

Effectiveness of Planned Teaching Program Regarding Breast Self-Examination in Early Detection of Breast Cancer among Nursing Students of Sumandeep Nursing College Pipariya, Waghodia, Vadodara

Ms. Gagan Sharma¹, Mr. Ismail P.A.², Shraddha Patel³, Pathak Rajat⁴, Shivangi Patel⁵, Priya Patel⁶

¹Assistant Professor, Department of Medical Surgical Nursing, Sumandeep Nursing College, Sumandeep Vidhyapeeth, Pipariya, Vadoara-391760, Gujarat, India

²Lecturer, Sumandeep Nursing College, Sumandeep Vidhyapeeth, Pipariya, Vadoara-391760, Gujarat, India

^{3,4,5,6} Student, sumandeep Nursing College, Sumandeep Vidhyapeeth, Pipariya, Vadoara-391760, Gujarat, India

Abstract: Awareness of breast self-examination among nursing students is very crucial nowadays because nurses play a vital role in bringing changes and creating awareness in community and susceptible group, with this health of student nurses and nurses is also important. As breast cancer is commonly seen in females to prevent this & early case detection & treatment breast self-examination awareness is must.

AIMS AND OBJECTIVES: To Assess Effectiveness of Planned Teaching Program on Knowledge Regarding Breast Self-Examination Among Nursing Students of Sumandeep Nursing College.

MATERIAL AND METHODS: The Pre-Experimental design approach: A Pre-test, Post-test design is used in this study on 60 nursing students by simple random sampling technique.

RESULTS: The findings indicate variable such as family type($\chi^2=20.176$) is found to be significant at 0.05 level of significance. While other variables are non-significant. Thus it can be interpreted that there is significance association between pre-test levels of knowledge among B.sc nursing students with their selected demographic variable

CONCLUSION: According post-test knowledge score 80% have good knowledge and 20% have average knowledge and no one have poor knowledge which was higher than pre-test knowledge score range. According to pre-test 68.3% were having knowledge level as average, while 28.3% had found with good knowledge has level and other 3.3% found with poor knowledge. The mean post-test knowledge score (17.6333) also was higher than the mean pre-test score (12.7833). There was significant difference in knowledge scores regarding breast self-examination among 1st year B.sc nursing students Sumandeep Nursing College, Pipariya, Waghodia, Vadodara. Thus H1 is accepted.

Keywords: Breast Self-Examination, Planned Teaching Program, Non-Communicable Disease, Nursing Students, Knowledge, Pre-test , Post-test score.

1. INTRODUCTION

Breast cancer is the most common type of cancer in women and the second leading cause of cancer related deaths, next to lung cancer. Although men can also get breast cancer. ¹

Breast cancer is the uncontrolled growth of breast cells. The term breast cancer refers to a malignant tumor that has developed from cells in the breast. Cancers originating from ducts are known as ductal carcinomas; those originating from lobules are known as lobular carcinomas.² The most effective way to detect breast cancer is by mammography, and a clinical breast exam can complement mammography screening.³ breast self-examination can help empower women to take some control and responsibility over their health promotion.⁴

OBJECTIVES:

- 1) To assess the pre-test score knowledge regarding breast self-examination among nursing students of Sumandeep Nursing College
- 2) To evaluate the effectiveness of planned teaching program on knowledge regarding breast self-examination among nursing students of Sumandeep Nursing College.
- 3) To find out association between post teaching knowledge score of breast self-examination among b.sc nursing students of Sumandeep Nursing College with selective demographic variables.

HYPOTHESIS:

H 1: There will be significant difference in the pre-test and post-test knowledge score regarding breast self-examination among nursing students at Sumandeep Nursing College.

H 2: There will be significant association between the selected demographic variables with the pre-test and post-test knowledge regarding breast self-examination among nursing students at Sumandeep Nursing College

2. MATERIALS AND METHODS

Research Approach: A experimental evaluative approach was used for the study.

Research Design: Pre-experimental one group pre-test post-test design.

Independent variables: The independent variable in this study is planned teaching program on breast self- examination.

Dependent variable: The dependent variable in this study is knowledge of nursing students regarding breast self-examination.

Target Population: In this study target population comprises of 1st year B.Sc. Nursing students who are studying in Sumandeep Nursing College.

Sample: In this study sample are 1st years B.Sc. Nursing students who are studying in Sumandeep Nursing College.

Sample Size: The sample for this study are 60, 1st year B.Sc. Nursing Students.

Sampling technique: Probability simple random sampling technique was used for this study.

CRITERIA FOR THE SELECTION OF THE SAMPLE:

- **Inclusion criteria.**
 - 1st year B.Sc. nursing students who are studying in Sumandeep Nursing College.
 - Nursing Students who are willing to participate in this study during data collection.
- **Exclusion criteria**

Students who are absent at the time of study.

SELECTION AND THE DEVELOPMENT OF THE TOOLS:

Data collection tools are the procedures or instruments used by the researcher to observe or measured the key variables in the research problem.

Tools were prepared on basis of objective of the study. A structured knowledge questionnaire was used to assess the knowledge of nursing students on breast self -examination. It was considered to be the most appropriate instrument to elicit the response from subjects who are able to read and write English.

THE FOLLOWING STEPS CARRIED OUT IN PREPARING THE

TOOLES ARE:

- Literature review
- Preparation of blue print
- Expert's opinion from guide

DESCRIPTION OF THE TOOLS:

The tools consisted of two sections:

SECTION –A: SOCIO-DEMOGRAPHIC DATA

It consist of 8 items seeking information related to age, family type, education Of mother and father, occupation of mother and father, dietary habit, source of information regarding breast self- examination.

SECTION-B: STRUCTURED KNOWLEDGE QUESTIONNAIRE ON BREAST SELF EXAMINATION

SCORING PROCEDURE:

It consists of 30 knowledge questionnaire.

- For each correct response score “one” will be assigned
- For each response score “zero” will be assigned.
- The total minimum and maximum score of knowledge assessment found to be “0”and “30”.

SCORING INTERPRETATION:

The total knowledge score obtained will be classified as follow,

- Poor: 0-7
- Average: 8-14
- Good: 15-21
- Excellent: 22-30

3. RESULTS AND DISCUSSION

SECTION I: Description of demographic characteristics of respondents

This section deals with the description of the demographic characteristics of 1st year B.Sc. Nursing students and has been presented in the form of frequency and percentage.

Age wise distribution of sample 1st year B.sc nursing students, 49(81.7) are in between the age group of 18-19years. 07(11.6%) of them are in between 19-20years and only 04(6.7%) are in between the age group of 20-21years.

Percentage distribution based on family type of 1st year B.sc nursing students are 26(43.3%) have nuclear family type, 33(55%) have joint family type, and only 01(1.7%) showing extended family type.

Percentage distribution based on education of mother of 1st year B.sc nursing students, out of which 27(45%) mothers are found as post graduate, 25(41.7%) are found as higher secondary ,remaining 06(10%) are found as graduate and only 02(3.3%) are found with matriculation.

