
EFFECTS OF FOOD PRACTICALS ON STUDENTS SKILL ACQUISITION IN SELECTED TERTIARY INSTITUTIONS OGUN STATE, NIGERIA

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ABSTRACT

The study examined the effects of Food Practicals on Students' Skill Acquisition in selected tertiary institutions in Ogun State, Nigeria. The study covered Home Economics Students in Tai Solarin University Ijagun and Home and Hotel Management Students of Olabisi Onabanjo University, Yewa Campus, Ayetoro respectively. Two research questions were raised while two null hypotheses were formulated and tested at 0.05 level of significance. The study was a quasi-experimental research which employed the pre-test, post-test control group design. The sample was made up of three hundred (300) level Home Economics Students in 2008/2009 session. The subjects were 138 and they were grouped into two, they were the experimental group (students from Tai Solarin University (69) and the control group students from Olabisi Onabanjo University (69). Both groups for eight weeks, thereafter, a post-test was given to both groups. The research instruments used were questionnaire and evaluation instrument for the practicals. The data collected were analysed using the analysis of covariance (ANCOVA). The F value results of the study revealed that one of the null hypotheses were rejected and one accepted. The major findings of the study were:- (i) students exposed to food practical lessons acquired more skills than those that are not exposed. (ii) students from the middle socio-economic background is not significant to skill acquisition. Conclusion and recommendations were made.

Keywords: *Effect, Food practicals, Skill acquisition & Tertiary Institutions.*

INTRODUCTION

The philosophy of Home Economics Education borders on the improvement of the quality of life of the individual family specifically and the society at large. It focuses on the acquisition of knowledge, skills and competencies which family members require to satisfactorily improve family living. Food and Nutrition is a major area of Home Economics. It comprises of the principles of nutrition-meal management vis-à-vis practical application of the principles. It is a practical –oriented aspect of Home Economics. The Science of Food and Nutrition cannot be effectively taught without carrying out practicals. Learning is the activity one performs and the experience(s) one passes through that affect his/her behavior (Oniyama and Amroma – Asite 2003). They posited that learning is a progressive and an orderly change in behaviour which comes as a result of experience and exercise. They asserted that learning is acquired through practice or training and experience(s) that must result in change in behaviour and such change in behaviour should be relatively permanent. To this end, various methods of teaching are employed in teaching, these include: lecture, demonstration, discussion, individualized, practice and drill, discovery, problem solving, role-playing, project, assignment, field trip and mode to develop creativity (Ochonogor & Onyebueke 2003). Food and Nutrition is a practical-oriented subject which should be taught with almost all members of teaching listed above especially the practice and drill method. This is a method which comprises of description

and explanations as well as practice (Olaitan & Agusiobo 1981). The objectives of the instructions in this method of teaching specify acquisition of skills and proficiencies in performing some acts, the skills to be acquired are part of the components of the subject. As a learners –centred method of teaching, the learners are expected to be involved with the practice to develop skills as it provides opportunity for the individual students to participate in the lesson until he masters a particular skill for learning to take place, the learner must interact with aspects of its environment. He must actively participate in the learning process (Oniyama and Amroma – Asite 2003). This can be done by exposing the students to practical lesson simultaneously with the theoretical principles. In order to acquire skills in Food and Nutrition, students, must be involved in associative learning. There are other variables which may affect skill acquisition even when the curriculum is effectively implemented. These are attitudes and socio-economic background of students. The socio-economic background of students could have positive or negative effect on the academic performance of students education that children from low socio-economic families perform poorly at any given level of ability. It is against this background that the study wants to find out if students in tertiary institutions are exposed sufficiently to Food practicals and if such practicals have effect on their skill acquisition.

STATEMENT OF THE PROBLEM

The teaching of Food and Nutrition as a practical-oriented course requires the application of the principles of learning. Learning will only take place if the correct methods of teaching are employed students must be given opportunity to interact with aspects of the environment. They must be able to relate theoretical principles of Food and Nutrition with the practicals they are expected to participate in associative learning so that they can develop and demonstrate practical skills in Foods and Nutrition.

