



## DETERMINANTS OF STUDENTS' ENROLMENT IN HOME ECONOMICS PROGRAMME IN SENIOR HIGH SCHOOLS IN GHANA

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### Abstract:

Students' enrolment in Home Economics programme in Senior High Schools (SHSs) in Ghana has been low in recent times. This has become a concern for major stakeholder in education. This study examined the determinants of students' enrolment in Home Economics programme in SHSs in Ghana. The cross-sectional descriptive survey design was employed for the conduct of the study. The target population comprised first year Home Economics students from 16 selected SHSs in three administrative regions (i.e., Western, Central and Greater Accra Region). A simple random sampling technique (lottery method) was employed to sample 4 schools in the Western Region and 6 each from Central and Greater Accra Region. A census sampling technique was then utilised to include all Home Economics first-year students in the selected schools. A sample size of 1,136 students from the 16 schools participated in the study. Data was collected using a questionnaire. Binary logistic regression analysis was employed to analyse the data using 1,000 bootstrap samples with 95% confidence interval with bias-corrected accelerated and 2,000,000 seed for Mersenne Twister. It was revealed that factors which significantly influenced students' decision to enrol in Home Economics programme were interest, job prospects, fathers, teachers, BECE grade, family relatives, and perceived workload among others. Factors such as gender, desire to be an entrepreneur, mothers and friends did not influence students' decision to enrol in the programme. The study recommended that management of Basic schools in Ghana should organise

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educative programmes to enlighten students and teachers on vocational and technical related courses and as such arouse students' interest in enrolling in such programmes.

**Keywords:** hidden curriculum, validity, reliability, teacher education

## 1. Introduction

Students' development of qualities of creativity, productivity, lifelong learning and entrepreneurship is renowned globally as a collective objective of various educational systems (Uwameiye, 2015). From Nkem's (2015) point of view, Home Economics as a field is no exception to this trend since it also plays a major role in societal, family and individual development. The programme -Home Economics- is largely described as that body of subject matter which deals with the application of the social and natural sciences together with arts to solving problems in the homes. It is primarily concerned with the acquisition of knowledge and services with the aim of strengthening family life through educating people regarding: (a) family life; (b) improvement of goods and services rendered to families; (c) carrying out studies to unravel the dynamic needs of families and individuals, and the means through which these needs can be satisfied; (d) advancing communal, countrywide, and global conditions appropriate for family life (Agolla & Ongori, 2009). Hussain, Dogar, Azeem, and Shakoor (2011) also described Home Economics as a field for preparing family members to increase their own and peoples' efficiency and as well assist individuals to shape their future and to adapt to change and calve their future.

In the Ghanaian society today, the Home Economics programme is developed to be valuable, beneficial and to train students with daily living and employment skills (Neequaye, Darkwa, & Amu, 2014). According to Neequaye et al. (2014), Home Economics is aimed at developing students' knowledge of the subject and improving technical competences in the field. It must be stated that Home Economics has consequently become a field which prepares individuals with knowledge of adapting to their own environment by successfully using material and human resources. McGregor (2010) indicated that Home Economics provides a multidisciplinary environment and content for students to practice and apply attained knowledge and skills from a diversity of fields, in circumstances related to everyday living.

In contemporary times, students' enrolment in Home Economics programme is continuously decreasing. Studies show that related programmes in the West Africa Examination Council (e.g., Clothing and Textiles, Home Management and Clothing and Textiles, etc.) have dwindled completely (Uwameiye, 2015). In Ode, Babayeju and Obalowu's (2013) view, there is also low students' enrolment in Home Economics programme in the universities. In their study, Ode et al. (2013) discovered that SHS Home Economics students did not continue to further the programme at the university because of the poor image attached to the programme. This was consistent with our experiences as practitioners in the educational sector which revealed small class sizes of Home Economics students compared to the other programmes. We also observed most

of the Home Economics students expressing dissatisfaction and disinterest in Home Economics. It appeared from our observation that some of the students did not have a passion for Home Economics and would like to divert their interest in other areas.

