“A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTTER ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CONSEQUENCES OF CONSANGUINEOUS MARRIAGES AMONG COLLEGE STUDENTS OF SELECTED COLLEGES OF HONAVAR UTTARA KANNADA”

By

MS. CHRISTINA JOSEPH

Submitted to

Rajiv Gandhi university of health science, Bangalore, Karnataka.

Under short term Research Grants for Undergraduate Students of Institutions affiliated to RGUHS for the year 2020 – 21

and in Partial fulfillment of the requirements for the degree of

Bachelor of Science in Nursing

Under the guidance of

A. SAGAYA AROCKIA MARY

St. Ignatius Institute of Health Sciences,

Honavar**,** Uttara Kannada.

2021

DECLARATION BY THE CANDIDATE

I hereby declare that this thesis titled **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTTER ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CONSEQUENCES OF CONSANGUINEOUS MARRIAGES AMONG COLLEGE STUDENTS OF SELECTED COLLEGES OF HONAVAR UTTARA KANNADA"** is a bonafide and genuine work to carried out by me under the guidance of **A.SAGAYA AROCKIA MARY**, the Professor, St. Ignatius Institute of Health Sciences, Honavar.

Date: **Ms. Christina Joseph**

Place: **Final year B.Sc. Nursing**

CERTIFICATE BY THE GUIDE

This is to certify that thesis **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTTER ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CONSEQUENCES OF CONSANGUINEOUS MARRIAGES AMONG COLLEGE STUDENTS OF SELECTED COLLEGES OF HONAVAR UTTARA KANNADA"** is a bonafide research work done by **Ms. Christina Joseph** under Short term Research Grants for Undergraduate Students of Institutions affiliated to RGUHS for the year 2020 – 21.

Date :

Place: Honavar.

Signature of the guide

A. Sagaya Arockia Mary
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ENDORSEMENT BY THE PRINCIPAL /HEAD OF THE INSTITUTION

This is to certify that the dissertation entitled **"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTTER ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CONSEQUENCES OF CONSANGUINEOUS MARRIAGES AMONG COLLEGE STUDENTS OF SELECTED COLLEGES OF HONAVAR UTTARA KANNADA"** is a bonafide research work done by **Ms. Christina Joseph** under Short term Research Grants for Undergraduate Students of Institutions affiliated to RGUHS for the year 2020 – 21 under the guidance of **A. SAGAYA AROCKIA MARY,** the Professor ,St. Ignatius Institute of Health Sciences, Honavar.

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SHORT-TERM RESEARCH GRANT FOR UNDERGRADUATE STUDENTS

2020-2021

FINAL REPORT

1.	**TITLE OF THE PROJECT**	**"A STUDY TO ASSESS THE EFFECTIVENESS OF COMPUTTER ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING CONSEQUENCES OF CONSANGUINEOUS MARRIAGES AMONG COLLEGE STUDENTS OF SELECTED COLLEGES OF HONAVAR UTTARA KANNADA"**
2.	**RGUHS PROJECT CODE**	**UG20NUR412**
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5.	**NAME OF THE DEPARTMENT**	**CHILD HEALTH NURSING**
6.	**DATE OF COMMENCEMENT OF THE RESEARCH ACTIVITY**	**5/3/21**
7.	**DATE OF COMPLETION**	**30/6/21**

8.	❖ **OBJECTIVES STATED**	**The objectives of the study are;** 1. To assess knowledge regarding consequence of consanguineous marriage among college students at selected collages of Honavar, Uttara Kannada. 2. To assess the effectiveness of computer assisted programme regarding consequence of consanguineous marriage among college students at selected collages of Honavar, Uttara Kannada. 3. To assess the association between pre-test knowledge score with demographic variables among college students at selected collages of Honavar, Uttara Kannada.
	❖ **OBJECTIVES ACHIEVED**	1. The pre and post-test knowledge regarding consequence of consanguineous marriage among college students at selected collages of Honavar was assessed through structured knowledge questionnaire. 2. Computer assisted programme regarding consequence of consanguineous marriage among college students was found to be effective through enhanced post-test knowledge level. 3. Significant relationship was determined between the pre-test knowledge score and selected demographic variables

9. FIELD /EXPERIMENTAL WORK GIVING FULL DETAILS OF RESEARCH METHOD ADOPTED.

Any investigation will become more valid when appropriate methods mare adopted by the investigator. In the present study investigator used the following steps of pre experimental research in order to evaluate the effectiveness of the intervention.

RESEARCH APPROACHES

Research approach is the way or view of a researcher in which he or she approaches a phenomenon it may be qualitative or quantitative. A quantitative evaluative research approach was adopted for the study. As enable the investigator "to evaluate effectiveness of computer Assisted Teaching Programme regarding Knowledge Regarding Consequences of Consanguineous marriage Among the College Students of Selected Colleges of Honavar, Uttara Kannada."

RESEARCH DESIGN:

Research design gives a frame work for a researcher to carryout everything on a straight-line to reach his goal or objectives. In the present study pre-experimental one group pre and post-test design was used.

VARIABLES UNDER STUDY:

Variables are the factors that describe the nature of the person or object included under a specific investigation.

Independent variable:

- Computer assisted programme.

Dependent variable:

- Knowledge of college students at selected colleges on consequence of consanguineous marriage

Demographic variables:

It includes age, gender, religion, type of family, area of residence, educational status, history of consanguineous marriage in the family and present knowledge and sources regarding consanguineous marriage.

SETTING OF THE STUDY:

Setting is the venue in which data collection takes place in a study. The study will be conducted at SIIPMS, Honavar.

POPULATION:

It is the universal or individual meet the criteria of a researcher. In this study the population is college students of selected colleges of Honavar, Uttara Kannada.

TARGET POPULATION:

The target population consist of the total members of a define set of college students from whom the data will be generalized. In the present study the target population was college students at Honavar.

ACCESSIBLE POPULATION:

In the study the accessible population was college students who are present in SIIPMS, Honavar.

SAMPLE

A sample is a small portion of population selected to participate in the research study. The sample for this research is college students in SIIPMS, Honavar.

SAMPLE SIZE:

The Sample size taken for this study is consisted of 30college students of selected colleges of Honavar.

SAMPLING TECHNIQUE:

Convenient sampling (Non Random sampling) procedure where the subject selected, in part of whole, at the purposive of researcher, or entitle using the most conveniently available people as a study participants.

