 10% is needed for moderately large populations of over 1,000 but under 10,000 (Neuman, 1994). Therefore, a sample size of 156 respondents was used.

### 3.4 Research instrument

A detailed self-administered questionnaire was used for the study. The questionnaire contained open-ended, closed-ended and likert type questions that were intended to capture the research objectives. Open-ended questions refer to questions, which give the respondent complete freedom to respond in his or her own words. This is important, as open-ended questions permit a greater depth of response. Closed ended questions refer to questions which respondents select the answer that best describes their situation. Closed ended questions are easier to analyze since they are in an immediate usable form. Likert scale is a type of rating scale, which consists of numbers, and descriptions, which are used to rate or rank the subjective and intangible components in research. It helps to minimize the subjectivity and makes it possible to use quantitative analysis. Personal characteristics of the students (respondents) were ascertained besides their perceptions of the subject. Questions were as simple as possible to avoid detailed clarifications.

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# 3.4.1 Reliability of instrument

According to Mugenda and Mugenda (1999), reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability in research is influenced by random errors. As random errors increase, reliability decreases. Errors may arise from inaccurate coding, ambiguous instructions to the subjects, interviewers fatigue and interviewers bias. The researcher minimized errors through accurate coding of the questionnaire, clarifying instructions on the questionnaire, and ensuring that the questionnaire was not too long. The questions asked were nonbiased,

# 3.4.2 Validity of instrument

Validity entails the research instrument measuring what it was intended to measure. It is the degree to which the test items measure the traits for which the test was designed (Mugenda and Mugenda, 1999). It is also broadly classified as the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Brinberg and Grath, 1985). To enhance content validity, the lecturers in the field of education first appraised the instruments. External validity, which has to do with representativeness of the sample with regards to the target population, was tested using a pilot study of students from two schools in each stratum. Twenty students were selected for this exercise. Respondents for the pilot study were both girls and boys. The respondents who participated in the pilot study did not take part in the main study. Pretesting was conducted to enable the researcher determine whether the items were

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correctly worded in order to avoid misrepresentation when administered to the sample in the main study.

# 3.5 Data collection procedure

The researcher visited the sampled schools with a letter of introduction from the Provincial Director of Education's office. She introduced the research topic and objectives to the teachers responsible who in turn assisted in delivering the questionnaires to the randomly selected respondents (students). A brief explanation was given on how the respondents were expected to fill in the questionnaire and the time limit of filling in the questionnaire. The explanation was consistent for all the schools. Once the questionnaires were completed, the researcher collected them from the various schools.

# 3.6 Data analysis techniques

Descriptive statistics was used to analyze the data. Percentages and proportions were also used to establish general perceptions of the students on home science subject. To facilitate conceptualization of the findings, tables, graphs and pie charts were also used.

# **CHAPTER FOUR**

# DATA ANALYSIS

# 4.0 Introduction

This section provided an overview of the findings and results of the study. The results of the data collection were summarized and tabulated on an SPSS table before a thorough analysis was done on secondary school students' perception of Home Science subject in Nairobi Province.

# 4.1 Findings and responses from students.

Out of the total 156 questionnaires, which were distributed, the respondents dully answered only 93. This represented a 60.00% return rate.

# 4.2 Analysis

	Age in years	Frequency	Percent	Valid Percent	Cumulative
					Percent
Valid	15.00	24	25.8	27.6	27.6
	16.00	27	29.0	31.0	58.6
	16.50	6	6.5	6.9	65.5
	17.00	18	19.4	20.7	86.2
	18.00	12	12.9	13.8	100.0
	Total	87	93.5	100.0	
Missing	.00	6	6.5		
Total		93	100.0		

# Table 4:Biographic data of the students

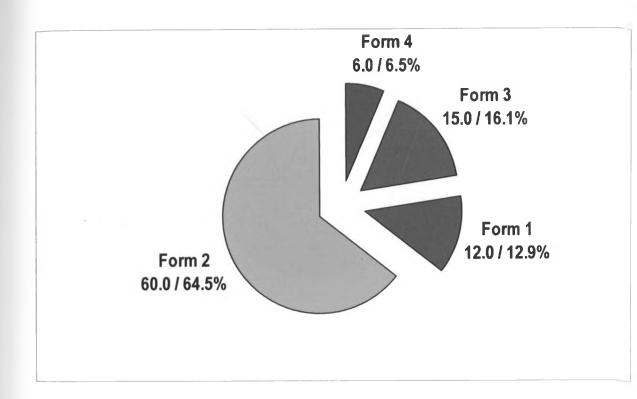
From the table, it is evident that the students age range between 15 and 18 years.

