Innovation Skills and its Utilization among Home Economics Education Graduates of Ahmadu Bello University Zaria, Nigeria

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Abstract. With the increase in the number of graduates searching for work in the labour market, the need for innovation and training in universities and colleges is increasing rapidly. This study examined innovation skills and its utilization among home economics education graduates of Ahmadu Bello University in Zaria Nigeria, where the relationship between innovation skills and its utilization was investigated. The study employed descriptive correlation and cross sectional design. Quantitative approach was also used. Using a purposive and random sampling, 300 staffs of Ahmadu Bello University, local government Administrators, and Home economics graduates from Ahmadu Bello University participated in the study. The data were analyzed using frequency, percentage, mean and standard deviation. Regression was used to test the effects of all the variables, while Pearson’s linear correlation analyses were used to test the relationship at 0.01 levels of significances. The findings showed that correlation between innovation skills and utilization among the home economics graduates was positive at 0.000 < 0.01 level of significant. Innovations emerge as the major predictor of skills utilization, and it is recommended that university administrators and policy makers should re-evaluate the current home economics curriculum to suit the technopreneurialship global demand, and the home economics graduates need to appreciate the benefits of devoting greater attention to the innovation skills acquired and utilized it practically for socio economic development for themselves, their families and the society at large.

1. Introduction

Ahmadu Bello University has grown to become the largest and most influential and diverse university in Nigeria, consisting of eighty two (82) academic department. Twelve (12) faculties and twelve (12) research institutes and specialized centers, the university offers undergraduates and post graduates courses in diverse fields as administration, law and education among others. Home economics department is in the faculty of education under the vocational and technical education, it was established in 1977. The issue of vocational and entrepreneurship emphasized that skills development and work oriented training, needs to be given priority at all schools level, to promote employment generation without reliance on white collar job among the educated population in Nigeria (Akunnaye, 2012). This study chooses to investigate the innovation skills and it utilization of only graduates of home economics education from this university,
because it has a large number of graduates both at diploma, bachelors, masters and PhD level.

2. **Statement of the problem**

Despite the persistent cry by the government, parents and stakeholders for the introduction of entrepreneurial skill training programmes into the undergraduates curriculum, it has always been observed that majority of our graduates and especially those that had gone through little skills training and those that were expected to have acquired the skills for self-reliance and join the pool of entrepreneur find it very difficult and impracticable to find their feet on ground being employed or self-employed. The home economics graduates are also victims of these problems despite the skills they acquired necessary for creative work (Sunday, 2012). Another dilemma is the misconception and low social recognition of the home economics course, it’s viewed as a type of course meant for drop outs that involves only cooking and sewing for those with low educational attainment (Ahmed 2010). Other studies have also confirmed that Home Economics and its practitioners have image problems in many of the African countries (Anyakoha, 2007). This is so because in most of the African countries the real image of the Home Economics is not there, people assumes that it only involves cooking and sewing. Therefore that wrong assumption tarnishes the image of the Home Economics Education, leaving it at the ghetto and makes the graduates shy on utilising the skills they acquired, which is not so in other countries.

Gender stereotyping in Home Economics is another serious phenomenon that is a challenge to Home Economics Education, it is commonly seen in Nigeria that in most of the Home Economics classes at any level almost all the students are females, as a result of the misconception of the course. This statement is in line with Anyakoha (2007) who said it is commonly seen as the field that focuses on roles socially vested on the females. The above mention problem led to general apathy among parents, administrators, teachers, students and the community towards home economics education. Therefore having taken cognizance of the problem of our new generation of university graduates, this prompted the researcher to carry out a study that looked at the innovation skills and it utilization among the home economics graduates of Ahmadu Bello University, Zaria in Kaduna State of Nigeria.

3. **Objective of the study**

The study investigated the relationship between innovation skills and it utilization among the home economics graduates of Ahmadu Bello University Zaria, Nigeria.

4. **Research Questions**

Does innovation relate to skills utilization among home economics graduates?

5. **Hypothesis**

There is significant relationship between innovation and skills utilization among the home economics graduates.

6. **Literature Review**

The term innovation referred to ideas or practice that is within the context of the school. Another definition of innovation involves newly introduced method, customs device, change in the way of doing things, renew, and alter among others. Onu (2014) view innovation as a means of doing things differently in different ways. Home Economics education today is not a field for the mere Courage and imagination, but a course that is needed in developing innovative programmes to meet the challenges of the present and foreseeable future in interpreting programmes, which needs a demanding funds and facilities to carry out these programmes (Chiduma & Emelue 2011).