Percentage distribution based on education of father of 1st year B.sc nursing students, out of which 36(60%) fathers are found as post graduate, 20(33.3%) are found as higher secondary ,remaining 03(05%) are found as graduate and only 01(1.7%) are found with matriculation.

Percentage distribution for occupation of mother of 1st year B.sc nursing students, from which 48(80%) of mothers found as housewife, 08(13.3) are found as government employee, 02(3.3%) are found with private job and other 02 (3.3%) are found with other occupation.

Percentage distribution for occupation of father of 1st year B.sc nursing students, from which 18(30%) of fathers found as government job, 16(26.7%) are found as business man, 14(23.3%) are found with any other job and other 12(20%) are found with private job.

Percentage distribution for dietary habit of 1st year B.sc nursing students, 48(80%) are found vegetarian, 08(13.3%) are found as non -vegetarian, 04(6.7%) are found as eggterian.

Percentage distribution for source of information, 25(41.7%) are get information from social media, 24(40%) found information from newspaper, 05(8.3%) are get information from literature, 06(10%) are get information from any other sources.

The data given in table 1 depicts the frequency and percentage distribution of 1st year B.Sc. Nursing students by demographic characteristics which includes age, family type, education of mother and father, occupation of mother and father, dietary habit, source of information.

Section II: Determine the Effectiveness of planned teaching program Breast Self-Examination among 1st Year B.Sc. Nursing Student.

Section II: (A) Frequency distribution of sample based on the level of knowledge score of pre-test and post-test.

The findings of pre-test data showed that 68.3% were having knowledge level as average, while 28.3% had found with good knowledge level and other 3.3% found with poor knowledge.

Findings of post-test data show that 80% found with good knowledge and only 20% found with average knowledge.

SECTION-II (B): Effectivness of planned teaching program on breast self examinaion among 1st year B.Sc. nursing students.

Comparison of pre-test and post-test knowledge scores of 1st year B.sc nursing students regarding breast self-examination the obtained 't' value 10.141 is greater than the table value at 0.05(2.0010) level of significance. Therefore "t" value is found to be significant. It indicates that there is a significant difference between pre-test and post-test knowledge of 1st year B.sc nursing students regarding breast self-examination.

SECTION III: Find Out Association Of Post Teaching Knowledge Score Of Breast Self-Examination Among 1st Year B.Sc. Nursing Student.

To test the association between pre-test knowledge of 1st year B.sc nursing students and demographic variables, following research hypothesis is formulated.

H₂:- There will be significant association between pre-test levels of knowledge regarding breast self-examination with selected demographic variables of 1st year B.sc nursing students.

The findings indicate variable such as family type($\chi^2=20.176$) is found to be significant at 0.05 level of significance, and variables such as age ($\chi^2=1.443$), education of mother ($\chi^2=5.861$), education of father ($\chi^2=5.162$), occupation of father ($\chi^2=9.526$), occupation of mother ($\chi^2=6.482$), dietary habit ($\chi^2=6.095$), source of information ($\chi^2=4.113$) were not significant at 0.05 level of significance. Thus it can be interpreted that there is significance association between pre-test levels of knowledge among 1st year B.sc nursing students with their selected demographic variable such as family type.

4. CONCLUSION

The present study assessed the knowledge regarding breast self-examination among 1st year B.sc nursing students Sumandeep Nursing College, Pipariya, Waghodia, Vadodara and found that the majority of students had poor knowledge related to breast self-examination. After planned teaching program on breast self-examination there was significant improvement on knowledge of the 1st year B.sc nursing students regarding breast self-examination. The study concluded that the planned teaching program was effective in improving knowledge of 1st year B.sc nursing students regarding breast self-examination.

According post-test knowledge score 80% have good knowledge and 20% have average knowledge and no one have poor knowledge which was higher than pre-test knowledge score range. According to pre-test 68.3% were having knowledge level as average, while 28.3% had found with good knowledge has level and other 3.3% found with poor knowledge.

The mean post-test knowledge score (17.6333) also was higher than the mean pre-test score (12.7833).

There was significant difference in knowledge scores regarding breast self-examination among 1st year B.sc nursing students Sumandeep nursing college, pipariya, waghodia, Vadodara. Thus H₁ is accepted.

ACKNOWLEDGEMENT

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We extend our appreciation and gratitude to nursing students for readily and willingly sharing their experience with us, this study wouldn't have been possible without their co-operation

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- [4] "world health organization: Breast cancer: prevention and control" Available from: <http://www.who.int/cancer/detection/breastcancer/en/index1>.

APPENDIX - A

TABLES:

TABLE 1: REPRESENTATION OF STUDY DESIGN

Sample	Pre-test O ₁ 1 st day	Intervention X 1 st day	Post –test O ₂ 7 th day
Nursing students	Knowledge regarding a breast self – examination before implementing planned teaching program.	Implementation of planned teaching program regarding breast self-examination.	Knowledge regarding breast self-examination after implementing planned teaching program.

TABLE- 2: SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY.

Characteristics	Category	Respondent	
		Number	Percentage(N=60)
Age group	18 to 19	47	81.7
	19 to 20	7	11.7
	20 to 21	4	6.7
Type of family	Joint	26	43.3
	Nuclear	33	55.0
	Extended	1	1.7
Education of mother	Matriculation	2	3.3
	Higher secondary	25	41.7
	Graduation	6	10.0
	Post-graduation	27	45.0
Education of father	Matriculation	1	1.7
	Higher secondary	20	33.3
	Graduation	3	5.0
	Post-graduation	36	60.0
Occupation of father	Business men	16	26.7
	Government employee	18	30.0
	Private job	12	20.0
	Any other *	14	23.3
Occupation of mother	House wife	48	80.0
	Government employee	8	13.3
	Private job	2	3.3
	Any other *	2	3.3
Dietary habit	Vegetarian	48	80.0
	Non-vegetarian	8	13.3
	Eggterian	4	6.7
Source of information	Social media	25	41.7
	Literature	5	8.3
	Newspaper	24	40.0
	Any other specify *	6	10.0s
Total		60	100%

NOTE: - *1 Farmer, labor, contractor and shop keeper. *2 business men, care taker, tuition teacher. *3 television, radio.