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# Pie chart 1: Students' level of satisfaction with the home science syllabus

#### **Response according to form**

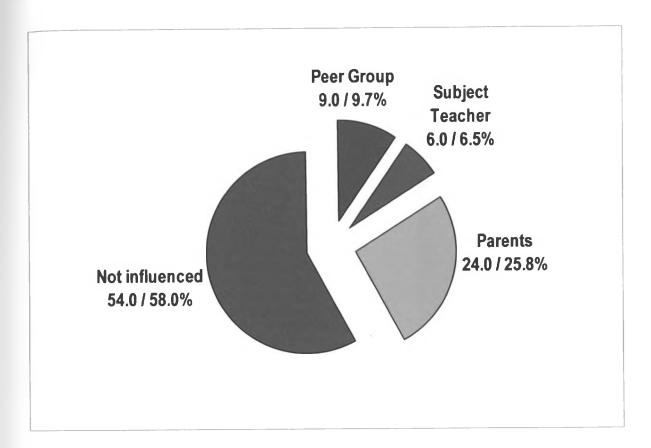
The pie chart below represents the level at which students were satisfied with the home science syllabus according to form.



The above pie chart shows that the least satisfied with the home science syllabus were form four students with 6.5% followed by form one students with 12.9%, then form three students with 16.1% and lastly form two students with 64.5%. Form two students were highest in satisfaction with the home science syllabus while Form fours were the least satisfied. This was due to the fact that there is a lot of practical work in form 4, which students viewed as difficult and time consuming.

# Pie chart 2: People who influenced students

The pie chart below represents the extent to which students were influenced by parents, home science teachers and peer group.

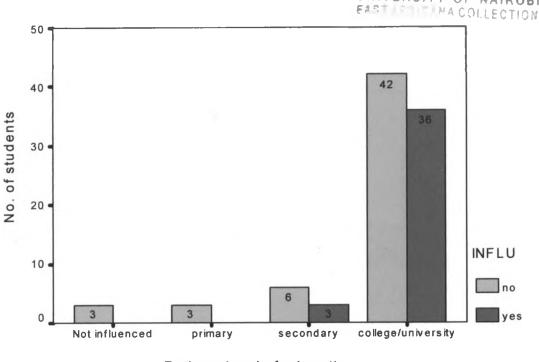


From the above figure it is evident that a good percentage of the students (54 of 93 which represent 58.0 %) were never influenced, hence the students made the decisions on their own volition. However, parents form the highest percentage (25.8%) of the people who influenced students. Peer group influenced the students to the extent of 9.7%, while subject teachers were the least with 6.5%.

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Graph 1: Fathers level of education influence on the student's perception of home science subject.

The graph below represents the extent to which the level of their fathers' education influences the students' perception of home science subject.



Fathers level of education

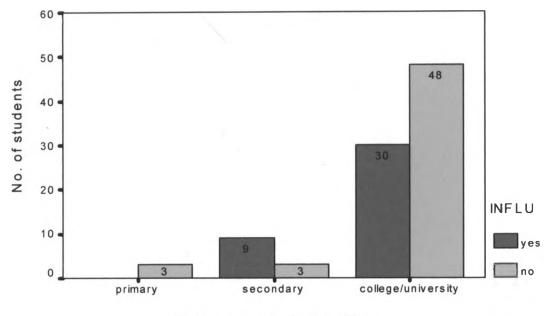
The graph shows that fathers who attained college or university level of education had the highest influence on their children's perception of home science subject, followed by those who attained secondary school level of education. Those who attained primary level of education had the least influence on their children.

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Graph 2: Mothers level of education influence on student's perception of homescience subject.

The graph below represents the extent to which the level of their mothers' education influences the students' perception of home science subject.