Home Economics is a profession with more than a hundred years of global history. Celebration for the centennial of the establishment of the international federation for the home economics (IFHE) peaked at the world congress in 2008, and the American Association of family and Consumer Sciences celebrate its centenary in 2009. Given these milestone, which trumpet the
longevity of the profession, it is timely to reflect on what could be regarded as one of the defining and enduring influences on the establishment, continued development, and the future of the field- the place and importance of generational theory. According to Alonge (2010) Home economics is described as a combination of innovative development, healthy life style, social responsibility, sustainable development and use of resources and cultural heritage. The innovation in home economics focus on nutrition education and food culture, family studies, consumer and environmental issues, all based on human aspects and everyday life.

Research undertaken by Lemchi (2016) identifies a philosophical shift in practice and pedagogy for home economics, with positive outcomes for students. This shift includes: encouraging students to clarify their own ideas, make their own decisions, use critical analysis, reflect on their learning, use research tools and strategies, explore issues, and encourages discussions, group work, and “ensuring higher order tasks involving the generation, application, analysis, and synthesis of ideas”.

Allan (2008) said that despite the many variances between countries on how home economics are implemented there are clear unifying themes: Home economics is responsive to change. Changing times require new ways of thinking, inclusive in this are the specialist thinking skills of critical and reflective thinking, and met cognition, Pervasive themes of wellness, technology, global interdependence, human development, resource development/management, Individual, family and community, self and society are identified as a common body of knowledge. Social, economic and environmental challenges and issues, and wholeness of the global family, over-arching themes include family, food and nutrition, food preparation, management and consumer choice.

In the face of the changing situation of the economy, where unemployment is the order of the day, home economics help people through utilisation of skills for today’s living. Anyakoha and Lemchi (2006) remarked that, one of the greatest challenges of home economics is to determine those issues that pose various forms of challenges and threats to individual families and the society at large and then address them most appropriately. The greatest challenge the society is facing presently is unemployment which can be addressed by entrepreneurial skill acquisition which innovation skills serves as special ingredients for self-reliance programmed. Unemployment leads to poverty, robbery, among others.

Fortunately, home economics education has several opportunities that involve innovation skills in both small and medium scale business, which can give the individual an opportunity for gainful self-employment. Ahmed (2010) explains that home economics related innovation skills utilization relayed on:

**Food and Nutrition Skills**
Fast food vending catering services, Bakery-Bread making, snacks, cake making and decoration, Ice cream business, Restaurant management, preparing of fruits drink, example zobo drink, bottling of groundnut, grounded pepper, and other spices.

**Clothing and Textiles Skills**
Fashion designing (men/women apparel), Tile and dye/batik production, embroidery, dressing (saloon), Fashion school operation, Bridal shop, and making of children apparel

**Home Management Skills**
Soap and body cream production, laundry and cleaning services, Rug cleaning services and housekeeping.

**Child development Skills**
Nursery management, day-care centers and baby sitting

**Housing and design Skills**
Interior decoration, Toys and gifts shop and Making of craft

The above innovative skills offered under home economics education provides individual with the necessary skills/tools for further creative work. Utilisation of skills on those training may require innovation and motivation to be inculcated into the students; this will enhance the graduates productivity, effectiveness and efficiency on utilization of skills.

7. **Methodology**
The study employed descriptive cross sectional survey research design whereby response of the respondents were collected at once in order to reduce time and cost involved, and the results represented all the home economics graduates from Ahmadu Bello University, Zaria in Kaduna State. The study used quantitative research approaches using questionnaires for collecting data. Descriptive correlation techniques used to determine the generality of the raised assumption, which helped the researcher to find the relationship between the variables.

**Target Population**

A total of 1200 was the population of the study. This includes one hundred and fifty administrative staff of Ahmadu Bello University (150). One hundred and fifty (150) local government administrative staff and nine hundred (900) home economics graduates.

**Sample Size**

Sloven’s formula was used to determine the minimum sample size for the study. The formula is given as:

\[ N = \frac{N}{1+N(e)^2} \]

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Target Population</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators and staffs of Ahmadu Bello University</td>
<td>150</td>
<td>38</td>
</tr>
<tr>
<td>Administrators of the eight local government</td>
<td>150</td>
<td>38</td>
</tr>
<tr>
<td>Home economics graduates of Ahmadu Bello University</td>
<td>900</td>
<td>225</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1200</strong></td>
<td><strong>301</strong></td>
</tr>
</tbody>
</table>

Source: Home economics department records Ahmadu Bello University and Local government commission board Kaduna state, Nigeria

**Research Instruments**

**A - Questionnaire**

For the purpose of this study two structured questionnaires were used for data collection from the respondents, one for home economics graduates and another for the administrators of Ahmadu Bello University and the Local government administrators. The questionnaires contained 35 items that was divided into three parts, namely; A, B and C. Section A contains the demographic characteristics of the respondents, such as gender, age and qualification. Section B contains 10 questions on innovation skills, section C contains 15 questions on utilisation. The response mode on the questionnaires on both dependent and independent variables was indicated as; Strongly Agree (4), Agree (3), Disagree (2), Strongly Agree (1).