SAMPLING CRITERIA:

In sampling criteria the researcher specifies the characteristic of the population under the study by dealing the inclusive and exclusive criteria are characteristics that each sample elements must possess to be including in the sample.

INCLUSION CRITERIA:

- Students of SIIPMS, Honavar only
- Accepted to be the part

EXCLUSION CRITERIA:

- Absentees

SELECTION & DEVELOPMENT OF TOOL:

A structured research tool makes completion in half of the work. The following steps were adopted in development of the tool:

The tool was developed after:

- An extensive review of research and non-research literature.
- Based on consultation with experts in the field and related field.
- Based on opinion of the expert to ascertain for the clarity and appropriateness of the items of given structured questionnaire.
- Based on informal discussion with peer group.

DESCRIPTION OF THE TOOL:

Structured knowledge questionnaire was developed to assess the effectiveness of computer Assisted Teaching Programme on Consequences of consanguineous marriage.

Self- structured questionnaire consists of two sections-

- **Section I:** Demographic Variables
- **Section II:** Structured Knowledge questionnaire regarding consequences of consanguineous marriage.

SECTION-I: This section consisted of 10 items obtaining information regarding subjects as Age , Gender , Religion , Type of family , Area of residence , Educational status , History of consanguineous marriage in family and regarding the previous knowledge and source of consanguineous marriage.

SECTION-II: This section consist of 20 multiple choice questions covering of definition, prevalence, degree of consanguinity, causes and factors, impacts, preventive measures by genetic counselling, premarital counselling and screening test for pregnant women to assess the knowledge of college students with a maximum score of 20 and the entire question has 4 options where as one will be the correct answer and other three will be the wrong answers. Each correct answer score "1" mark and incorrect answer scores "0" mark.

CRITERIAN MEASURES

The multiple choice question were used to assess the knowledge of college students Regarding Consequences of consanguineous marriage, the assessment of knowledge will be identified through following scale :-

CRITERIAN MEASURES OF KNOWLEDGE SCORE

Knowledge Level	**Score Range**	**Percentage (%)**
Poor	0-5	0-25
Average	6-10	26- 50
Good	11-15	51– 75
Excellent	16-20	76 – 100

Score interpretation Total: 20 Maximum Score: 1

TESTING OF THE TOOL:

- **CONTENT VALIDITY:**

To ensure the content validity of tool, the prepared tool along with problems statement, objectives, operational definition, hypothesis, self-structured booklet was submitted to 5 experts, in the field of Community Health Nursing, obstetrician, Clinical psychologist, Dept. of Gynaecology and Statistician. Expert requested to judge the items on the basis of their relevance, clarity, feasibility organization of the items included in the study. Based on expert opinion, some of the questions were modified and some of the question has been deleted, arrangement of the option was done in proper way according to the suggestions given by experts, the tool was presented and finalized by the research committee of SIIHS Honavar.

RELIABILITY OF TOOL:

As the tool contains 20 items, Procedure used for calculating reliability of research instrument is Split Half method. The reliability co-efficient calculated using split half formula to determine Reliability co-efficient for self structured knowledge questionnaire. The "r" was found to be r=0.87. This correlation coefficient was reliable and it is good tool for assessing the effectiveness of computer assisted teaching program on Knowledge regarding Consequences of consanguineous marriage.

PILOT STUDY:

As a rehearsal of the main study the pilot study was conducted among 5 DMLT students, Honavar from 07/06/2021 to 09/06/2021.The purpose of study was explained to 5college students who fill the sampling criteria, the purpose of the study was explained and confidentiality was assured to all subjects. The average time taken by each subject to attend the questionnaire and given answer was about 1 hour within a period of one week. The data analysis was done using descriptive and inferential statics. Pilot study confirmed practicability.

Pilot study report as follows

Pre Test			**Post Test**		
Date	No of sample	Duration	Date	No of sample	Duration
03/06/21	05	1 hour	10/06/21	05	1 hour

DATA COLLECTION PROCESS:

Gathering data from the participant is the most important and root to find the answer for a researcher objective. The main study among students of diploma in imaging technology, OT, and Anaesthesia and dialysis technology in SIIPMS, Honavar. A formal written permission was obtained from concerned authorities before data collection from the students. Data collection period was from 22/06/2021 to 28/06/2021. The Procedure was the same as in the pilot study valid and reliable knowledge questionnaire was used for data collection. Computer Assisted Teaching Programme was conducted through zoom meeting. Self introduction and establishing rapport with the subject 30 college students. Explained the importance of research study, the confidentiality of their responses was assured and consent was obtained from each Participant.

The process used for data collection was as follows

- The research investigator introduced herself and explained the purpose of the study to the college students.
- The written consent was obtained from the subjects.
- The self structured knowledge questionnaire was used to assess the Knowledge Regarding Consequences of consanguineous marriage.
- The participants were thanked for their co-operation.
- Data collected was then tabulated and analysed.

Data collection process is scheduled as following.

Pre Test			**Post Test**		
Date	**sample**	**Time**	**Date**	**sample**	**Time**
14/06/21	30	9-10 AM	21/06/21	30	9-10 AM

PLAN FOR DATA ANALYSIS

Analysis of the data was planned on the basis of objective and hypothesis. The data plan to be analysis by using both descriptive and inferential statistics and the following plan for analysis would be worked out.

Descriptive statistics:

- Demographic data was analysed in items of frequency and percentage.
- The knowledge and practice regarding consequence of consanguineous marriages.
- Mean, mean percentage and standard deviation was computed.