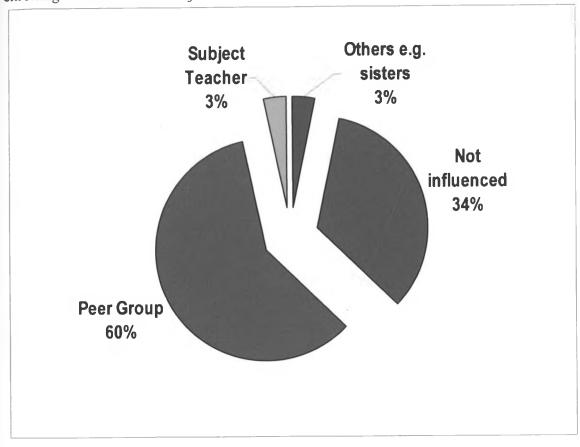


Mothers level of education

The above graph shows that mothers who attained college or university level of education had the highest influence on their children's perception of home science subject followed by those who attained secondary school level of education. Those who attained primary level of education had the least influence on their children.

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# Pie chart 3: People who discouraged students.



The graph below represents the percentages of people who discouraged students from enrolling in home science subject.

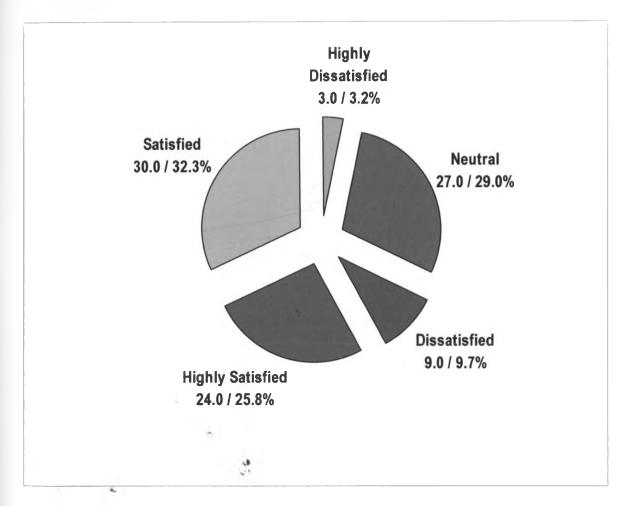
From the above graph, peer group formed the highest percentage (60%) of the people who discouraged students from taking home science as subject. 34% of the students were not influenced, while teachers and other people like sisters had the least influence with 3% each.

Some of the sampled responses from home science students on how they were discouraged from taking home science by their peers include:

- That home science is for women
- It is a hard subject and requires a lot of time and energy
- There is no good career for home science subject
- There is too much work and it is hard to score an" A"

# Pie chart 4: Effect of course content on the perception of students of home science.

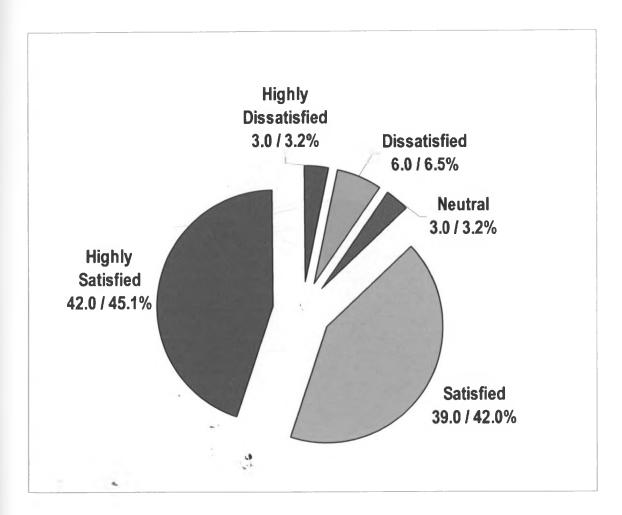
The pie chart below represents the extent to which the students were satisfied with the course content.



Students who were satisfied with the course content represent the highest percentage of 32.3%. The students were satisfied that the syllabus is commensurate with their expectations. These were followed by those who were neutral with 29%, followed by 9.7% who were dissatisfied with the course content. Those who were highly dissatisfied were the least with 3.2%.

