Influence of Gender and Self Concept on Home Economics Achievement among Junior Secondary School Students in Akwa Ibom State, Nigeria

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Abstract
The purpose of this study was to investigate gender and self concept on home economics achievement among junior secondary school students in Akwa Ibom State. Two hypotheses were formulated to guide the study. Literature review was done accordingly. Ex-post facto research design was adopted. A total of five hundred and three (503) students were randomly selected and used for the study. The selection was done through the stratified and simple random sampling techniques. Two instruments were used to collect data: the questionnaire and Home Economics achievement scores obtained from Junior Secondary Certificate Examination (JSCE). Independent t-test analysis was employed to test the hypotheses at .05 level of significance. Result revealed that students mean score based on gender was not significantly different. Result also showed that students who have high self-concept performed better than their counterpart whose self-concept is low. Based on these findings, it was recommended that teachers and parents should always encourage students to develop positive self concept of themselves so that they can achieve more and make progress in their academic endeavours.

Introduction
Home economics has grown from a subject that was taught as domestic science to a multifaceted interdisciplinary course. Domestic science of the colonial days included simple training in cookery, housewifery, laundry work, sewing, spindle and childcare. It was in the early days a course that prepared girls for the stereotyped role of the wife whose singular responsibility was to keep the house for the “man” of the house (Olubajo & Olaiya 1998). Today Home economics is one of the approved vocational subjects taught in junior secondary schools as a viable course in national development.

The 1969 National Curriculum Conference transformed home economics from its traditional role to that of an interdisciplinary subject that borrows from the sciences, engineering, sociology, arts among others (Federal Republic of Nigeria, 2004). Home economics today is recognized as an important school subject. It is a skilled oriented field of study noted for its capability of equipping learners with skills. It has distinct areas such as food and nutrition, home management. Textile and clothing, child and family development. These areas are however presented in an integrated curriculum for the junior secondary schools (Iloje, 1999).

the abysmally poor performance of students in home economics at both internal and external moderated examinations has been of concern to home economists, vocational educators and educationists. It has also been found that home economics graduates in secondary schools are poor in the exhibition of behaviours desired as the goal for being exposed to home economics education. This poor goal realization has made some parents and guardians alike to counsel their wards away from offering the subject in school. It is no wonder that a progressive decline in enrolment in the subject has been noted (Olaiya, 1988).

Literature Review
Gender and Home Economics Students’ Academic Achievement
The relationship between gender and home economics achievement of students has been observed in different cultures throughout the worlds. Some of the measures which have come under investigation include cognitive styles achievement (Lynn, 1972; Okeke & Wood-Robinson, 1980; Siann & Ugwuegbu, 1980), and ability to perform tasks (Hanson, 1966, Ogunyemi, 1972; Onocha & Okpala, 1986). The general conclusion from these studies is in the direction of male superiority over female. It is only Ogunyemi’s study that indicated that the achievement of females and not males improved from teacher-supplied information about a science related, situation (Ogunyemi, 1972). He mentioned that girls included in their answers fine details which showed evidence of understanding. The performance of the boys were superior to those of girls.

Okpala (1986) opines that males are likely to be more effective in planning and implementing activity-oriented investigations than females. He reported that a large percentage of male pre-service teachers in his study demonstrated the ability to use formal reasoning patterns in problem solving situations than their female counterparts. There are other researchers (Hanson & Brembeck, 1966) who have also seen women teachers as having a predominantly literary bent or at least antiscientific and anti-technological bent. In other words, men are seen to be more practical, more scientific and more technologically, oriented than women.

What could be responsible for the male superiority over female which had manifested into what Fromm
(1968) called “a war between sexes”? Area these biases or is it a calculated propaganda against the female gender? Answers to questions such as those have led to various explanations about the differences between the genders. A number of dimensions range from natural (Fromm 1968 & Lynn 1972) to socio-cultural. They have pointed out that the characteristic differences between males and females are derived from anatomical and physiological differences. Lynn (1972), thinks that nature combines with the usual process of acquiring feminine identification to produce a style of thinking and learning for females that differ measurably from the style characteristics of males. But Hodges (1974) contends that what society regards as masculine and feminine is essentially rooted in cultural conventions rather than biology. Also Siann & Ugwuegbu (1980) feel that the different patterns of abilities seen as sex-appropriate in any culture are related to the expected stereotypes which the culture holds about sex roles. They asserted with particular reference to technical task, that social rather than physical variables account for sex difference in achievement.