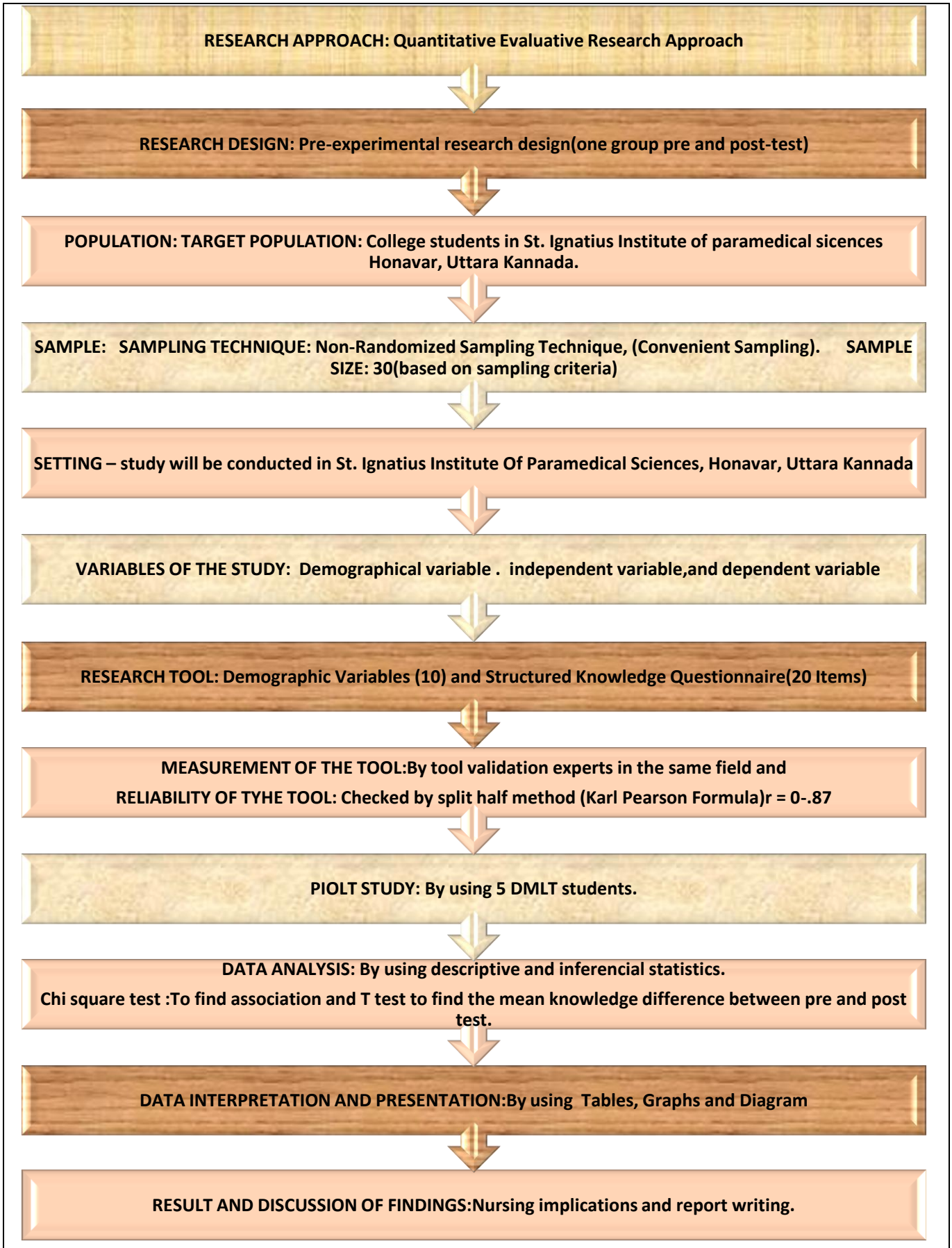
Inferential statistics:

- Chi-square test is to find out association between the selected demographic variables and level of knowledge regarding consequences of consanguineous marriage.
- "Paired t " test to find the effectiveness.

ETHICAL CONSIDERATION:

- Permission was obtained from research committee of SIIHS, Honavar.
- Due permission from authorities was sought and obtained from the principal of SIIPMS, Honavar.
- Informed written consent was taken from the students
- Anonymity of the participants was ensured.

FIGURE NO:2- SCHEMATIC PRESENTATION OF THE RESEARCH METHODILOGY.



10: DETAILED DATA ANALYSIS.

Analysis of gathered data will enable to find the end result on which the researcher working. Statistical method is a method for rendering quantitative information meaningful and intangible. This enables the research to summaries, organize, evaluate, interpret and communicate numeric Information. Analysis and interpretation of data collected among B.Sc. degree students regarding the effectiveness of computer assisted teaching programme on knowledge regarding the consequences of consanguineous marriages.

HYPOTHESIS

- **H_1**: There will be a significant difference between the pre test and post test knowledge score on consequence of consanguineous marriage after intervention.
- **H_2**: There is a significance association between the post test knowledge with their related demographic variables.

ORGANIZATION AND PRESENTATION OF DATA:

The data and finding have been organized and presented under the following sections.

- **SECTION: I-** Frequency and Percentage and Distribution of study subjects according to socio- demographic variables.

- **SECTION: II-** Analysis of overall pre and post-test knowledge regarding consequences of consanguineous marriage among college students at selected colleges of at Honavar Uttara Kannada.

- **SECTION: III-** Analysis of effectiveness of computer assisted teaching program by finding the mean difference between the pre and post test knowledge of college students of selected colleges of Honavar Uttara Kannada.

- **SECTION: IV-**'Paired t - test' Analysis of Effectiveness of computer assisted teaching program in improving knowledge regarding Consequences of consanguineous marriage among the college students of selected colleges in pre Experimental group.

- **SECTION: V-** Analysis of Chi squire test showing significant association between pre-test knowledge levels among the selected demographic variables.

SECTION – I

Frequency and percentage distribution of subjects according to socio demographic variables

Table 1: Shows the demographic information of subjects those who are participated in the present study**.**

N=30

SL.NO	DEMOGRAPHIC VARIABLE	FREQUENCY	PERCENTAGE
1.	**Age in years**		
	(a)18 – 20	27	90%
	(b)21 – 23	3	10%
	(c)24 – 26	-	-
2.	**Gender**		
	(a)Boys	4	13%
	(b)Girls	26	87%
3.	**Religion**		
	(a)Hindu	18	60%
	(b)Muslim	-	-
	(c)Christian	12	40%
	(d)Others	-	-
4.	**Type of family**		
	(a)Nuclear	22	73%
	(b)Joined	6	20%
	(c)Extended	2	7%
5.	**Area of residence**		
	(a)Urban	6	20%
	(b)Rural	24	80%
6.	**Educational status in years**		
	(a) I year	25	83%
	(b)II year	5	17%
7.	**History of consanguineous marriage in family**		
	(a)Yes	4	13%
	(b)No	26	87%
9.	**If yes specify the relationship**		
	(a)Parents	3	10%
	(b)Siblings	-	-
	(c)Cousins	1	4%
	(d)Nobody	26	87%

8.	**Do you have previous knowledge regarding consanguineous marriage?**		
	(a)Yes	8	27%
	(b)No	22	73%
9.	**If yes specify the source of information**		
	(a)Family	4	13%
	(b)Friends	1	3%
	(c)Health personnel	-	-
	(d)Mass media	3	10%
	(e)Nobody	22	73%

Table 1: Shows the frequency and percentage distribution of subjects according to socio demographic variables such as Age, Gender, Religion, Type of family, Area of residence, Educational status, History of consanguineous marriage in family and regarding the previous knowledge and source of information on consanguineous marriage.