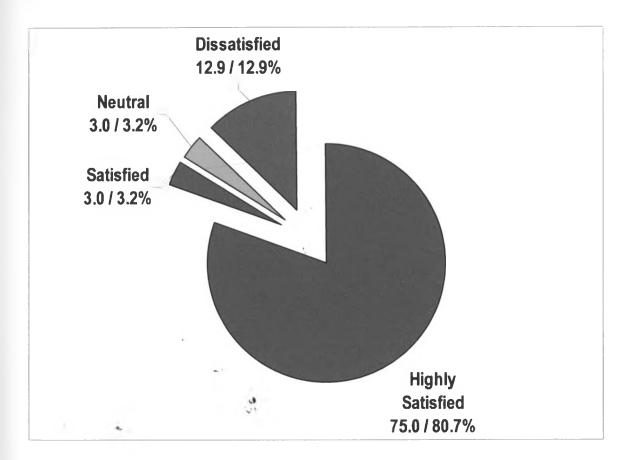
# Pie chart 5: Effect of availability of equipment on students' perception towards home science.

The pie chart below represents the levels at which students were satisfied with the facilities in their schools.



The highest percentage is represented by students who were highly satisfied with the facilities they have in their schools, that is the cookery equipment, clothing and textiles equipment and home management equipment, and generally the home science laboratory. This was 45.1%, followed by students who were satisfied, with 42%. Students who were dissatisfied represented 6.5%. Those who were neutral and also those who were highly dissatisfied were the least with were 3.2%.

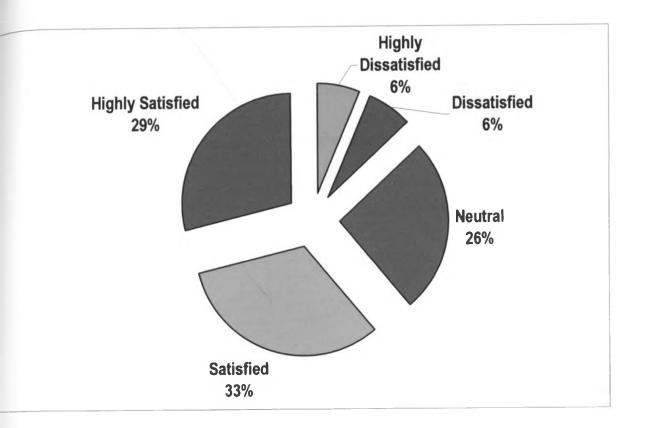
Pie chart 6: Influence of gender on students' perception towards home science. The pie chart below represents the students' feelings towards the notion that home science is a subject for women.



The highest percentage of students was 80.7% and they were highly dissatisfied with the notion that other people say that home science is for women, it is all about cooking and sewing, and that boys should enroll in more challenging subjects like commerce, agriculture, and accounting. They were followed by those who were dissatisfied, being 12.9%. Those who were neutral and also those who were satisfied were the least with 3.2%.

Pie chart 7: Influence of costs that go into home science subject on students' perception of home science

The pie chart below represents students' level of satisfaction with the costs of home science subject.

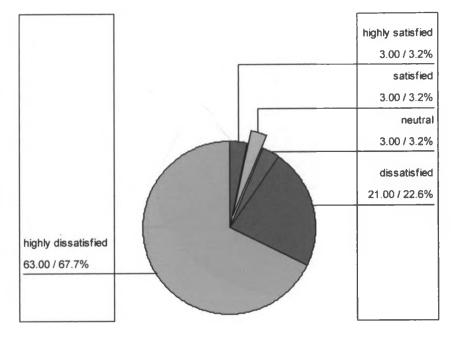


Students who were satisfied that the subject was within affordable costs represent the highest percentage of 33%. They were followed by those who were highly satisfied (29%), followed by those who were neutral (26%), and the least were those who were highly dissatisfied and those who were dissatisfied, with 6%.

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# Pie chart 8: Effect of peer pressure on student's perception of home science

The pie chart below represents the students' feelings when their peers tell them that home science is easy and should be scrapped from the syllabus.



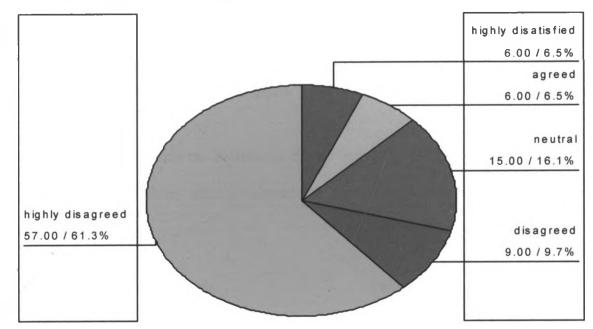
students level of satisfaction with peer pressure

The largest percentage of 67.7% were highly dissatisfied when their peers share such sentiments as home science is a woman course, which is easy and for the weak, and should be scrapped off from the syllabus. Those who were dissatisfied followed with 22.6%. All the rest with 3.2% were neutral, satisfied, and highly satisfied.