TABLE- 3 frequency distribution of sample based on the level of knowledge score of pre-test and post-test

Sr. No.	Level of knowledge	Pre-test score	Post-test score
1	Poor (0-7)	02	00
2	Average (8-14)	41	12
3	Good (15-23)	17	48
4	Excellent (24-30)	00	00

TABLE 4: 'T' TEST VALUE

Variables		Mean	Mean difference	Std. deviation	paired t- value
EFFECTIVENESS	Pre-test	12.78	4.85	2.76	Df=59 T =10.141\ significant
	Post-test	17.63		2.99	

TABLE 5 THE ABOVE TABLE PROVES MY HYPOTHESIS (H₂) THAT THERE IS SIGNIFICANT ASSOCIATION BETWEEN ONE OF THE DEMOGRAPHIC VARIABLE I.E. FAMILY TYPE OF B.SC. NURSING STUDENT AT P VALUE <0.05 LEVEL

Sr. No.	Variables	Level of knowledge			Total	X ²	Table value/ df/ of significance
		Poor	Average	good			
1	AGE GROUP					1.44	9.49/ 4/ NS
	18 to 19	2	32	15	49		
	19 to 20	0	6	1	7		
	20 to 21	0	3	1	4		
	Total	2	41	17	60		
2	FAMILYTYPE					20.1	9.49/ 4/ S
	NUCLEAR	0	11	15	26		
	JOINT	2	29	2	33		
	EXTENDED	0	1	0	1		
	TOTAL	2	41	17	60		
3	EDUCATION OF MOTHER					5.86	12.59/ 6/ N.S.
	MATRICULATION	0	2	0	2		
	HIGHER SECONDRY	2	18	5	25		
	GEADUATE	0	3	3	6		
	TOTAL	2	41	17	60		
4	EDUCATION OF FATHER					5.16	12.59/ 6/ N.S.
	MATRICULATION	0	0	1	1		
	HIGHER SECONDRY	1	15	4	20		
	GEADUATE	0	3	0	3		
	TOTAL	2	41	17	60		
5	OCCUPATION OF FATHER					9.52	12.59/ 6/ N.S.
	BUSINESS MEN	0	8	8	16		
	GOVERNMENT EMPLOYEE	0	12	6	18		
	PRIVET JOB	1	10	1	12		
	TOTAL	2	41	17	60		

6	OCCUPATION OF MOTHER				6.48	12.59/ 6/ N.S.	
	HOUSE WIFE	1	36	11			16
	GOVERNMENT EMPLOYEE	1	3	4			18
	PRIVET JOB	0	1	1			12
	ANY OTHER	0	1	1			14
	TOTAL	2	41	17			60
7	DIETART HABIT				6.09	9.49/ 4/ N.S.	
	VEGETARIAN	1	32	15			48
	NON-VEGETARIAN	1	7	0			8
	EGGTERIAN	0	2	2			4
	TOTAL	2	41	17			60
8	SOURCE OF INFORMATION				4.13	12.29/ 6/ N.S.	
	SOCIAL MEDIA	1	16	8			25
	LITERATURE	0	2	3			5
	NEWS PAPER	1	18	5			24
	ANY OTHER SPECIFY	0	5	1			6
	TOTAL	2	41	17			60

FIGURES:

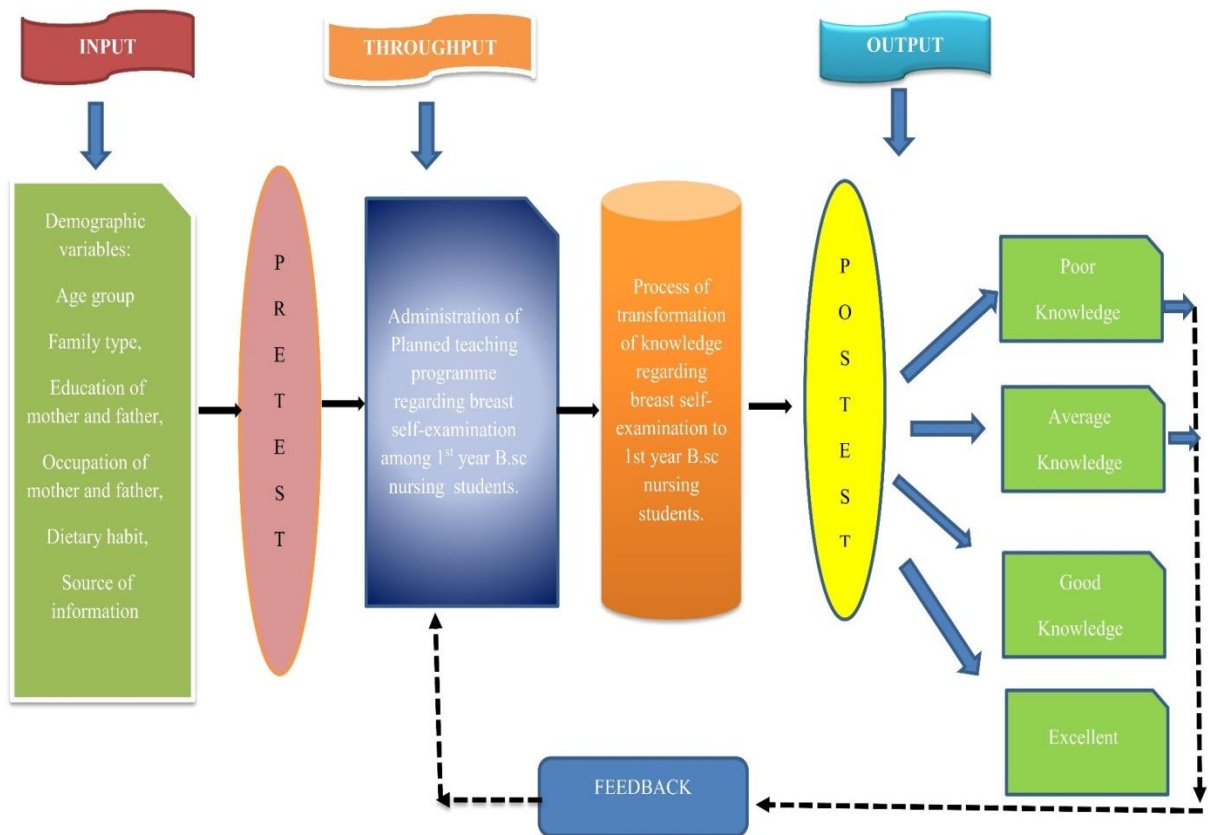


FIG.1-Modified conceptual framework based on Ludwig von bertalanffy general system theory (1968)