Table 1.1: Frequency and distribution of students according to Age in years.

N = 30

AGE OF THE STUDENTS	FREQUENCY	PERCENTAGE
(a)18 – 20	27	90%
(b)21 – 23	3	10%
(c)24 – 26	-	-
TOTAL	30	100%

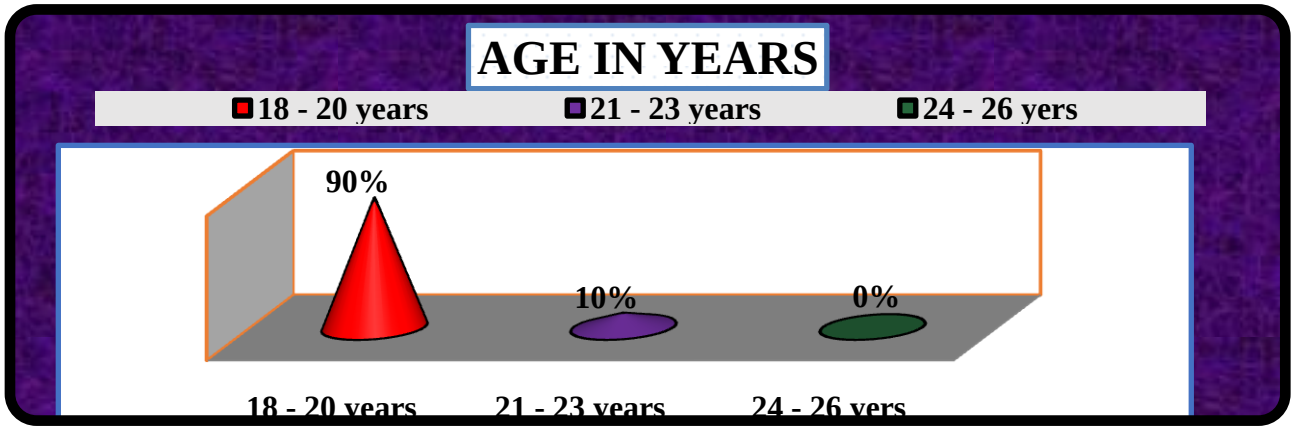


Figure No – 3.1: Cone diagram shows the percentage distribution of subjects according to Age of the student.

Table 1.1 (Fig-3): Depicts that according to age of the students the maximum number subjects 27(90%) were 18 – 20 and 3(10%) were21 – 23 years.

Table 1.2: Frequency and distribution of students according to gender.

N = 30

GENDER	FREQUENCY	PERCENTAGE
Boys	4	13%
Girls	26	87%
TOTAL	**30**	**100%**

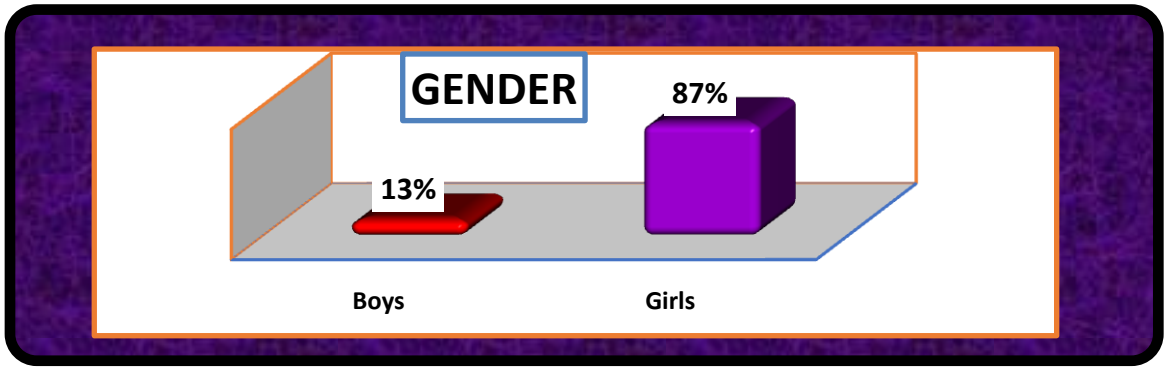


Fig 3.2: Column diagram shows that percentage distribution of subjects according to gender of the student.

Table 1.2(Fig3.1) Depicts that according to the gender of the students the maximum number subjects 26(87%) were girls and 4(13%) were boys.

Table 1.3: Frequency and distribution of students according to religion

N = 30

RELIGION	FREQUENCY	PERCENTAGE
(a)Hindu	18	60%
(b)Muslim	-	-
(c)Christian	12	40%
(d)Others	-	-
TOTAL	**30**	**100%**

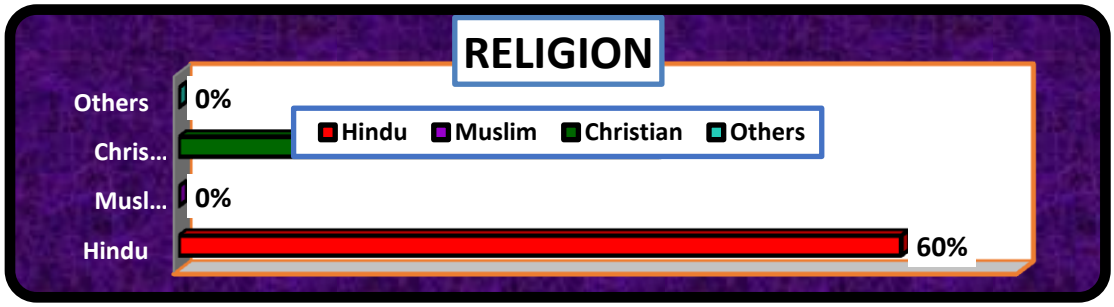


Fig 3.3-Bar shows that percentage distribution of subjects according to religion of the students.

Table 1.3 (Fig3.3) Depicts that according to the religion of the students the maximum subjects 18(60%) were Hindus and 12 (40%) were Christians and 0(0%) were Muslims and others.