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# Pie chart 9: Influence of government policy on students' perception of home science subject.

The pie chart below represents the students' feelings towards the government policy to make home science subject an elective subject.



students level of satisfaction with the Government policy

Students who highly disagreed with the governments' decision to make home science an elective subject and its decision to stop examining home science in KCPE represent the highest percentage of 61.3%. They were followed by those who were neutral with 16.1%, and those who disagreed with 9.7%. Students who agreed and those who were highly dissatisfied followed with 6.5%.

# 4.3 Summary of the findings

On the area of course content, majority of the students were in the percentage of highly satisfied and satisfied. Very few students were highly dissatisfied with the syllabus. Form two students represented the highest percentage of students who were most satisfied with

the syllabus. However, form four students claimed that the practical work was too much. Otherwise there was no major complaint in the syllabus.

Availability of equipment in the home science laboratories had a positive influence on the students perception of home science subject, and majority of the students were satisfied with the equipment in the home science rooms. The students expressed their views that in all areas of home science, that is clothing and textiles, foods and nutrition, and home management, adequate equipment was in place.

Majority of the students made the decision to choose home science subject on their own volition. However, of those who influenced the students, parents had the highest influence.

# 4.4 Summary of data analysis

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From the analyzed data, the objectives of the study were sufficiently addressed and achieved. Various factors were found to influence the perception of students of Home science subject. The students gave varied reasons on their perception on the subject. They were satisfied with the syllabus, equipment, and costs that go into home science subject, but were highly dissatisfied with the governments' policy to make home science an elective subject. They were also highly dissatisfied with the government's policy to stop examining home science as a subject in KCPE. The students were also dissatisfied with the belief that home science is for women.

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A finding to note was that all the home science teachers in the sampled schools were female. The students were generally dissatisfied with the influence of peer pressure in an attempt to deter them from choosing home science as a subject.

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# **CHAPTER FIVE**

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

#### 5.0 Summary

Home science as a subject, is essential for all human beings since it is concerned with activities that meet man's basic needs, namely, food (in cookery), clothing (in needlework), shelter (in home management), and childcare.

Historically, home science in Kenya was viewed as a woman only subject. At one time, some men enrolled in the subject at university level and they got a lot of criticism from their male counterparts. The government decided to make home science an elective subject, among other choice subjects like agriculture and commerce. According to the Kenya National Examinations Council results of year 2002 and 2003, home science enrolled fewer students than agriculture, and commerce.

This study was interested in finding out how the students perceive home science and the factors that influence them positively or negatively. Various variables were discussed. These were course content, availability of equipment, influence of gender, costs, and effect of peer pressure and government policy to make home science an elective subject.

The questionnaire return rate was 60%. This was a total of 93 students. Given that the sample is greater than 30, according to Central Limit Theorem, it is sufficient enough to enable us draw conclusions concerning the whole population. Graphs, tables and pie charts were employed.

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# 5.1 Conclusion

Home science is still a very popular subject in secondary schools. Students who take study it enjoy it, but they are discouraged (including prospective home science students) when their peers give negative sentiments about home science, like it is for women and it is too easy. Peer pressure is very influential, especially during adolescence and when they share such sentiments, interested students tend to shy away from the subject .Boy students fear to take home science because of the stigma associated with it, that it is a subject for women. This explains why more girls than boys enroll for homescience subject.

Students were discouraged with the governments' decisions pertaining to home science subject. When the government made home science an elective subject, students tend to look at what they consider lucrative subjects from which they could choose from, like computer. Making home science an elective with computer, in this computer era could lure the students in choosing computer, which the students view as having good career opportunities. Hence they may opt not to take the subject.

# 5.2 Recommendations

The MoEST, KIE, and all other concerned stakeholders should neither reduce nor increase the course content, since the students are able to cope with the workload. However, if there is any reduction in the home science syllabus, it may be of necessity in the practical work in form four, so as to make the subject more attractive to non-home science students.

The school administration, and parents should invest more in buying home science equipment for the subject to thrive in this country. Parents are therefore urged to support the administrations' pleas for pumping more money into purchases of homescience equipment. Therefore head teachers should maintain equipment and facilities at high standards so that more students can be attracted to the subject.