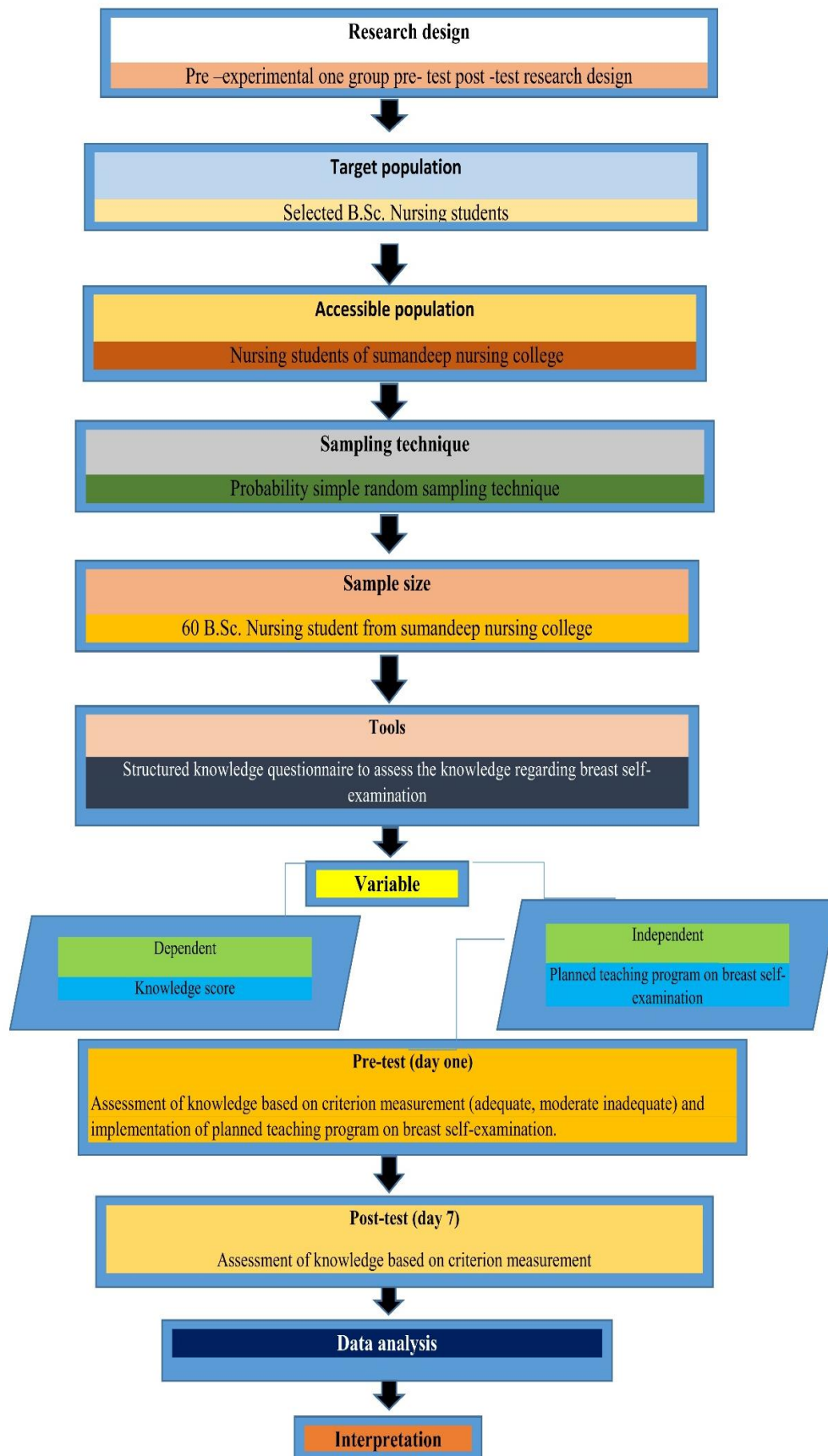


FIG. 2: SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY

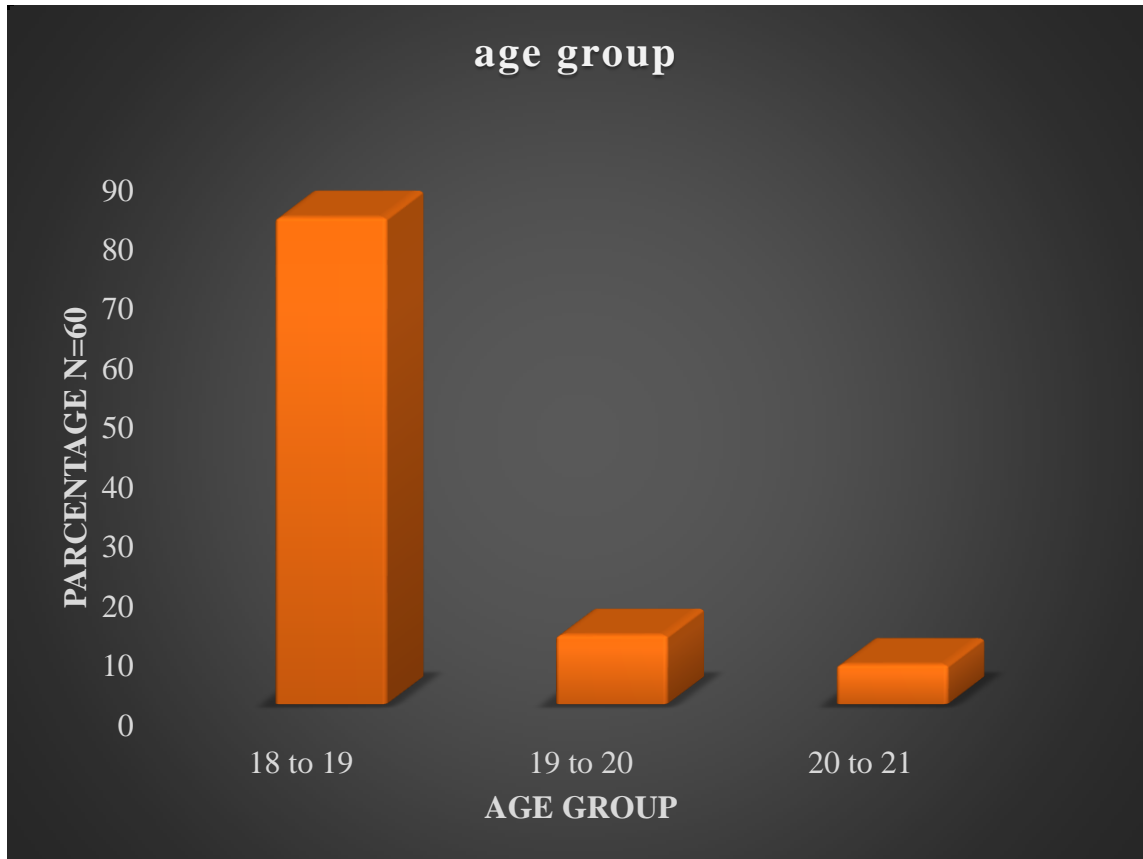


FIGURE 3: CLASSIFICATION OF RESPONDENTS BY AGE.