Table no 1.4: Frequency and distribution of students according to type of family

N = 30

TYPE OF FAMILY	FREQUENCY	PERCENTAGE
(a)Nuclear	22	73%
(b)Joined	6	20%
(c)Extended	2	7%
TOTAL	30	100%

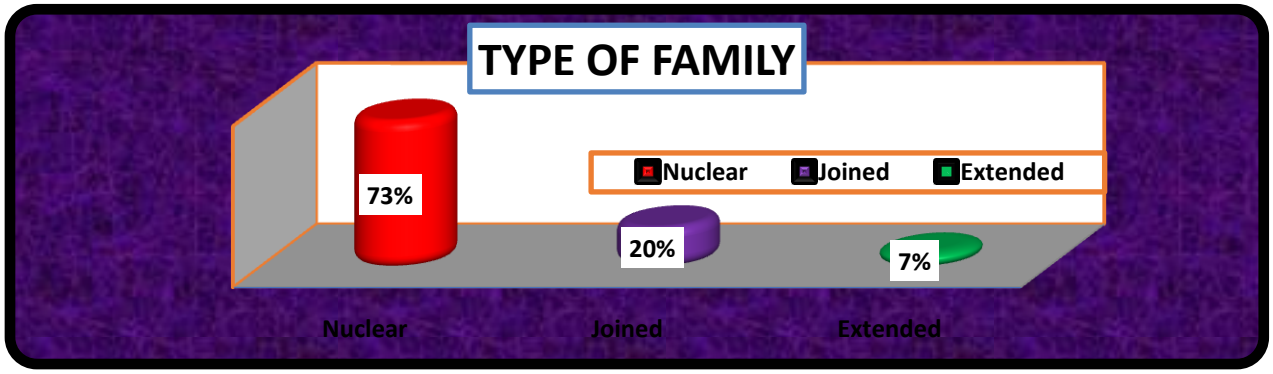


Fig 3.4: Cylindrical diagram represents the percentage distribution of students according to the type of family.

Table 1.4(Fig3.4) Depicts that according to the type of family of the students the maximum number of subjects 22(73%) were from nuclear family, 6(20%) were from joined family and 2(7%) were from extended family.

Table No. 1.5: Frequency and distribution of students according to area of residence

N = 30

AREA OF RESIDENCE	FREQUENCY	PERCENTAGE
(a)Urban	6	20%
(b)Rural	24	80%
TOTAL	**30**	**100%**

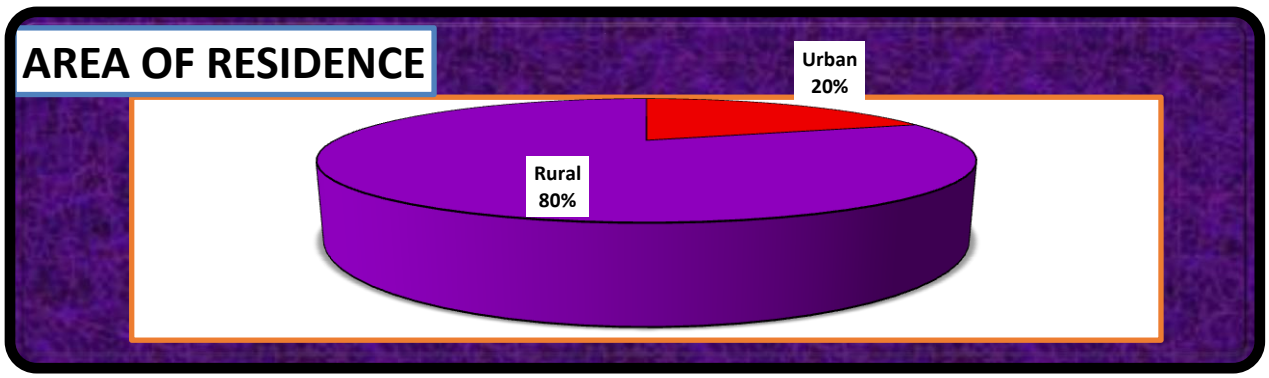


Fig 3.5: Pie graph shows the percentage distribution of subjects according to the area of residence.

Table 1.5(Fig3.5) Depicts that according to the type of family of the students the maximum number of subjects 24(80%) were from urban background and 6(20%) were from rural background.

Table 1.6: Frequency and distribution of students according to educational status in years

N = 30

EDUCATIONAL STATUS	FREQUENCY	PERCENTAGE
(a)I st year	25	83%
(b)I nd year	5	17%
TOTAL	**30**	**100%**

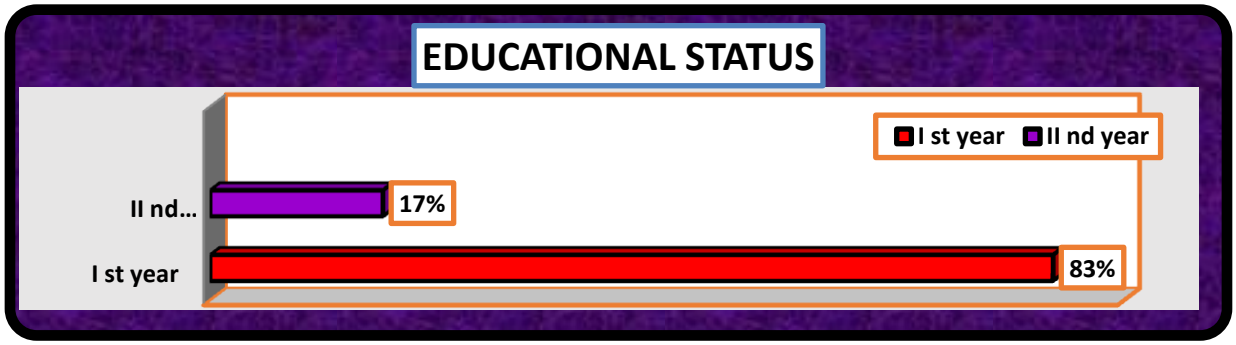


Fig 3.6: Bar diagram represents the percentage distribution of subjects according to the educational status.

Table 1.6(Fig 3.6) Depicts that according to the educational status of the student maximum number subjects 25(83%) were first years and 5(17%) were second years.