RESEARCH QUESTIONS

The study sought to answer the following research questions:

1. Is there any significant different in skill acquisition between students exposed to food practicals and those who are not
2. Is there any significant difference in skill acquisition among students from low, middle and high socio-economic backgrounds?

RESEARCH HYPOTHESES

H01: There is no significant difference between skill acquisition students exposed to food practicals and those who were not.

H02: There is no significant difference among skill acquisition of students from low, middle and high socio-economic backgrounds.

OBJECTIVE OF THE STUDY

The broad objective is to determine the effects of food practicals on students skill acquisition on selected tertiary institutions in Ogun State, Nigeria.

SPECIFIC OBJECTIVES

The specific objectives are to:

- i. Assess the effect of skill acquisition between students exposed to food practical and those who were met in the study area.

- ii. Examine the effects of skill acquisition among students from low, middle and high economic background in the study area.

SIGNIFICANCE OF THE STUDY

Learning comes as a result of experience and practice. Associative learning is encouraged in the teaching and learning process of Food and Nutrition as at results from a connection between a stimulus and a response as propounded by Pavlov (1902). This principle of learning emphatically encourage practice. Therefore in teaching Food and Nutrition, practical lessons would afford the students opportunities to practice what they have learnt and would enhance their skill acquisition. Since Home Economics Education focuses on the acquisition of knowledge, skills and competences, it is expected that the results of the study will enable Home Economic lecturers to see the need to teach theoretical principles of Food and Nutrition and the practicals simultaneously as this would enhance students skill acquisition. The result of the study will encourage government to provide fund for the procurement of equipment and provision of facilities. This will enhance more practical classes and consequently students’ skill acquisition.

MATERIALS AND METHODS

The study was quasi-experimental research which employed the pre-test, post-test control group design. The population consisted of 300 level Economics students in Tai Solarin University, Ijagun and Home and Hotel Management Students, Olabisi Onabanjo University, Yewa Campus Ayetoro in 2008/2009 session Tai Solarin University as the experimental group and Olabisi Onabanjo University as the control group. Two instruments were used for data collection. One is the practical skill rating scale and the second was questionnaire consisted of items based on null hypotheses. The data collected was analysed using analysis of covariance (ANCOVA) statistics. These were tested at 0.05 probability level using computer sub-programme (SPSS).

RESULTS

Hypothesis 1: (H01) - There is no significant difference between skill acquisition of students exposed to food practicals and those who were not.

Table 1: Ancova summary table for the experimental and control groups on skill acquisition of students exposed to food practicals and those who were not

Source of variation	Sum of squares	Df	Mean square	Calculated f-value	Significance
Covariates	252.677	1	252.677	46.511	0.000
Pre-test	252.677	1	252.677	46.511	0.000
Main effects	7720.064	1	7720.064	1421.055	0.000
Group	7720.064	1	7720.064	1421.055	0.000
Explained	7972.7400	2	3986.370	733.783	0.000
Residual	733.405	135	5.433		
Total	8706.145	137	63.549		

The results using pre-test as a covariate in table 1 showed that the main effects were significant at 0.05 level. This indicated that there was a significant difference between

students exposed to food practicals and those who were not ($F_{1, 137} = 1421.055$, $P < 0.05$).

Table 2: Multiple classification analysis between experimental and control groups in their skill acquisition

Variable + Category Groups	N	Unadjusted Deviation	Eta	Adjusted for independent Covariates	Beta
Experimental	67	782		7.79	
Control	71	-7.38		-7.35	Multiple R squared
			0.96		0.95
Multiple R					0.916
Grand mean 25.55					0.957

The unadjusted deviation and the adjusted deviation in the multiple classification analysis in table 2 above indicated that students in experimental group differ significantly from the students in the control group in their performances. This is also reflected in the adjusted post-test means for both groups of students. The adjusted post-test mean for the experimental group was 33.34 while that of the control group was 18.20. It followed that food practical lessons had significant effect on students skill acquisition. Therefore, the null hypothesis I which slated that there is no significant difference in skill acquisition between students exposed to food practicals and those who were not is rejected. The contributor of variance is 91.6%.