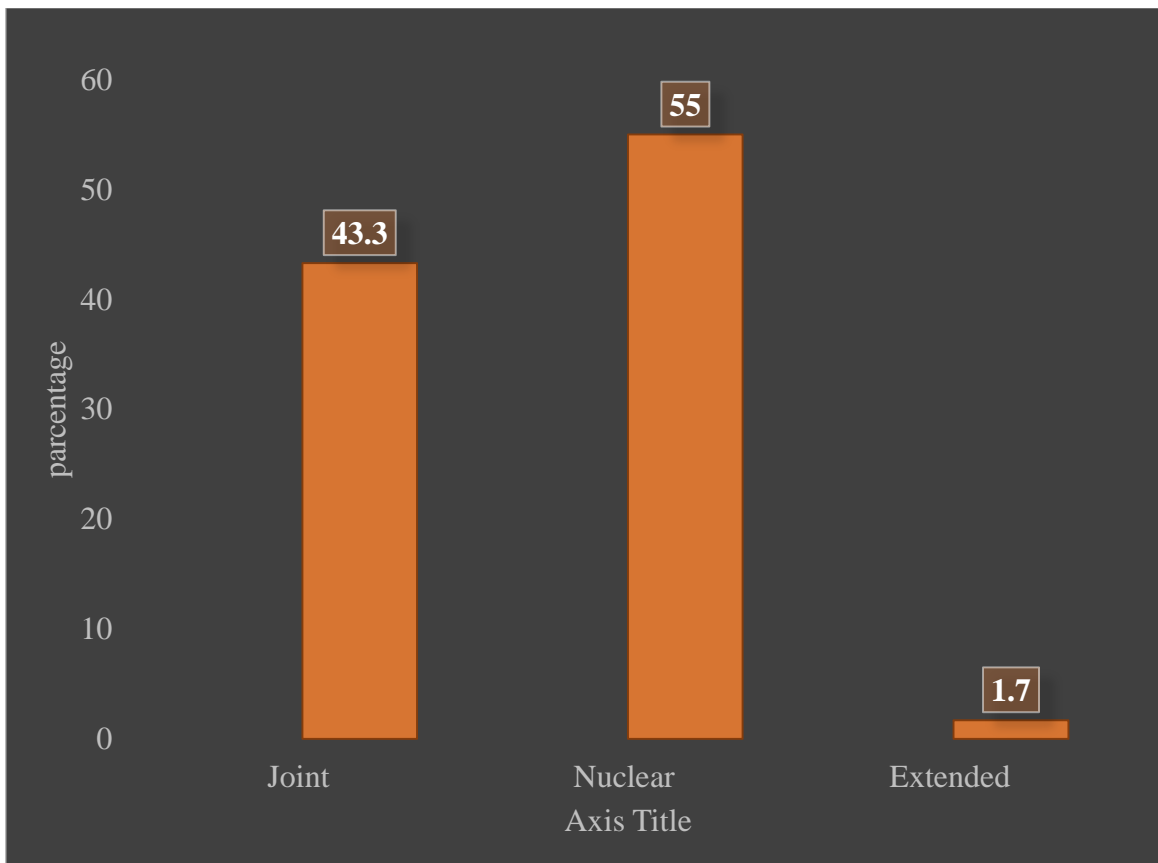


FIGURE 4: CLASSIFICATION OF RESPONDENTS BY FAMILY TYPE.