Table 1.7: Frequency and distribution of students according to history of consanguineous marriage in family

N = 30

History OF CONSANGUINEOUS MARRIAGE IN THE FAMILY	FREQUENCY	PERCENTAGE
(a)Yes	4	13%
(b)No	26	87%
TOTAL	**30**	**100%**

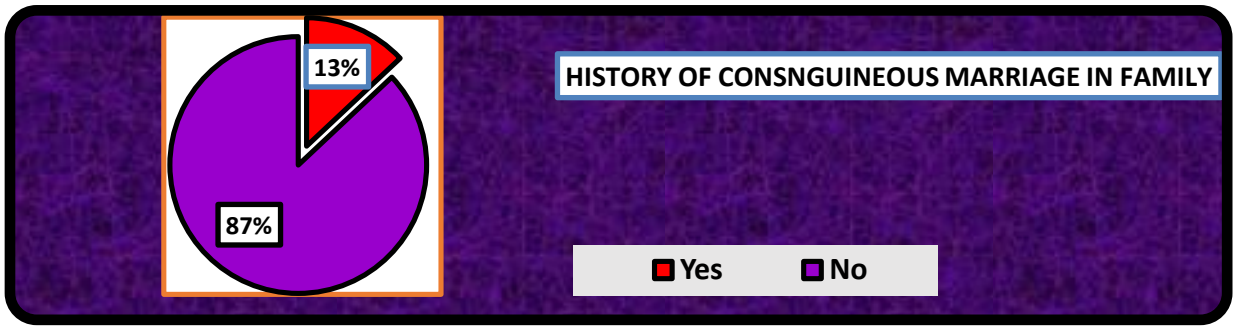


Fig 3.7: -Pie diagram represents the percentage distribution of subjects according to the history of consanguineous marriage in the family.

Table 1.7(Fig3.7) Depicts that according to the history of consanguineous marriage in the family of students the maximum number subjects 26(87%) were saying no and 4(13%) were saying yes.

Table 1.8: Frequency and distribution of students to specify the relationship of consanguineous marriage in family

N = 30

RELATION	FREQUENCY	PERCENTAGE
(a)Parents	3	75%
(b)Siblings	-	-
(c)Cousins	1	15%
TOTAL	**4**	**100%**

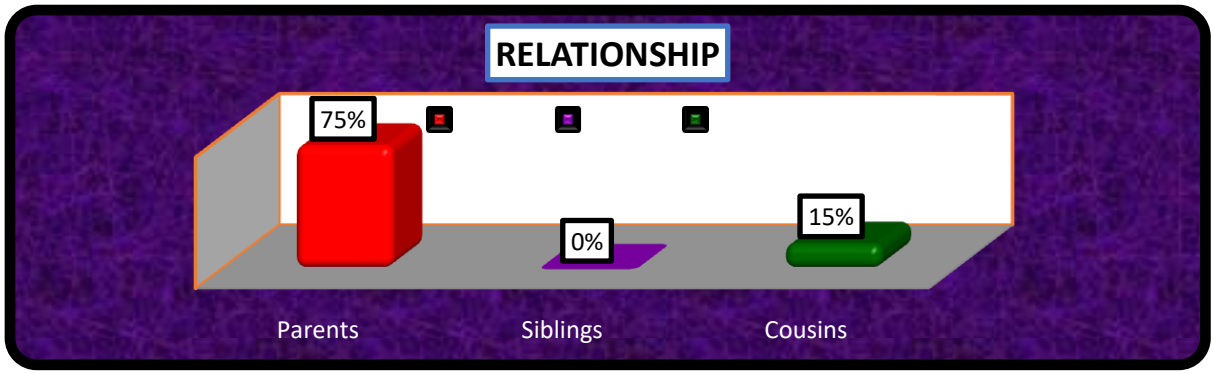


Fig 3.8: Column shows the relationship of students who has the history of consanguineous marriage in the family

Table 1.8(Fig3.8) Depicts that according to the relationship of students who has the history of consanguineous marriage in their family the maximum number subjects 3(75%) were parents and 1(15%) were cousin.

Table 1.9: Frequency and distribution of students according to their previous knowledge regarding the impacts of consanguineous marriage

N = 30

PREVIOUS KNOWLEDGE REGARDING IMPACTS OF CONSANGUNEOUS MARRIAGE	FREQUENCY	PERCENTAGE
(a)Yes	8	27%
(b)No	22	73%
TOTAL	**30**	**100%**

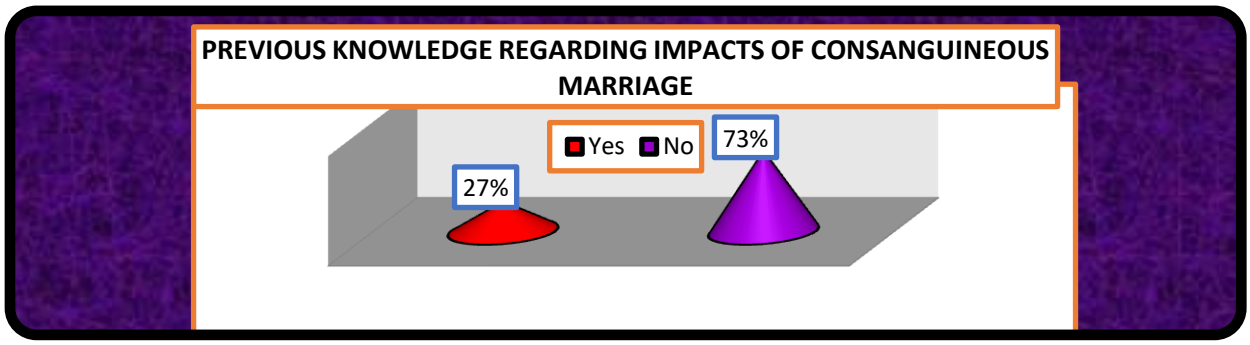


Fig 3.9: Pie diagram shows the percentage distribution of subjects according to the previous knowledge regarding the impacts of consanguineous marriage.

Table 1.9(Fig 3.9) Depicts that according to the previous knowledge regarding the impacts of consanguineous marriage the maximum number subjects 22(73%) were not having any knowledge and 8(27%) were having the knowledge regarding the impacts of consanguineous marriage.