Although the trends in results make it evident that there is a decreasing rate of enrolment in Africa (Uko-Aviomoh & Oviawe, 2010; Anene, 2002), especially in Ghana (Neequaye, Darkwa, & Amu, 2014), it appears that limited literature exists on the determinants of students' enrolment in Home Economics programme (e.g., Anene, 2002; Uko-Aviomoh & Oviawe, 2010). Much is known regarding the general factors students' consider in the selection of programmes in SHSs and universities (e.g., Lawler, 2015; Mbawuni & Nimako, 2015; Oladele, 2000). However, examining the determinants of students' decision to enrol of specific programmes such as Home Economics provide a comprehensive understanding of the enrolment rate of that particular programme in question. Generally, this study seeks to examine the determinants of students' enrolment in Home Economics programme in Senior High Schools in Ghana.

A study of this nature has implications for Home Economics programme heads, students, parents, government and society. These stakeholders can utilize the findings to overcome the issue of low students' enrolment in Home Economics programme in the SHS. In the first place, the findings of this study can be used by Home Economics heads of department to improve the enrolment rate and the teaching and learning of Home Economics. In this technological age and era, where many people complain about unemployment and poverty alleviation, the results of the study would help curriculum planners, designers and evaluators align the contents of the syllabus to meet what they set to achieve. Although the study was conducted in Ghana, the findings are useful for educational institutions in other international countries that have Vocational and Technical Education Programmes at various levels of education.

## **2. Factors Associated Students' Enrolment in Technical and Vocational Programmes**

Despite the essence and significance of Technical and Vocational programmes, the programme is faced with a number of challenges. In practice, however, the programme is one of the programmes which attract the lowest enrolment of students both at the secondary schools, universities and other tertiary institutions (Anene, 2002; Uko-Aviomoh & Oviawe, 2010; Uwameiye, 2015). Besides, the low enrolment pattern, Home Economics education, for example, shows a wide disparity between male and female students in favour of females. Both low enrolment and gender disparity in enrolment have been attributed to wrong awareness (perception) of the meaning and the roles of Home Economists (Imonikeme, 2002). This gender-biased perception, according to Mbawuni and Nimako (2015), is a general perception held by pupils, teachers, parents, and headteachers, among others.

From Ode, Babayeju, and Onalowu's (2013) study, they found that parents discouraged their children to select Home Economics as a programme of study. According to Ode and his colleagues, parents seem to underrate Home Economics and

object to its inclusion in the school's curriculum. Ovute (2001) also reported that non-availability of equipment and facilities for practicals and the expensive nature of the programme has affected the enrolment of students on the programme at all levels of education. In most cases, parents decide for their children on the programme to study because of the labelled idea of what a male child and female child should do. That is, males are found to occupy powerful positions and females are supposed to be in the kitchen. Consequently, parents would desire that their wards, especially males, to be doctors, engineers, etc., thereby influencing the child's decision in selecting a programme of study (Nwankwo, 2004). Evans-Solomon and Opoku-Asare (2011) reported that males perceive sewing nor cooking skills as competencies for their female counterparts. These perceptions made them develop a general dislike for the said subjects in Home Economics.

Eze (2001) specified numerous factors that influence male students in the study of Home Economics; that there are differential patterns of socialization of girls and boys at an early stage of life; he recognises irrelevance of Home Economics for boys; non-existence of career education for young people; and femininity of Home Economics programme. Several authors have underscored a number of factors which affects the enrolment and gender disparities in Home Economics programme. Although these factors provide a clue to what really propels students to choose Home Economics as a programme of study in the SHSs, less empirical evidence has been provided to that effect. That is, no study was found which investigated the factors influencing the choice of Home Economics programme in SHSs.

Ode, Babayeju, and Onalowu (2013) also investigated the factors associated with low students' enrolment in Home Economics programme. Some of the restraints included lack of equipment /facilities/materials for the teaching and learning of the subject, inadequate instructional time because of the time-consuming nature of the subject, ignorance of career opportunities in Home Economics among others. The findings showed that students have a poor view of the roles of Home Economics programme.