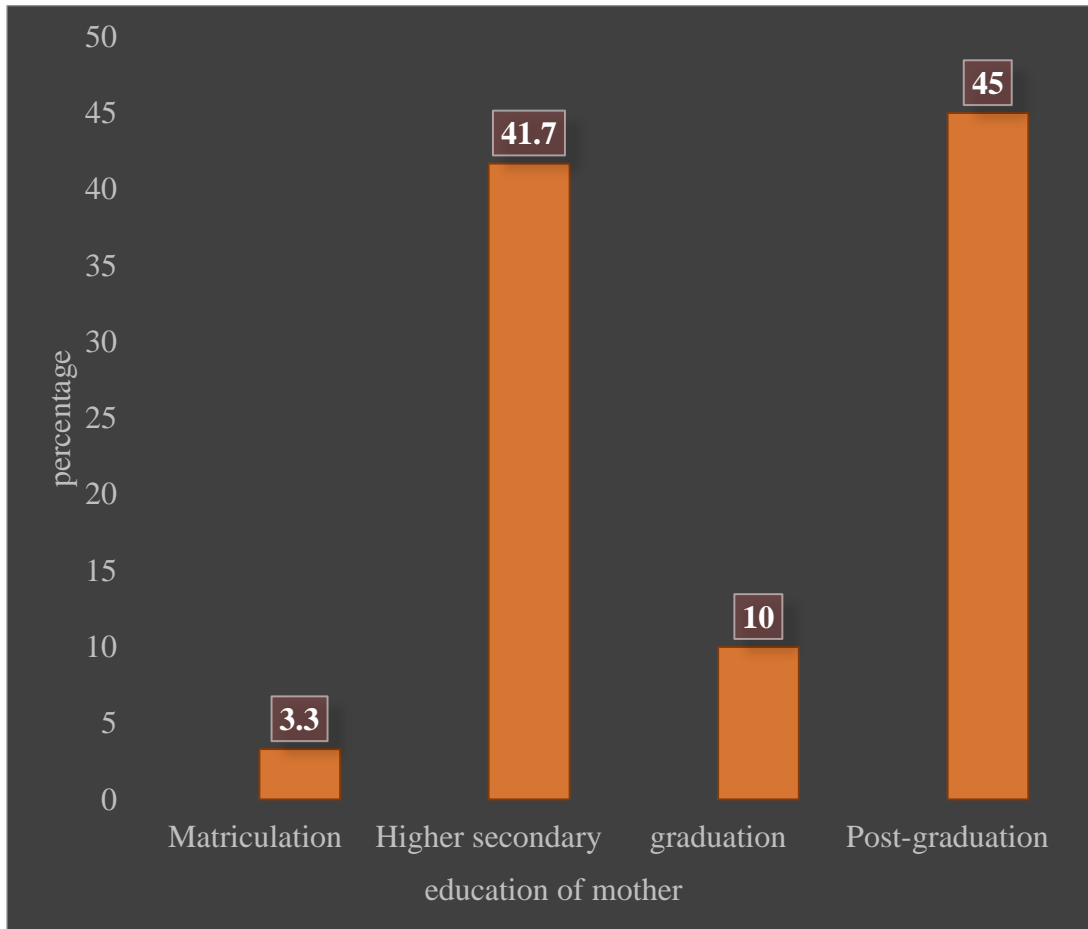


FIGURE 5: CLASSIFICATION OF RESPONDENTS EDUCATION OF MOTHER DISTRIBUTION

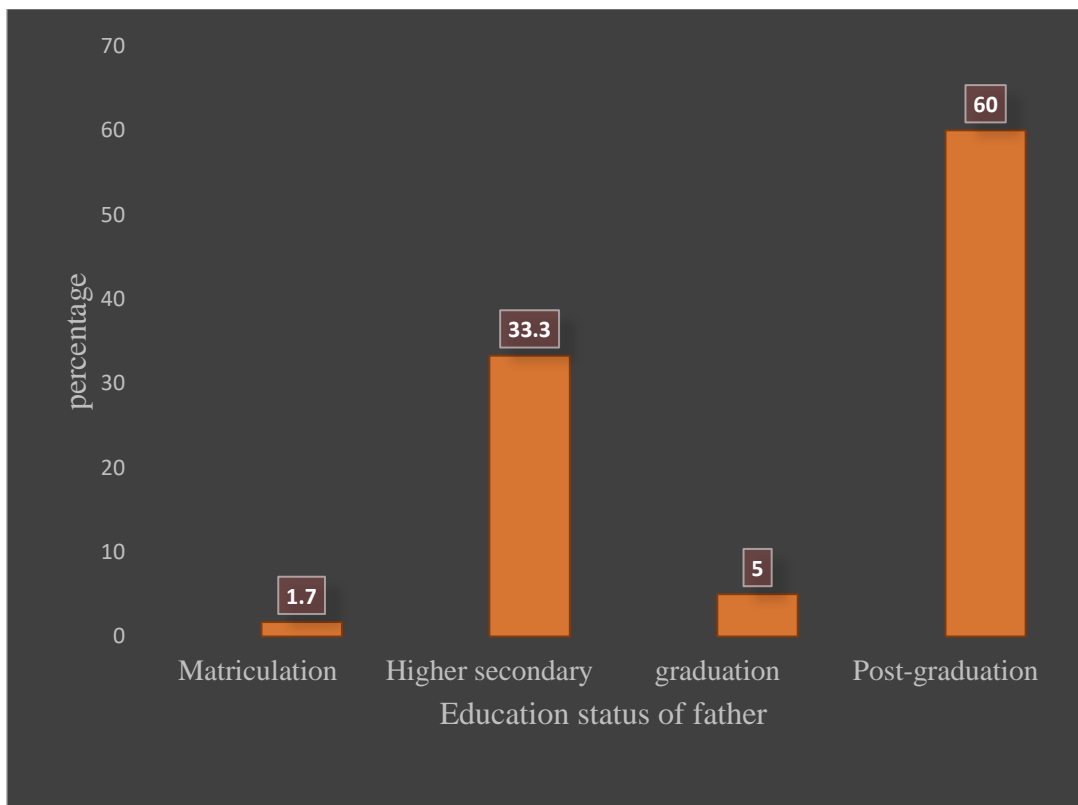


FIGURE 6: CLASSIFICATION OF RESPONDENTS BY EDUCATION OF FATHER.

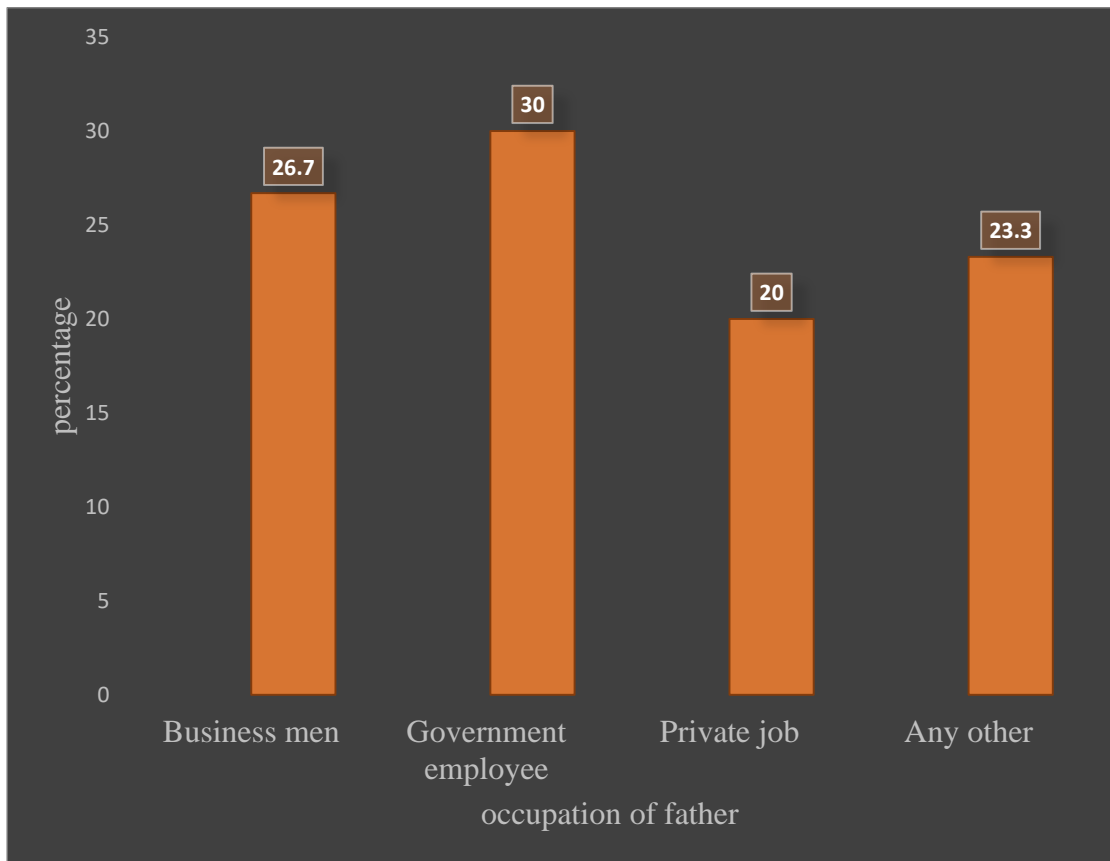


FIGURE 7: CLASSIFICATION OF RESPONDENTS BY OCCUPATION OF FATHER.