All education stakeholders, including the government, parents and teachers should encourage more boys to enroll in home science especially for the sake of career choice in the present limited career choices, where men can be employed as chefs, caterers, tailors, and housekeepers. More parents should encourage their children to enroll in home science, since according to this research the costs of homescience may not be as exorbitant as it is viewed by most people.

All stakeholders should create awareness of the benefits and importance of home science subject, and accord it a more positive face than it has been accorded, so that students can be attracted to the subject, especially male students. The government can actively assist in this by re-strategizing ways in which it can make home science more attractive to students through its' policies. For example, if home science was made a compulsory subject, even at high school, it would bear more fruit and assist in attaining one of the educational objectives of, "industrialization by the year 2020". Home science subject will assist the government to achieve this important goal.

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# 5.3 Suggestions for further research

Based on the findings of the study, there are areas that need to be studied in order to improve the perception of students towards home science.

- There is need for a comparative study or replication of this study in other parts of the country. Such would generate generalizations that could assist in policy and decision-making, and sustain further academic interest and debate, regarding home science subject.
- 2) There is need to study ways in which campaigns can be carried out to popularize home science subject and give it a more positive face, especially for the male students.
- 3) This study focused on home science students only, since they were the only ones who could give some pertinent information on what they felt about certain areas of home science, like course content and facilities. There is need to study the perception of non-home science students towards home science subject.

# **BIBLIOGRAPHY**

- Anderson, J. (1970). Struggle for the school. Kenya. Longman.
- Best, J.B. (1989). Cognitive Psychology. 2<sup>nd</sup> edition. St. Paul. West.
- Brinberg, D: Mc Grath. (1985). Validity and the research process. London. Sage publications.
- Burgess, R. (1982). Field research. A sourcebook and field manual. London.George Allen and Unwin.
- Connell, J; Phillipchalk, R. (1992). Understanding human Behaviour. 7<sup>th</sup> edition. USA. Holt, Rinehart and Winston, Inc.
- Coren, S; Ward, L.M. (1989). Sensation and Perception. 3<sup>rd</sup> edition. New York. Harcourt Brace Jovanovich.
- Gachathi, P. (1976). Report of the National Committee on Educational Objectives and Policies. Nairobi. Government printer.
- Kasuku, S.D.K (1984). Factors leading to the low acceptability of home economics in Kenya secondary schools. PGDE project. (Unpublished)

...

Karingithi, G. (1988). A survey of teaching aids used by teachers teaching home science in schools in Northern division of Nairobi district. K.U. MED (P.T.E) project. (unpublished)

- Kenya National Examinations Council. (2004). *The year 2003 KCSE Examination Candidates Performance report*. Nairobi, Kenya. Kenya National Examinations Council.
- Kerlinger, N.F. (1964). Foundation of Behavioral Research: Educational and Psychological Inquiry. New York. Holt, Rine Hart and Winston, Inc.
- Keya, S. et. Al. (1989). *Guide lines for the formulation of research project* proposals. Nairobi, Kenya. National council for science and technology.
- Kithimba, A; Mburugu, K. et al. (1997). Reconceptualizing the Home EconomicsProfession in Kenya. A report on a National Research Project. Kenya.(Unpublished).
- Kothari, C. (2003). Research Methodology, Methods and Techniques. 2<sup>nd</sup> edition. New Delhi. New age International (Ltd).
- Malim, T; Birch. A. (1998). *Introductory Psychology*. London. Macmillan press Ltd.
- Mugenda, O. (1995). The Role of Home Economics in Kenya. Nairobi, Kenya. Ngatho publications.
- Mugenda, O; Mugenda, A. (1999). Research methods. Quantitative and qualitative approaches. Nairobi, Kenya. Acts press.

Murray, E. (1991). Reconceptualizing the home economics instruction and

research programmes with particular reference to developing countries; a model and a process. Williams west and Murray (Eds), Home economics and the global community. Manchester, MO, USA.