8. **Data Analysis**

The data collected was analyzed statistically using the statistical package of the social science (SPSS). Frequency and percentages were used for demographic characteristics of respondents, while mean and standard deviation were used to analyze the perceptions of the respondents on innovations skills. Inferential statistics involving Pearson Linear Correlation Coefficient (PLCC) statistic and regression analysis were used to determine the relationships between independent variable and dependent variables at 0.01 levels of significances. The following mean ranges were used to arrive at the mean of the individual indicators and interpretation.

<table>
<thead>
<tr>
<th>Mean</th>
<th>Range</th>
<th>Response mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.26</td>
<td>4.00</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>2.51</td>
<td>3.25</td>
<td>Agree</td>
</tr>
<tr>
<td>1.76</td>
<td>2.25</td>
<td>Disagree</td>
</tr>
<tr>
<td>1.00</td>
<td>1.75</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Interpretation:
- **Very high**
- **High**
- **Low**
- **Very low**
Table 1: Respondents’ perceptions on items relating to innovation (n=279)

<table>
<thead>
<tr>
<th>Innovation Items</th>
<th>Category of respondent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local government administrator</td>
<td>University staff &amp; administrators</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>I</td>
</tr>
<tr>
<td>Innovations in home economics leads to innovative thinking and creative problem solving</td>
<td>3.5</td>
<td>VH</td>
</tr>
<tr>
<td>Innovation can be a catalyst for the growth and success of home economics education</td>
<td>3.5</td>
<td>VH</td>
</tr>
<tr>
<td>Innovation among home economics graduates gives a competitive advantage to grow</td>
<td>3.3</td>
<td>VH</td>
</tr>
<tr>
<td>Innovation in home economics means coming up with new ways of doing things</td>
<td>3.4</td>
<td>VH</td>
</tr>
<tr>
<td>Innovation in home economics uses technological means to be productive</td>
<td>3.3</td>
<td>VH</td>
</tr>
<tr>
<td>Home economics developed innovation through training</td>
<td>3.3</td>
<td>VH</td>
</tr>
<tr>
<td>Lecturers should encourage innovation and originality in students by giving them practical</td>
<td>3.4</td>
<td>VH</td>
</tr>
<tr>
<td>Fear of being innovation hinders the progress of home economics graduates</td>
<td>3.2</td>
<td>H</td>
</tr>
<tr>
<td>Equipped laboratory is imperative for helping the graduates to develop innovative talents</td>
<td>3.3</td>
<td>VH</td>
</tr>
<tr>
<td>Innovation is a disposition to make one recognize his/her skills</td>
<td>3.4</td>
<td>VH</td>
</tr>
<tr>
<td>Overall Mean/SD</td>
<td>3.4</td>
<td>VH</td>
</tr>
</tbody>
</table>

Note: I = Interpretation, M = Mean, SD = Standard deviation, VH = Very High; H = High

Table 1 shows the respondents perception on innovation. For Local government administrators the item which states that “innovation in home economics leads to innovative thinking and creative problem solving” had a mean of 3.5 which is interpreted as very high. While items “Innovative can be a catalyst for the growth and success of home economics education” is interpreted as very high with another mean of 3.5. Item on “innovation in home economics means coming up with new ways of doing things” “Lecturers should encourage innovation and originality in students by giving them practical’s, “innovation is a disposition to make one recognize his/her skills” have a mean of 3.4 which means very high respectively. While the University staff and administrators, on the item “innovation in home economics leads to innovative thinking and creative problem solving” had a mean of 3.2 which is interpreted as very high.