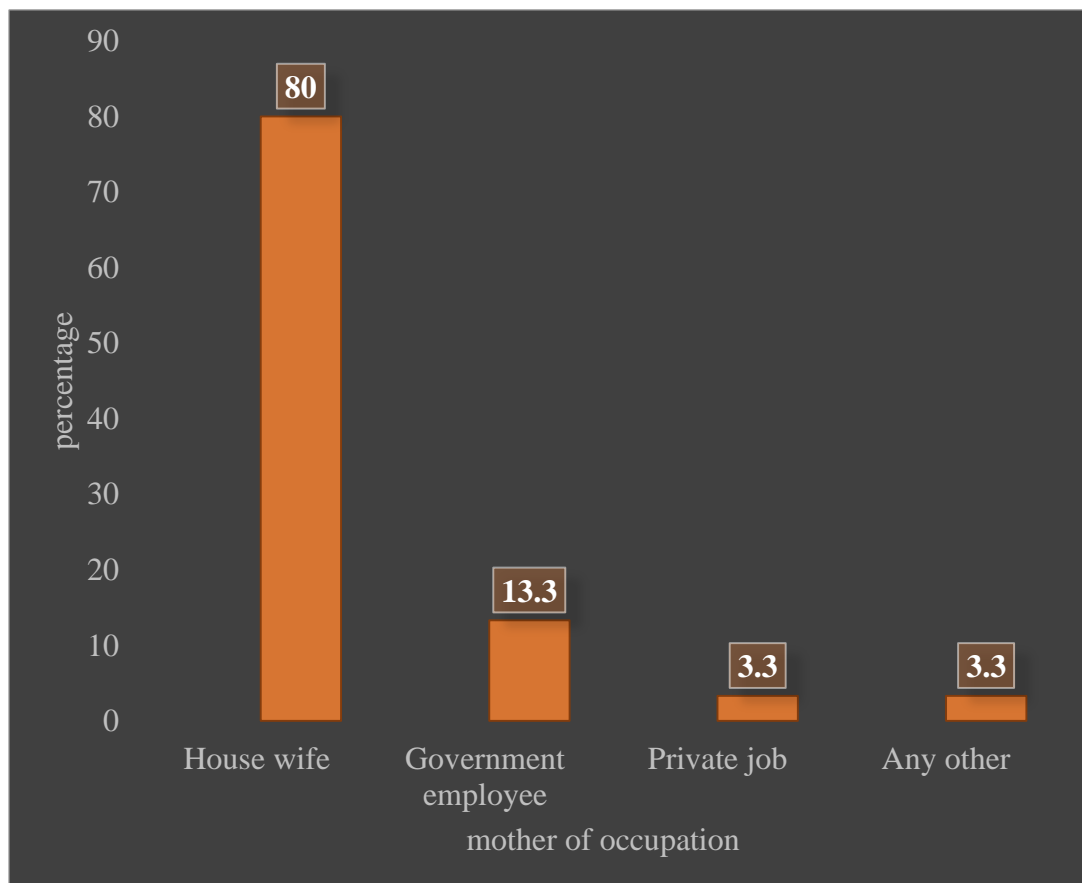


FIGURE 8: CLASSIFICATION OF RESPONDENTS OCCUPATION OF MOTHER.

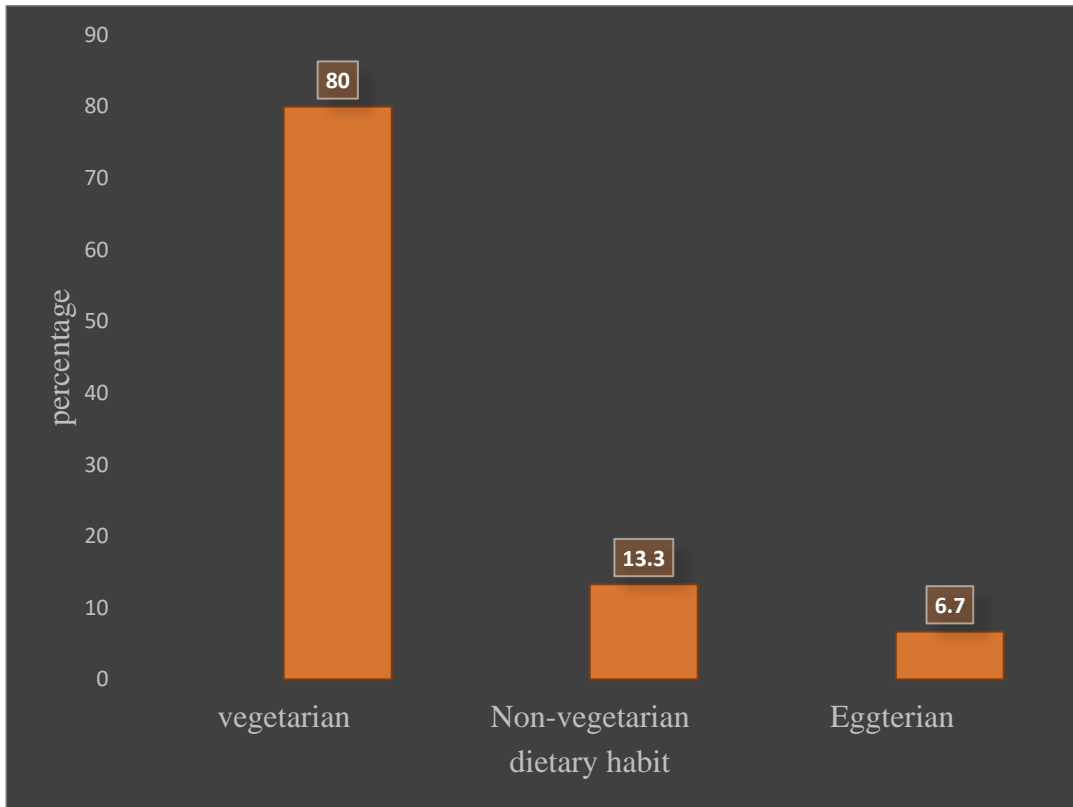


FIGURE 9: CLASSIFICATION OF RESPONDENTS BY DIETARY HABIT.

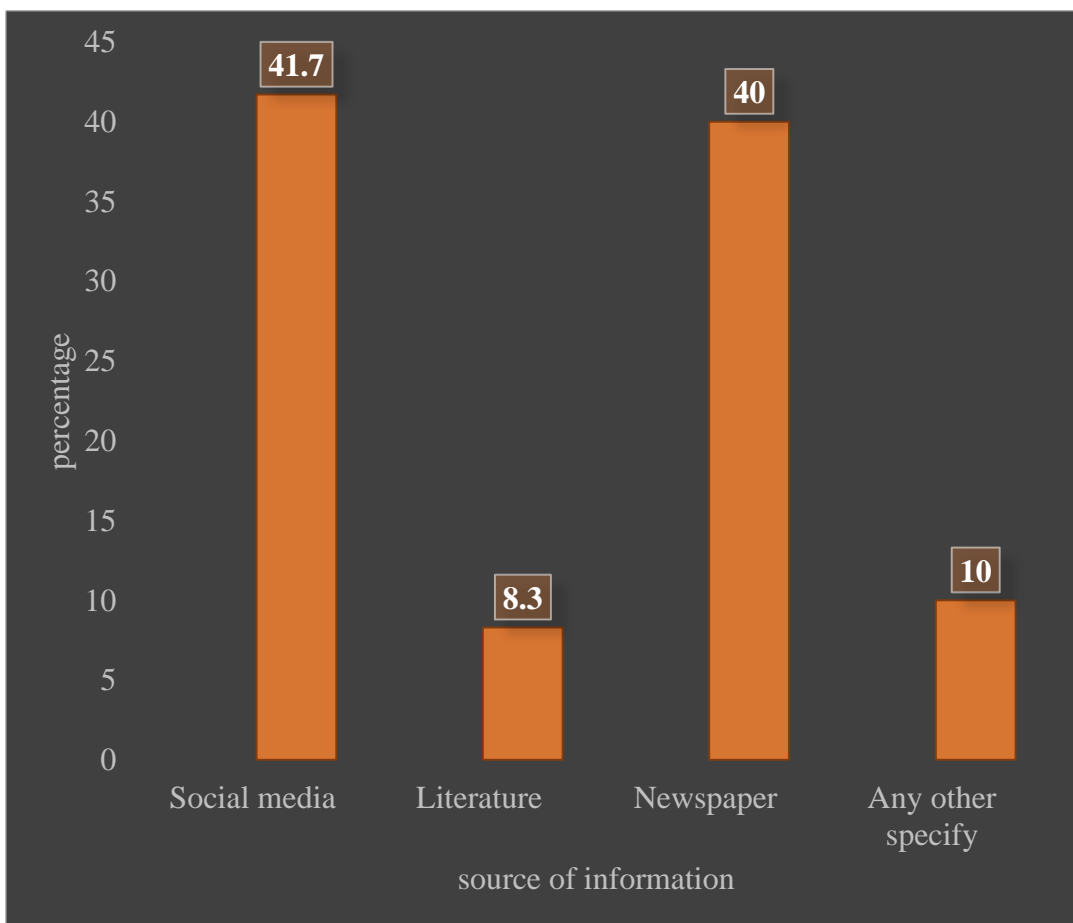


FIGURE 10: CLASSIFICATION OF RESPONDENTS BY SOURCE OF INFORMATION.