Ezenwanne (2015) examined the academic stress among Home Economics students in Colleges of Education in Nigeria. Through the administration of questionnaires, data was taken to address the aim of the study. It was found that despite the level of study, students reading Home Economics were found to go through socio-interpersonal and physical-technical stressors in their academic quests. It was further revealed that these stressors were associated with course processes- acquiring and learning courses. Similar studies have been conducted and have found that students on various programmes go through stress (e.g., Agolla & Ongori, 2009; Amponsah & Owolabi, 2011; Rafidah, Azizah, Norzaidi, Chong, & Salwani, 2009). These studies made it clear that the high level of stress among students was as a result of course loads. As a result, most of these studies concluded that this could influence the rate of enrolment and loyalty of the programmes of study.

Findings of previous studies have made it clear that for a decision to be made by any student to enter into a programme, several factors come into play. Majority of

studies have highlighted the role of parents and the general attitude of the public as a determinant of the choice of the programme. In other studies, it was believed that the programme is for females rather than males. Studies like that of Amponsah and Owolabi (2011) have underscored the essence of the stress in making this decision to enrol in a programme. It seems studies combining a number of factors appear to be non-existent. This study adds up to the recent understanding of the factors which determines students' decision to enrol in a programme.

### 3. Research Methods

The cross-sectional descriptive survey design was employed for the conduct of the study. This design was used since the focus of the study was to describe the current state of students' decisions to enrol in Home Economics programme. This was done by collecting the data at one point in time with the aim of generalising the finding from the sample to the population. The target population comprised first-year Home Economics students from 16 selected SHSs in three administrative regions (i.e., Western, Central and Greater Accra Region). These regions were selected because they are regions that the authors have had adequate experiences with the Home Economics students in the Senior High Schools. Only first years were involved because they had just transited from their respective Junior High Schools. This was necessary because the study intended to explore what influenced their decision to choose the programmes they are offering.

A simple random sampling technique (lottery method) was employed to proportionally sample 4 SHSs from Western Region, 6 from Central Region and 6 from the Greater Accra Region. A census sampling technique was then utilised to include all Home Economics first-year students in the selected schools. The total of 1,136 students was recorded to be in all the 16 schools. This same number was the sample of the study. Out of 1,136 questionnaires administered, only 935 of them were successfully retrieved resulting in a return rate of 82.3%. The female respondents were 97.9% ( $n=915$ ) whereas 2.1% were males ( $n=20$ ). This highlights that more females than males enrol on Home Economics programme. The mean age was 16 years with a standard deviation of .887. The youngest respondent was 14 years whereas the oldest was 18 years

The questionnaire was used as the major instrument for the study. The validity and reliability of the responses to the statements on the questionnaire were ensured. Samples of the questionnaire were sent to experts in instrument development to establish content validity. A pilot-testing was also conducted and the responses were critically examined and modifications were made. A reliability estimate was computed using Kruder-Richardson reliability and yielded an estimate of .89.

The data were analysed using both descriptive and inferential statistics. To examine the factors influencing students' decision to enrol in Home Economics programme, binary logistic regression analysis was employed to analyse the data. This was because the predictors and the criterion were all categorical variables (dichotomous). In the estimation of the parameters, the bootstrapping approach was

used. Particularly, 1,000 bootstrap samples with 95% confidence interval using bias-corrected accelerated. About 2,000,000 seed for Mersenne Twister was used.

#### 4. Results

##### 4.1 Factors Influences Students' Decision to Enrol in Home Economics Programme

To examine the determinants of students' decision to enrol in the programme, binary logistic regression was used to analyse the data. The predictors were: (1) gender, (2) Interest, (3) desire to be entrepreneur, (4) having sibling offering the programme, (5) believe in the ability to go through the course, (6) job prospect/opportunities, (7) discouragement from mothers, (8) discouragement from fathers, (9) encouraged by JHS teacher, (10) deterred by Family relatives, (11) encouragement from Friends, (12) Basic Education Certificate Examination (BECE) grade, and (13) workload. The criterion variable was students' decision to enrol in Home Economics programme and its related fields when given the chance.