Other items on “Innovation among home economics graduates gives a competitive
advantage to grow” “Equipped laboratory is imperative for helping the graduates to develop innovative talents” and “innovation is a disposition to make one recognize his/her potentials to improve his/her skills” has a mean of 3.5 respectively which is very high. For the home economics graduates on item “Lectures should encourage innovation and originality in students by giving them practical” has 3.5 which is very high. Whereas item on “innovation in home economics leads to innovative thinking and creative problem solving”, “innovation can be a catalyst for the growth and success of home economics education”, “innovation among home economics graduates gives a competitive advantage to grow”; “innovation in home economics means coming up with new ways of doing things” and innovation is a disposition to make one recognize his/her potentials to improve his/her skills” all these items have 3.4 respectively which indicates very high for the items.

By looking at the interpretations above, it revealed that all the ten items adapted for the innovation scale in this study were highly perceived by the respondents (overall mean=3.4; SD=0.7). In the same vein, results indicate that respondents in each category, namely: Local government administrators, University staff & administrators, as well as Home economics graduates have higher perceptions on items relating to innovation. Accordingly, the means and standard deviations were (mean=3.4; SD=0.6), (mean=3.4; SD=0.7), and (mean=3.4; SD=0.7) for Local government administrators, University staff & administrators, and Home economics graduates, respectively. The impact of the overall SD value of all the three categories of the respondents is not wide, 0.6, 0.7 and 0.7 respectively. This shows that majority of the opinion agree that there is a relationship between the independent variable and the depended variable. A graphical representation of these results is further depicted in Figure 4.3.

Figure 1: Means for individual indicators of innovation by category of respondent
Figure 1 shows that both the University staff and administrators, Local government administrators and home economics graduates has a higher scores on all the ten innovation items with overall mean 3.4 respectively. They all believe that innovation in home economics means coming up with new ways of doing things that can be a catalyst for the growth and success of home economics education.

8.1 Correlation between innovation skills and it utilization
Regarding the relationship between innovation skills it utilization, results presented in Table 2 indicated a strong and significant positive relationship between innovation skills and utilization (r = 0.700; p < 0.01) based on Cohen’s (1988) guideline for interpretation the strength of the correlation.
Hypothesis Testing

Research Question: Does innovation relate to skills utilization among home economics graduates? 

H₁: There is significant relationship between innovation and skills utilization among the home economics graduates.

This hypothesis of the study was tested using regression and Correlation Coefficient at P≤0.01 level of significance. Table: 3 show the interpretation of the strength of the correlation coefficient.

Table: 3 OLS regression summarizing the combined effect of innovation skills on utilization (DV)

<table>
<thead>
<tr>
<th></th>
<th>Un standardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.843</td>
<td>.158</td>
<td>5.332</td>
<td>.000</td>
</tr>
<tr>
<td>Innovation</td>
<td>.766</td>
<td>.047</td>
<td>.700</td>
<td>16.323</td>
</tr>
<tr>
<td>F=266.440</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R=.700</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value=.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-Squared=.490</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared=.488</td>
<td></td>
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</table>

As indicated in Table: 3 Innovation had a significant positive relationship with skills utilization where (β) = 0.766, t = 16.323, p = 0.000. Hence, hypothesis was accepted because 0.000 < 0.01 level of significance. The R-square value is .490 which means that 49% of the skills utilization accounted for by innovation hold other factors constant.

9. Conclusion

The results of this study also revealed that, in trying to apply new ideas in order to produce something new and useful (innovation), the Overall Mean and standard deviation are also very high (3.4 and 0.7) respectively. Scholars agree that innovation leads to problem solving leading to competitive advantage and growth. It is clear that innovation skills has achieved a balanced and desired outcomes and it utilization among home economics education graduates of Ahmadu Bello University Zaria, Nigeria. From the analysis of this study and related literatures, it is clear that innovations in home economics lead to innovative thinking in educated youths that are engaged in productive entrepreneurship through constant practice.

10. Recommendations

- Home economics graduates should be given ample opportunity to be innovative and translate their theoretical knowledge to practical application through the grant of soft loans by the government.
- The Universities should be able to provide more holistic learning of home economic education by helping to support students to learn more about entrepreneurship through attachments with successful entrepreneurs.
- Home economics classes should be students centered in approach based on individual student creativity and innovative skills with zeal towards changing behavior towards home economics education before graduation.

- As regards teaching methods however, practical based teaching approach should be greatly encouraged. Thus, students should not only be theory centred, they should be given the opportunity to participate practically and be allowed to give their own input on topical issues of discussion in classroom learning environment.

- Home economics education courses should emphasize more important aspects of entrepreneurial knowledge, which include creativity skills, innovation skills, problem solving ability and critical thinking skills.

References


Onu V. C (2014). Developing Creativity And Problem Solving Skills For Entrepreneurship Education In Entrepreneurship Education of Health Entitles Strategies. Publish By HERAN.