- Mutiso, M. (1986). A survey of factors that cause student satisfaction and dissatisfaction when studying home economics at Kenyatta university, K.U.MED Project. (Unpublished).
- Mwikali, J. (1990). A survey of the factors that affect the teaching and learning of home science in primary schools in Langata division Nairobi. K.U. MED (P.T.E.) Project. (Unpublished).
- Neuman, L. W. (1994). Social research methods. Qualitative and quantitative approaches. 2<sup>nd</sup> edition. USA. Allyn and Bacon.
- Nyangi, M. (1992). Factors that influence the trend of student enrollment in home science in Nairobi secondary schools. K.U. MED Project. (Unpublished).
- Onyango, J. (1985). Factors that influence the acceptability to study home economics among male students at Kenyatta University College. K.U. MED Project. (Unpublished).
- Racho. M. A. (1994). An investigation of factors affecting acquisition of practical skills in science in Kenyan primary schools. A comparative study of schools in langata division of Nairobi city and Ngong division in Kajiado district. MED. Thesis proposal. (Unpublished).

- Raju, B.M. (1973). Education in Kenya, problems and perspectives inEducational Planning and Administration. Heinemann, London.
- Republic of Kenya. (1970). *Development plan 1970-1974*. Nairobi. Government printer.
- Republic of Kenya. (1974). *Development plan 1974-1978*. Nairobi. Government printer.
- Republic of Kenya. (1979). *Development plan 1979-1983*. Nairobi. Government printer.
- Republic of Kenya. (1985). Secondary Education Home Science Syllabus for Kenya Certificate of Secondary Education. Nairobi. Kenya Institute of Education. UNIVERSITY OF NAIROBI EAST AFRICAMA COLLECTION

Republic of Kenya. (1988). Report of the Education Administration Conference. Nairobi. Government printer.

- Republic of Kenya. (1994). *Development plan 1994-1996*. Nairobi. Government printer.
- Republic of Kenya. (1997). *Development plan 1997-2001*. Nairobi. Government printer.
- Republic of Kenya. (2002). National Development plan 2002-2008. Nairobi.

Government printer.

Republic of Kenya. (2003). Draft Education Sector Strategic Plan. 2003-2007. Nairobi. Government printer.

Schiffman, H.R. (1990). Sensation and Perception. 3rd edition. New York. Wiley.

- Sigot, A. (1987). An evaluation of high school home science curriculum in Kenya.K. U. PhD. Thesis. (Unpublished).
- Stewart, B; Wickens, R. (1997). *Psychology*. 4<sup>th</sup> edition. USA. Houghton Mifflin company.

Tate, M. (1961). Home Economics as a Profession. USA. Mc Graw-Hill.

# **APPENDIX I: LETTER OF INTRODUCTION**

University of Nairobi College of Education & External Studies P.O. BOX 92 KIKUYU

Dear Sir / Madam,

## **RE: LETTER OF INTRODUCTION**

I am a postgraduate student undertaking a masters degree course at the Department of Administration and Planning, faculty of Education, University of Nairobi. I am carrying out a study to analyze secondary school students' perception towards home science subject in Nairobi Province.

Please fill in the attached questionnaire that is intended to gather information in order to facilitate the study, whose findings may be useful in recommending the development of the best methods of improving home science subject, to make it more fruitful in this country Kenya.

Please note that all the information given will be treated as confidential, and your accurate answers will greatly help this study. The answers you give will be used for statistical purposes only and no one will be allowed to see your personal responses. Any other assistance from you in promoting this study will be highly appreciated.

Thanking you in advance for your time and co-operation,

Yours truly,

Grace O. Wahome

# **APPENDIX II - QUESTIONNAIRE FOR STUDENTS**

This questionnaire is designed to gather data about your perception towards home science subject. Your responses will be accorded strict confidentiality. Do not indicate your name, admission number or anything that could lead to identification. Please respond to the following questions honestly, by ticking ( $\sqrt{}$ ) the appropriate responses. For structured questions, use the spaces provided. Respond to all the items. Thank you.

#### Personal and school background.

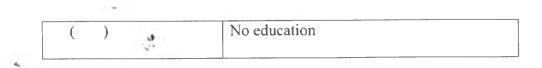
 1. What is your Gender?
 Male
 ( )

 Female( )

2. What is your age?

3. Which form are you currently in? Form 1( ) Form 2( ) Form 3( ) Form 4( )

4. (a) What is your mothers educational background?



nary education
cation
sity
er

(b) Mothers Current occupation?

5. (a) What is your fathers educational background?

...

No education
Some primary education
Completed primary education
Secondary education
College/ university

(b) Fathers current occupation?