The socio-cultural dimensions for sex differences seem to hold sway. Researchers (Mbilinyi, 1970; Hofman, 1972; & Pringle, 1974) have stressed the element of socialization in the nature-culture controversy over sex differences. Mbilinyi (1970) attributes what is regarded as the intellectual inferiority of women in certain areas to ingrained attitudes, prevalent in socio-cultural practices in child-rearing among cultures. And as Hofman (1972) puts it, female socialization emphasizes the importance of affinitive tendencies (the forming of warm personal relations) as opposed to the achievement motives more emphasized for males. Also Pringle (1974) explains that parental attitudes and expectations are different according to the sex of a child. Children grow in environments which clearly distinguished behaviour expected boys and girls, the proximate grounds for enforcing the proper roles is expressed in terms of what constitutes manly and womanly behaviour (Komarovsky, 1962).

There has been a renewed debate on the controversial issue of gender differences on Mathematics and home economics achievement. This debate current focuses on why female students are not seeking careers in information technology occupations. The most comprehensive reviews of the research in the area of gender differences have shown very few differences between mathematics and home economics abilities between female students (Halpern, 2000). In fact, the research has shown two gender differences in specific sub-areas of spatial and aptitude abilities, the dimensional mental rotation (favour males) and family management (favour females). Research conducted by Fennema & Sherman (1976) has also shown a decline in the differences between the genders in the past few decades on standardized test, suggesting that the more exposure that women are getting to mathematics and home economics classes, the better their scores. Even though this research put into questions whether gender differences still exist in academic achievement, many researchers are still finding differences in performance as well as general interest areas related to mathematics and home economics. Thus achievement alone cannot be the sole reason for women as they make their career choices.

Jacob, Lanaz, Osgoat, Eccles & Wigfield (2002) found that self concept of ability and value in mathematics decline for both gender between first and third year with no real difference between male and female students trajectories over time. In fact, by the third year in junior secondary school, girls valued home economics more than boys when controlling self concept ability. This research might suggest that females should be just represented in family management. Even though women have made great studies in the law, medical and social science professions, very few can be found in graduate programmes or professions in Mathematics, Computer Science, Physics, Engineering or Information Technology jobs (Eccles, 2001).

Many ideas have been put forth on why high achieving women may not be entering these professions including discrimination, gender-types, socialization, self concept of ability in these areas, and the value and interest that women have in these professions (Eccles, 2001).

The different roles boys and girls assume during adolescence and the different ways by which they are socialized may render girls vulnerable to assimilation of the adverse identity and behaviour ethnographers often find many youths. Cultures continue to mark family socialization practices vis-à-vis boys and girls. It continues to be a culture in which girls receive more family supervision and protection through childhood and adolescence than boys do. Parents tend to be even more concerned about the negative influence of culture on their female children than the male children. This will affect their academic achievement in home economics (Portes & Rumbant, 2001; Suarez-Orozoe & Suarez-Orozoe, 2001).

Party out of a sense that girls chastity and reputation must be protected and preserved and partly because girls are perceived as more physically and emotionally dependent girls tend to be raised with a much shorter and tighter vein than boys, who in many instances, are encouraged and expected to venture out into the world of works, romance, politics etc (Gibson, 1989; Suarez-Orozoe & Suarez-Orozoe, 2001). Girls are often forced to take a chaperon dates, boys are not only free to go unsupervised but are actually celebrated for their romantic exploits. In many cases, these restrictions may extend to such time-honoured, peer culture traditions. Even the idea of sleeping over at friends houses is discouraged for boy an would be unthinkable for girls.

Parents often enforce these restrictions on girls to avoid rumours and informal sanction from community members who view these kinds of practice as mistrust. Academic achievement will be hindered by
parents who choose not to rigidly enforce these rules and are often perceived as unable to control their children, issues bordering on dating, dress style and peer relation are also of eminent importance to parents (Gibson, 1989; Suarez-Orozeo & Suarez-Orozeo, 2001). Even among less traditional families, girls are more likely to adhere to parents rules and expectations (Sofelo, 1994; Kibria, 1976). This trend is supported by research on children, which suggest that girls tend to remain more culturally uncensored in their native culture as evidenced by their much higher levels of home language fluency (Porles & Rambout, 2001). This may result partly from the fact that girls spend more time with parents, as they have more responsibilities at home than their brothers (Valenzuez, 1999). As a result of this, girls are assisted in their school work and they tend to perform better in school than their boys counterparts.