Table 1.10: Frequency and distribution of students by specifying the source of information

N = 30

SPECIFY THE SOURCE	FREQUENCY	PERCENTAGE
(a) Family	4	50%
(b)Friends	1	13%
(c)Health personnel	-	-
(d)Mass media	3	37%
GRAND TOTAL	**8**	**100%**

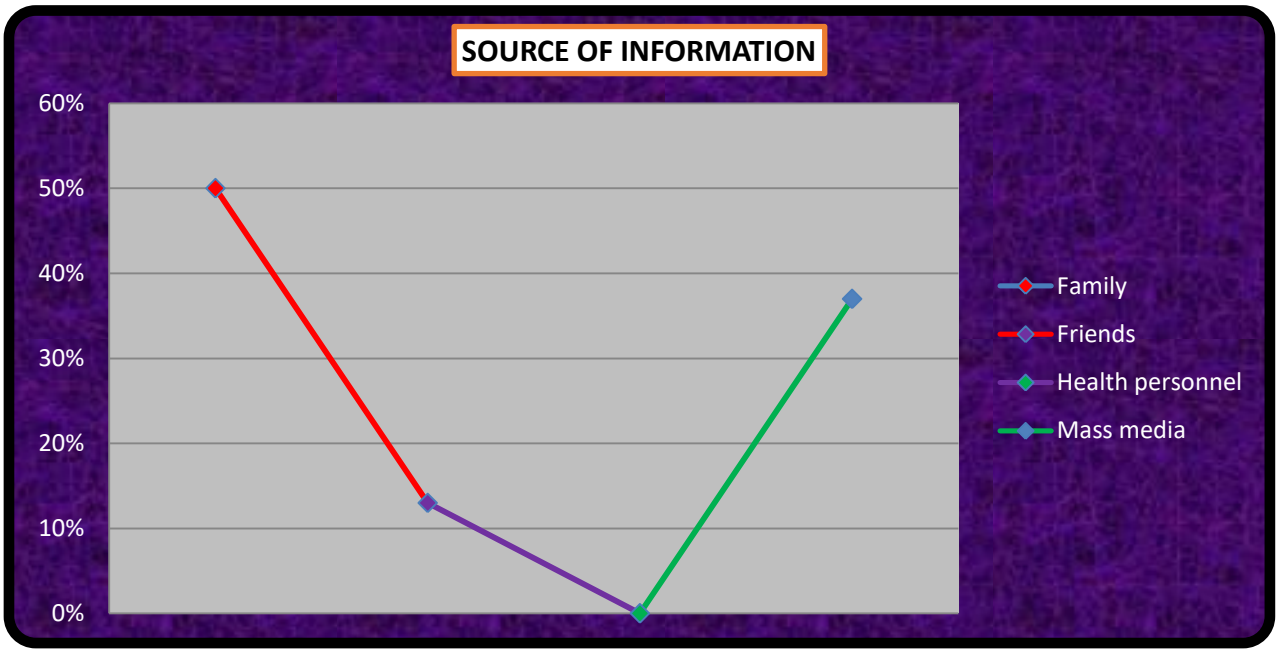


Fig 3.10: Line graph shows the percentage distribution of subjects according to source of information regarding the impacts of consanguineous marriages.

Table 1.10(Fig 3.10) Depicts that according to the source of information regarding the impacts of consanguineous marriages the maximum number subjects 4(50%) got information from the family, 3(37%) from the mass media, 1(13%) from the friends and 0(0%) from the health personnel.

SECTION – II

Finding of overall Knowledge Level of college students regarding the consequences of consanguineous marriage.

Table No.-2: Shows the frequency and percentage distribution of overall knowledge level of college students regarding the consequences of consanguineous marriage.

N =30

Knowledge Level	Pre test		Post test	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Poor	02	07%	00	00%
Average	18	60%	01	03%
Good	10	33%	11	37%
Excellent	00	00%	18	60%

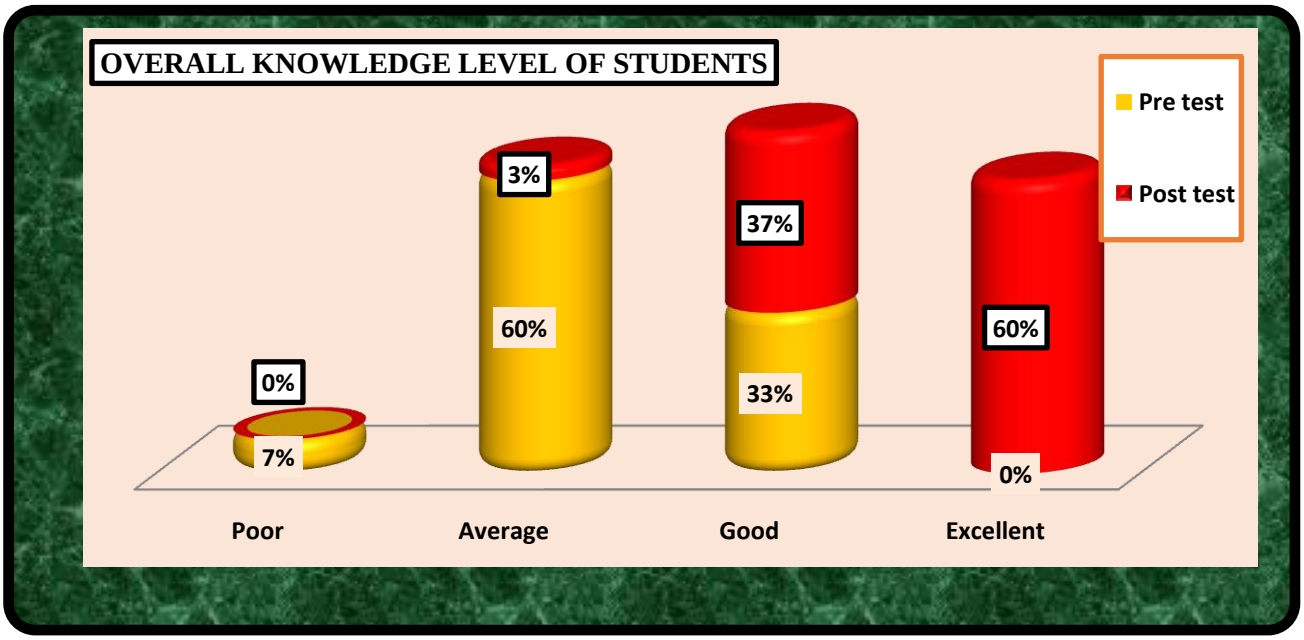


Figure No.-4: Cylindrical diagram representing the pre test and post test Knowledge score of pre experimental group regarding consequences of consanguineous marriage among college students of selected colleges.