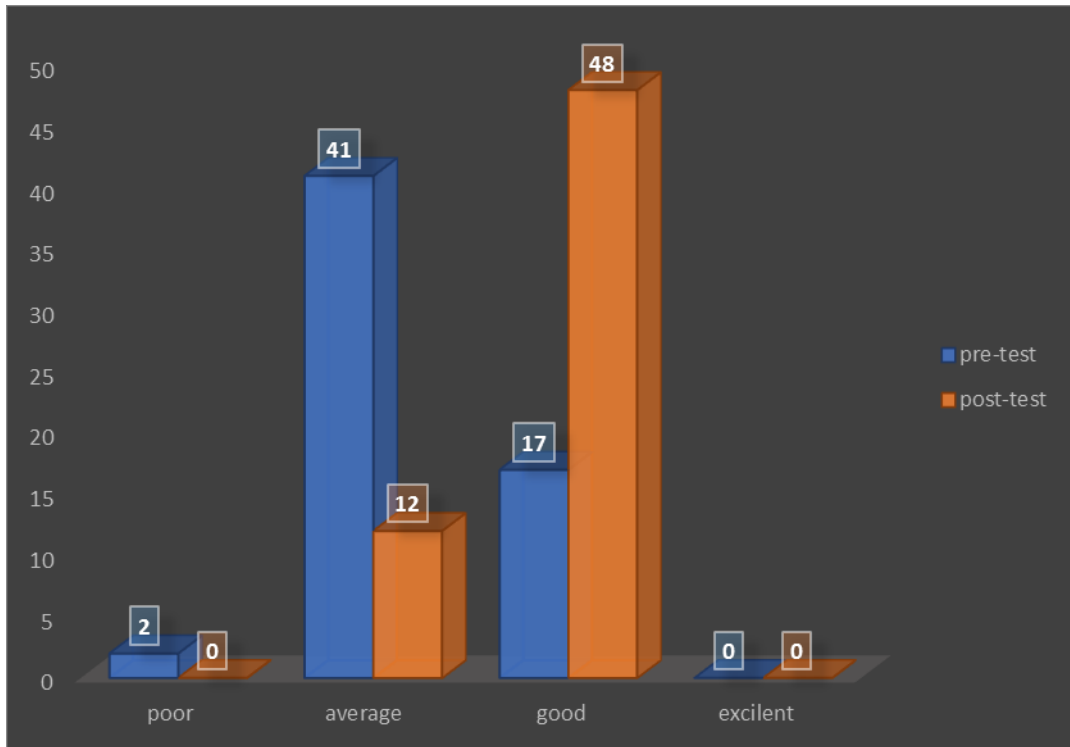


FIGURE 11: THE FREQUENCY DISTRIBUTION OF SUBJECTS LEVEL OF EFFECTIVENESS BEFORE AND AFTER IMPLEMENTING PLANNED TEACHING PROGRAM.

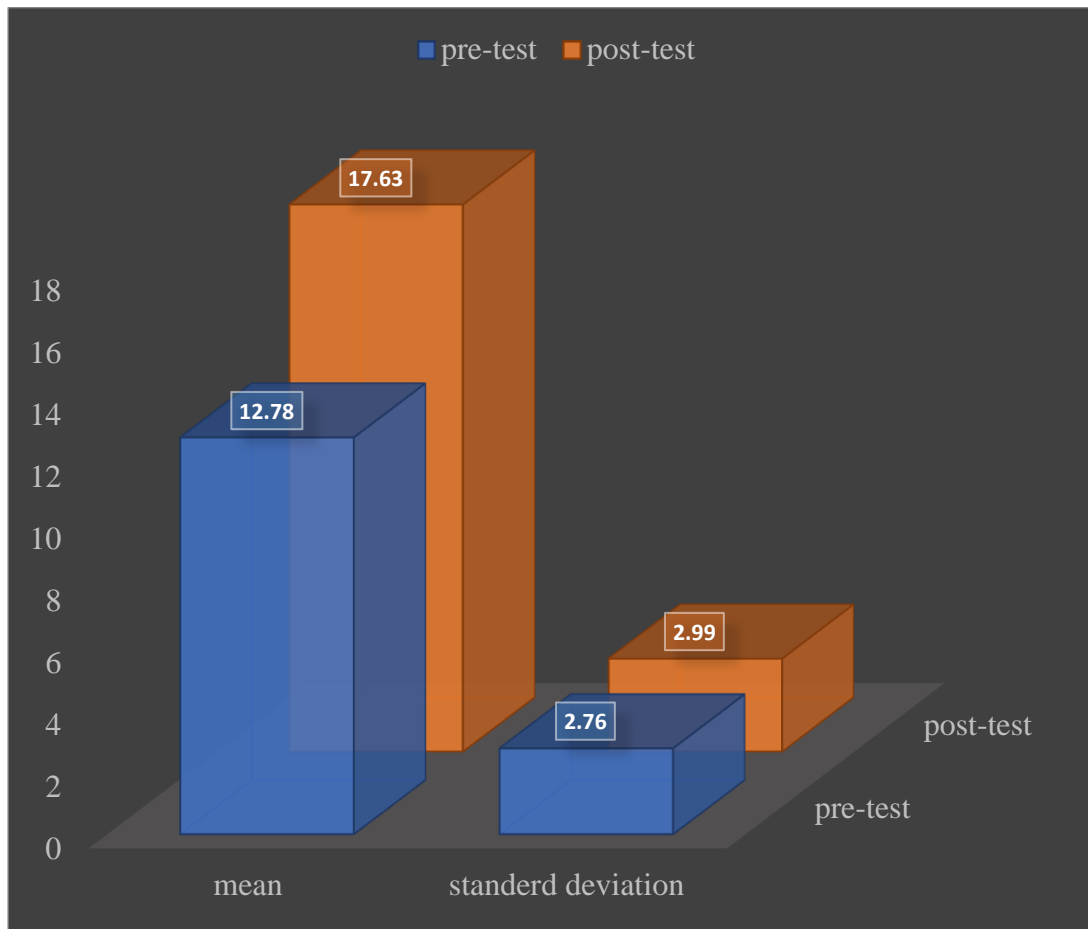


FIGURE 12: INTERPRETATION T-TEST VALUE AFTER COMPAIRING THE PRE-TEST AND POST-TEST SCORE