The kind of school-culture retention that results from higher rates of exposure to the message and expectations of parental, old-world view may help to keep girls from assimilating oppositional views and behaviour at variance with those of their parents and home culture. These combined with messages and role models of dedication and effort serve the girls well as they resolve the tension between following the peer culture and following the road to success in and through school. If nothing else, the relative restriction imposed on girls serves to protect them more from engaging in the kind of criminal and gang-related activities in which boys are more free to engage (Smith, 1999). Hence girls give more attention to academics and achieve better grades and scores than boys (Smith, 1999).

Self-Concept and Academic Achievement

Sex difference in the development of self concept had been reported. Oluwo (1985) for instance, found that Nigerian boys had significantly more positive self-concept than girls. There is quite a body of research (Coppersmith, 1959; Obanya, 1976; Wylie, 1979) suggesting a positive relationship between self concept and educational achievements. These researchers believe that the child’s positive self-concept is perhaps the basis for educational progress. There are, however, some studies (Hart, 1985; Thomas, 1973) who found no significant relationship between general self-concept and academic achievement.

According to Ezewu (1987) “human self concept refers to how an individual conceives himself or herself” p. 18. It is a function of an individual evaluation of himself or herself in terms of what he or she can do or achieve. He further noted that students with high self concept makes poor learners who finally end u as school drop out and truants. Conversely, student with high self concept make best learners and achieve very highly. Cohen (1976) opines that success feedback given to students and words of praise help the students to develop high level of self concept. Combs & Davis (1966) support the assumption that the way a student perceives himself or herself is a crucial determinant of academic achievement. Obviously, high self concept enhances achievement than low self concept. In the North American countries, adults often characterize reading as a feminine activity; while in Nigeria parents want their sons but not necessarily their daughters to be well educated. They see reading as an essential element in school success, as “male activity”.

In another study, Mteer (1975) found that boys expressed a greater interest in home economics than the girls. The finding tends to agree with Feunama & Sherman (1976) who accounted for girls poor achievement in Mathematics to sex role. Mteer further explained that such a finding might be informed by the fact that the content of the home economics curriculum is largely male – oriented. Cresswall (1964) found that girls made fewer errors than boys in a linear programme on class. But while there was not significant difference in the test scores, the boys obtained higher scores than girls. Cresswall pointed out, however, that he result might be due to the attitude that chess is a male pastime. This could affect the females’ motivation and their subsequent achievement.

However, findings about self concepts and academic achievement have so far remained inconsistent and inconclusive. The present study was designed to contribute to the scantly and vacillating evidence in this area by investigating the relationship between self concept among other professional variables and secondary school students’ home economics achievement.

Methodology

The research design used for this study is the ex-post-facto design. The population of the study is made up of all the home economic students in junior secondary classes of the 241 public secondary schools in Akwa Ibom State. There were totaled two thousand one hundred and twenty three (2,123) in the year 2007 (Akwa Ibom State Secondary Education Board, 2005). The sample of the study was made up five hundred and three (503) students selected from the secondary schools used for the study. The stratified and simple random sampling techniques were adopted to select the schools and students that form the sample of the study. The instruments used for this study was the questionnaire and home economics achievement scores obtained from the Junior Secondary Certificate Examination (JSCE) of 2006/2007 session. Akwa Ibom State Ministry of Education provided the achievement data for the study. In order to validate the instruments, the two instruments were given to experts in educational research and evaluation in the Faculty of Education, University of Calabar for vetting. To ascertain
the reliability of the instrument, the researchers carried out a trial testing using two schools that were not included in the study. The reliability indices ranged from 0.65 to 0.83. This implies that the instruments had stability and consistency to measure what they purport to measure.

Result and Discussion
In this section each hypothesis is re-tested in the null form. The variables are identified and the result of the statistical analysis carried out to test the hypotheses. The 0.05 level of significance was used to test each of the hypotheses.

Hypotheses 1: There is no significant different in the home economics achievement of students in junior secondary school based on gender. In order to test the above hypothesis independent t-test was computed as shown in table 1.