**Table 1:** Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	143.215	16	.000
	Block	143.215	16	.000
	Model	143.215	16	.000

-2log likelihood=814.295; Coz & Snell R<sup>2</sup>= .142, Nagelkerke R<sup>2</sup>

The Omnibus Tests of Model Coefficients found the model to be fit,  $X^2(16)=143.215$ ,  $p<.001$  (Table 1). The Nagelkerke R<sup>2</sup> showed that 22.2% of the variances in students' decision to enrol in Home Economics programme is explained by the predictors.

Table 2 presents results on the relative contribution of the predictors.

**Table 2:** Relative Prediction of the Predictor Variables

	$\beta$	Bootstrap <sup>a</sup>				
		Wald	Std. Error	Exp(B)	95% CI	
					Lower	Upper
Gender (Male)	19.786	.000	.263	39.3	19.23	20.30
Interest	1.446	32.71	.287	4.25	.92	2.05
Desire to be entrepreneur	-.361	3.73	.186	.70	-.73	.01
Having sibling offering the programme	-.799	14.87	.231	.45	-1.24	-.32
Believe in ability to go through the course	.671	10.52	.219	1.96	.26	1.13
Job prospect/opportunities	.826	18.98	.185	2.29	.47	1.20
Discouragement from mothers	.652	3.02	.408	1.92	-.08	1.56
Discouragement from fathers	-.639	5.51	.282	.53	-1.19	-.07
Encouraged by JHS teachers	.896	5.14	.406	2.45	.24	1.86
Deterred by Family relatives	-1.267	13.96	.314	.28	-1.89	-.67
Encouragement from Friends	.099	.200	.221	1.10	-.33	.54
BECE grade (6-10)	-.470	5.48	.204 <sup>b</sup>	.63	-.87	-.077
Workload	-.042	.195	.046	.959	.65	1.41
Constant	-.230	.612	.304	.79	-8.33	-3.63

The study revealed that students' interest positively influences their decision to enrol in Home Economics Programme,  $\beta=1.446$ ,  $CI(.92, 2.05)$ . Among all the predictors, interest to pursue the programme was the highest predictor of their decision to enrol in the programme ( $Walds\ test=32.71$ ). The analysis further found that a unit increase in students' interest will lead to 4.25 (odds ratio) probability that he/she will enrol in Home Economics programme. Similarly, students who believed that they have the ability to go through the Home Economics programme were 1.96 likely to enrol in the programme,  $\beta=.671$ ,  $CI(.26, 1.13)$ .

It was found that students' who had siblings offering Home Economics programme were less likely to enrol in the programme,  $\beta=-.799$ ,  $CI(-1.24, -.32)$ . The odds of having enrolled on Home Economics programme is .45 times lower for those who have siblings pursuing the same programme than those who do not have sibling(s) on the programme.

Students who believed that there are job opportunities for people who enrol in Home Economics programme are 2.29 more likely to enrol in the programme,  $\beta=.826$ ,  $CI(.47, 1.20)$ . Again, students who are encouraged by their Junior High School teachers to enrol in the programme are 2.45 time more likely to enrol in the programme than those who were not encouraged,  $\beta=.896$ ,  $CI(.24, 1.86)$ .

The results revealed that the odds of choosing Home Economics Programme is .53 times lower among students whose fathers discouraged them,  $\beta=-.639$ ,  $CI(-1.19, -.07)$ . When discouraged by family relatives, students were .28 times less likely to enrol in Home Economics programme,  $\beta=-1.267$ ,  $CI(-1.89, -.67)$ . It was also found that students who scored grade 6-10 in BECE were .63 times less likely to enrol in Home Economics programme,  $\beta=-.470$ ,  $CI(-.87, -.077)$ . Further analysis revealed that students who perceived that there is a lot of workload in Home Economics programme were .989 times less likely to enrol in the programme,  $\beta=-.042$ ,  $CI(.65, 1.41)$

A number of factors did not significantly predict students' decision to enrol in Home Economics Programme, however. These include gender, desire to be an entrepreneur, discouragement from mothers, and encouragement from friends.