Hypothesis two (HO₂) There is no significant difference among skill acquisition competences of students from low, middle and high socio-economic backgrounds.

Table 3: Ancova result for the experimental and control groups (independent variables) on skill acquisition of students from low, middle and high socio-economic backgrounds

Sources of Variation Covariates	Sum squares	of	Df	Mean square	Cal F-value	Sig of F
Pre-test	252.677		1	252.677	*4.348	.039
Main Effects	665.774		2	332.887	5.728	.004
Socio-economic status	665.774		2	332.887	5.728	.002
Explained	918.450		3	306.150	5.268	
Residual	7787.695		134	58.117		
Total	8706.145		137	63.549		

$P < 0.05$ Calculated f-value = 5.7208

The socio- economic status of parents was not significantly at 0.05 level. This the socio-economic status of parent had no significant effect on the skill acquisition of students ($F_{2, 137} = 5.728$).

Table 3b (i): Post HOC Analysis (Turkey's B Multiple Range test) for the Socio-economic background on skill acquisition. Analysis of variance (Anova)

Sources of Variation	Df	Sum of squares	Mean square	F-Ratio	Probability
Between Groups	2	721.1716	360.5858	6.0963	0.0029
Within Groups	135	7984.9733	59.1480		
Total	137	8706.1449			

Table 3b(ii)

Group	Count	Mean	Standard Deviation	Standard Error	95pct cont. int for mean
1	14	22.7837	6.4829	1.7326	19.0426 to 26.5288
2	77	27.5844	8.1923	9336	25.7250 to 29.4438
3	47	23.0426	7.1291	1.0399	20.9494 to 25.1357
Total	138	25.5507	7.9717	.6786	24.2088 to 26.8926

In order to find out groups that are significantly different, the Turkey Post Hoc Analysis was carried out shown in tables 3bi and ii. The result indicated that there was a significant difference between students from middle class and those from low class. The mean score for the middle socio-economic group is higher than from the low group. It followed that although socio-economic status of parents has no significant effect on the skill acquisition of students, the students from the middle socio-economic group. Therefore, the hypothesis which stated that there is no significant difference in skill acquisition among students from low, middle and upper socio-economic background is accepted.

DISCUSSION OF RESULTS

The study showed that students in the experimental group had higher skill acquisition competencies when compared with the control group. This indicated that students exposed to food practical lessons acquired more skill than those who were not. The findings from tables 3a, 3b(i) and (ii) revealed that there is no significant difference in skill acquisition amongst students from low, middle and high socio-economic backgrounds. The result of the Post Hoc Analysis also showed that there is no significant difference in skill acquisition between students from middle class and those from the low class. Although students from the middle socio-economic background had better skill acquisition in food practical the difference is not significant.

CONCLUSION

It is concluded that exposure of students to food practical is necessary for skill acquisition. Also the socio-economic background of students had no bearing with their skill acquisition.

RECOMMENDATIONS

Based on the findings and conclusion, the following recommendations were made:

1. Government should provide all necessary facilities and equipments for the teaching of food and Nutrition courses.
2. Students should be exposed sufficiently to food practical lessons in order to ensure that they acquire adequate skills that could make them self reliant

3. The curriculum for food and nutrition courses should be effectively implemented.
4. The lecturers to should be more committed to food practical. They should make the best of every situation. They should also be innovative.
5. Students should seize every opportunity while in training to acquire all the necessary skills. They should be punctual and regular to all food practical lessons.

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