Table 1 Independent t-test analysis of Home Economics Achievement of Junior Secondary School Students by Gender (N = 503).

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>204</td>
<td>47.279</td>
<td>15.411</td>
<td>.973 n.s</td>
</tr>
<tr>
<td>Female</td>
<td>299</td>
<td>48.605</td>
<td>14.387</td>
<td>.973 n.s</td>
</tr>
</tbody>
</table>

Critical t = 1.96 n.s = not significant

The independent t-test analysis of Hypothesis 1 reveals that the calculated t-value of 0.973 was less than the critical t-value of 1.96 at the 0.05 level of significance hence, the hypothesis was accepted. The result of the statistical analysis in Table 1 shows that there was no significant difference among the junior secondary school students in their home economics achievement means scores based on gender.

Hypothesis 2: There is no significant difference in the home economics achievement of students in junior secondary schools based on self-concept.

In order to test the above hypothesis, independent t-test was employed. The result of the analysis is reported in table 2.

Table 2 Independent t-test analysis of Home Economics Achievement of junior secondary school students by self-concept (N=503)

<table>
<thead>
<tr>
<th>Self-concept</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>209</td>
<td>50.387</td>
<td>16.176</td>
<td>2.98</td>
</tr>
<tr>
<td>Low</td>
<td>294</td>
<td>46.418</td>
<td>13.545</td>
<td>2.98</td>
</tr>
</tbody>
</table>

Critical t=1.96 *significant at p <.05

Table 2 shows that there was significant difference in the home economic achievement mean scores of student based on their self-concept. The value of the calculated t-test result of 2.89 with df of 501 is greater than the critical t-value of 1.96 at the 0.05 level of significance. Hence, null hypothesis 2 was rejected. The implication of above analysis was that subjects who have high self-concept perform better in home economic test than their counterpart whose self-concept is low.

Discussion of the findings
This section is concerned with the discussion of findings. This discussion will be done according to the hypothesis for the study. The result of the first hypothesis showed that, there was not significant difference between male and female subjects with regard to their mean scores in home economics achievement.

It is obvious that both sexes are motivated to achieve, by males are interest in the task itself, whereas females work for praise and the approval of others (Ekpo, 1992). Even though the reviewed related literature revealed that males are superior to females in academic achievement, the revealed that males are superior to females in academic achievement, the analyzed data rejected this assumption. This could be explained by the fact that since home economics is core (compulsory) subject for students at the junior secondary schools level; both sexes are forced by necessity to think hard in order to make a good pass in the examination. Again since both sexes were taught by the same teachers, both groups had the opportunity of working hard for their success.

The result of the second hypothesis revealed that, there is significant difference in their academic achievement based on self concept. A possible explanation adduced form the study is that a child’s positive self concept is perhaps the basis for his educational progress and achievement. Accordingly, Ezewu, (1987) noted that students with low self concept makes poor learner who finally end up as school drop out and truants. Conversely, students, with high self concept make best learners and achieve very highly. Combs & Davis (1966) support the assertion that the way a student perceives himself or herself is a crucial determinant of academic achievement. Obviously, high self concept enhances achievement than low self concept. It is a known fact that interest and high self concept contribute more to success in fields of study, such as home economics which is an
integrated subject of the study at the junior secondary school level.

**Conclusion and Recommendation**

Based on the result of findings of the study, it was concluded that, there was not significant difference in home economics achievement based on gender. This indicates that gender (male or female) did not influence their academic achievement in the subject. Self-concept significantly influenced students’ academic achievement in home economics. Students with high self-concept performed better than those with low self-concept. Based on the findings of the study, the following recommendations were made.

1. The findings of this clearly demonstrate the fact gender has nothing to do with academic achievement of students in home economics. It is therefore recommended that schools should re-orient parents on the importance of creating favourable socio-psychological atmosphere, providing educative materials and intellectual stimulation for these children. The Parent-Teachers-Association meetings should provide the forum of such enlightenment. Efforts should be made to get parents interested in the school activities. They should be regularly informed of their wards’ academic progress in school through the continuous assessment and end of term examination result.

2. Teachers and parents should always encourage students to develop positive or high self concept about them so that they would be able to achieve more and made progress in any school subject. High self concept is a sure way of better academic performance in school and in later life.

**References**


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