## 5. Discussion

The findings of our study provide evidence to the effect that the social interaction and environment of the individual play a major role in students' decision to enrol in Home Economics programme. In various homes and families, for example, students' desires to read a particular programme are shaped by their interaction with the family. In this study, for one, siblings, family relatives, and fathers were found as agents who influenced peoples' decision to enrol in Home Economics programme. This finding is consistent with what has been found in previous literature. In Ode, Babayeju, and Onalowu's (2013) study, parents were found to discourage their children from selecting Home Economics as a programme of study. Supporting the views of Ode et al. (2013), Eze (2001) explained that parents' discouragement of their wards stems from the fact that there are differential patterns of socialization of girls and boys an early stage of life;

he recognises irrelevance of Home Economics for boys; non-existence of career education for young people; and femininity of Home Economics programme.

Corroborating the findings of this study, Dowell and Greenwood (2005) argued that society believes that the cookery class is "not for boys". It is important to highlight that these perceptions held by parents and the society do not only deter people from enrolling in Home Economics but also 'kills their interest to enrol in such programmes. It is unsurprising that this study discovered that interest is the strongest significant predictor of students' decision to enrol in Home Economics programme. This was also confirmed by Ferry's (2008) study which also found interest as a predictor of students' decision to enrol in Home Economics programme. Ferry further explained that interest in the study of Home Economics starts from home such that the home provides the material for playing role difference, which creates gender differentials among the children of the home.

Agents from schools were also found as a predictor of students' decision to enrol in Home Economics programme. Particularly, it was found that performance in the Basic Education Certificate Examination (BECE), as well as teachers, influenced students' decision to enrol in the programme. The association between vocational and technical skills training and weak academic ability is clearly noted in discussions with parents and guardians of trainees in Bortei-Doku et al.'s (2011) study. Some parents and guardians suggested that they decided to send their children into vocational training or apprenticeships after they failed to perform at the Basic Education Certificate Examination (BECE). The implication is that if the child had performed well, he/she would have been sent to the secondary school and not a vocational or technical training institute. In other cases, teachers are seen advising students who are weak to read Technical and Vocational related programmes. This has been supported by Pimpa's (2007) observation that teachers have made Technical and Vocational related programmes unattractive to students. This finding is also consistent with a study by Brown (2013) which reported that in Ghana, academically weak students are selected by the computerized school selection programme to read the subject. This has created the impression that Home Economics is to be studied by academically weak students. She stated that interest exhibited by some school administrators in the subject also leaves much to be desired.

Not only in Ghana but also in the United States (e.g. Wancott, 2000) Technical and Vocational Education has low image problems among parents and teachers. There are some myths and realities identified in technical education and vocational training in the United States. Most people think that vocational education is only for dropouts and special students (Brown, 2013). But the reality is 80% of students in secondary schools will take at least one vocational subject, and one out of eight students from the academic field will take more than one vocational subject (Wancott, 2000). The second myth is that vocational graduates, earn less than the academically - streamed students. Of course, every rational person would look at the job prospect of a particular programme before enrolling on it. In the case of this study, students' who believed that there are job opportunities available for those reading Home Economics programme



were more likely to enrol in the programme. Consistent with the findings of this study, Pimpa (2007) also found future job opportunities as one of the key criteria students used in confirming their decision to enrol in the vocational institutions. Pimpa (2007) also indicated that students examined their ability to handle the workloads of a programme before making the decision to enrol in the programme. This was supported by the findings of this study.

## 6. Conclusions and Recommendations

It can be concluded that students' decision to enrol in Home Economics programme is influenced by personal, home/family and school factors. These factors include interest, teachers, job prospects, fathers, family relatives, and BECE grade among others. These agents come into contact with students on a daily basis and thus, the probability of these agents influencing students' decision to enrol in Home Economics programme is high. Take the fathers and other family relatives, for example, students might have spent their whole life staying with them. These interactions shape students' ideologies about certain decisions to be taken.

Based on the findings of the study, it is recommended that management of Basic schools in Ghana should organise educative programmes to enlighten students and teachers on vocational and technical related courses and as such arouse students' interest in enrolling in such programmes. Management of SHSs should also take it upon themselves to educate all students on the notion that every programme is significant as far as national development is a concern. This is to erase the idea that some programmes are for those who are academically weak from their minds. Again, parents should be educated by stakeholders in education through public education and media to enlighten them on the essence of reading Home Economics.

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