6. List down your 3 best subjects, starting with the most favourite.

7. What is the gender and numbers of the home science teachers in your school?

(	)	Female	Number (	)	
(	)	Male	Number	(	)

8. What is the name of your school?

9. Were you ever influenced by anyone to enroll in home science subject?

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Yes	(	)
No	(	)

(b) If yes, who

- 1. Parents
- 2. Subject teacher
- 3. Career teacher
- 4. Guidance and counseling teacher
- 5. Peer Group

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e you influenced ?
e you influenced ?

10. Were you ever discouraged by anyone from enrolling in home science?

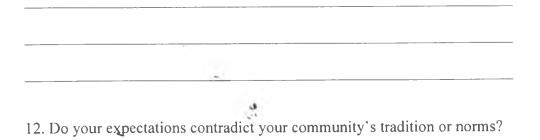
Yes	(	)
No	(	)

(b) If yes, who?

- 1. Parents
- 2. Subject teacher
- 3. Career teacher
- 4. Guidance and counseling teacher
- 5. Peer Group

(c) Explain how you were discouraged \_\_\_\_\_

11. What are your expectations as you chose to study home science subject?



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Yes ( ) No ( )

13. Explain your answer.

14. What are your most important reasons for enrolling in home science subject?

(	)	It will help me get a good job after school.
(	)	It encourages me to develop my own academic interest
(	)	I enjoy the lessons
(	)	It is easy to pass
(	)	I needed something to do and nothing else was appealing
(	)	I was interested in the subject
(	)	I was forced to do the subject

15.(a) Is home science subject limited to ones' gender?



#### **SECTION B**

Below are lists of factors that may or may not contribute to enrolment in home science subject. For each item, put a tick ( $\sqrt{}$ ) on the number that best tells how satisfied or dissatisfied you are with that factor. The key to the scale is provided below.

1	Highly satisfied
2	Satisfied
3	Neutral
4	Dissatisfied
5	Highly dissatisfied

### Syllabus

How satisfied are you with

÷.

	1	2	3	4	5
The amount of work in the syllabus					
The time allocated in the timetable for home science					
The amount of challenge you experience in home					
science					
The ability to complete the syllabus adequately					
within the stipulated time.					

## Equipment

How satisfied are you that you have the following equipment for home science?

	1	2	3	4	5
Cookery equipment for example Cookers.					
Clothing and textiles equipment. For example sewing machines.					
Home management equipment for example pails, brooms					
Home science laboratory.					

Costs

How satisfied are you with

\*

	1	2	3	4	5
Costs of purchasing C/T materials?					
Costs of purchasing F/N materials?					
Requirements for home science for example home					
science room?					

# Peer pressure

How satisfied are you when your peers share sentiments such as:

	1	2	3	4	5
Home science is a woman's course		-			
Home science is easy					
Home science is for those who are academically					
weak					
Home science should be scrapped off from the					
syllabus					

## Gender

How satisfied are you when other people say:

	1	2	3	4	5
Home science is for women					
Home science is all about cooking and sewing					
Boys should enroll in more challenging subjects			_		
like commerce , agriculture and accounting.					

# **Government policy**

How satisfied are you with the government's decision to:

-	1	2	3	4	5
Make home science subject an elective?					

Reduce	technical	subjects	offered	in	secondary			
schools								
Stop exa	mining hor	me science	e subject	in K	CPE			

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### **LEARNERS PERCEPTION INVENTORY GUIDE**

The following statements represent opinions, and your agreement or disagreement will be determined on the basis of your particular beliefs. Kindly check your positions on the scale if the statement is in line with your beliefs. Then tick ( $\sqrt{}$ ) in the grid of your choice.

- (1) Highly Agreed
- (2) Agreed
- (3) Neutral
- (4) Disagreed
- (5) Highly disagreed

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	1	2	3	4	5
Home science is well organized					
The lessons are substantive in content					
Teachers are concerned with whether students					
understood the content or not.					
Abstract ideas and theories are presented clearly					
Home science is challenging and worthwhile					
Ideas and theories are simply presented					
Home science stimulates a desire for continuous					
studying					

Facilities are appropriate for learning			
Time allocation on the timetable for home science			
should be increased			
Home science is not marketable in the job market	 	 	
Home science cannot be affordable by the common			
citizen			
Home science should be left to girls alone			
There is need to strengthen home science subject for	 		
students			
Home science should be a compulsory subject			
I attend home science classes for the sake of passing			
examinations.			

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