Table No.2 (Figure No.-4) Depict that only 00 (00%) had excellent knowledge, 10 (33%) of subject had good knowledge, 18 (60%) have average and 02 (07%) has poor knowledge in pre test whereas in post test 11 (37%) has good knowledge, 18 (60%) has excellent knowledge, 01 (03%) has average and 00 (00%) has poor knowledge.

SECTION – III

Finding of mean difference in the pre and post test knowledge of college students regarding the consequences of consanguineous marriages.

Table No. -3: shows the mean difference in the pre test and post test knowledge regarding consequences of consanguineous marriage.

N=30

knowledge Level	Mean score	Mean percentage	Standard deviation	Mean percentage difference
Pre-test	9.3	46.5%	2.54	32.1%
Post-test	15.73	78.65%	2.11	

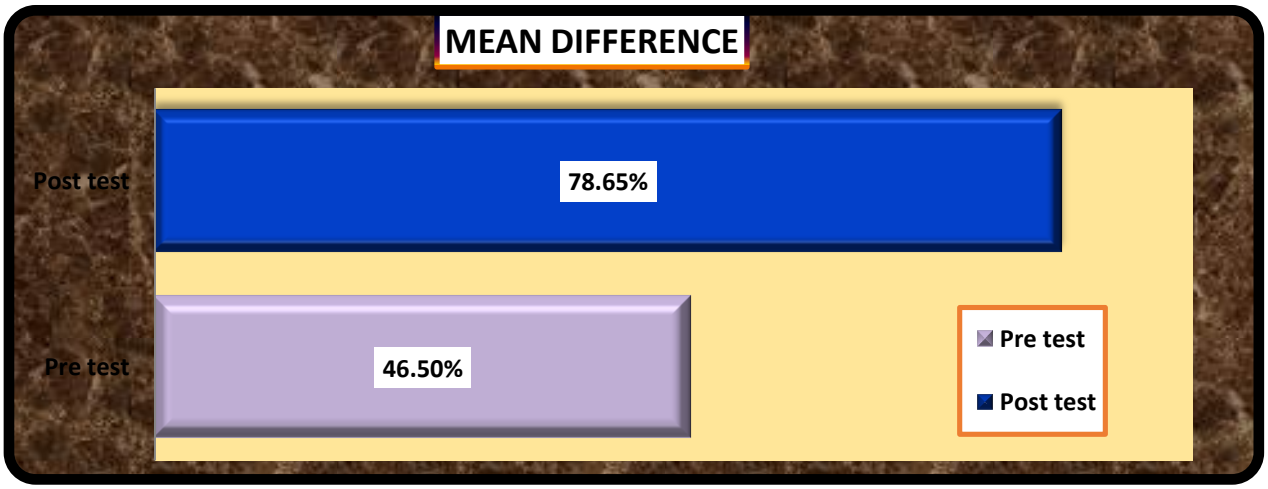


Figure No.-5. Bar diagram shows the mean difference between pre-test and post-test knowledge scores.

Table No.-3 (figure no. 5) Shows the pre-test mean knowledge score of subject was 9.3, mean percentage was 46.5% and SD was 2.54 where as in post-test mean knowledge score was 15.73, mean percentage was 78.65% and SD was 2.11 percentage difference was 32.1%**.**

SECTION – IV

Paired t - Test finding for the effectiveness of computer assisted teaching program on knowledge regarding consequences of consanguineous marriage.

Table No. 4: Shows the 'Paired t test' test finding the effectiveness of computer assisted teaching program on knowledge regarding consequences of consanguineous marriage .

N=30

Knowledge level	Mean	SD	SE	'Paired t ' Test value		Inference
				P	t	
Pre-test	9.3	2.54	0.602	2.05	-10.68	P >0.05 significant
Post-test	15.73	2.11				

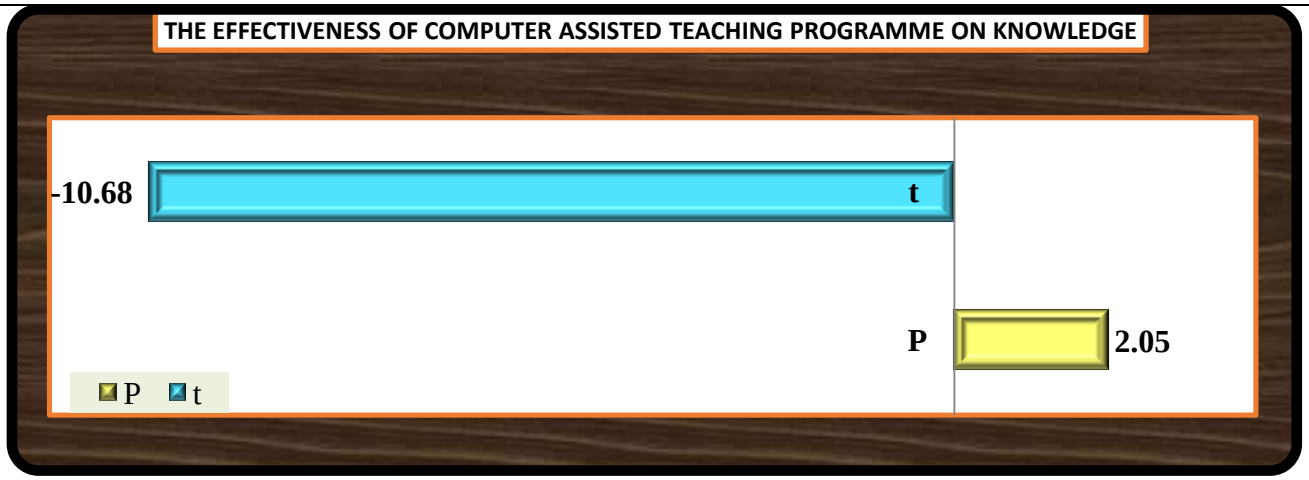


Figure No.- 6 Bar diagram shows the effectiveness of computer assisted teaching knowledge gain after teaching and pre-test and post-test knowledge score.

Table No.-4 (figure No.6) Depict that the pre-test mean knowledge score of subject is ±9.3, SD was 2.54 whereas in post-test mean knowledge score is 15.73, SD is 2.11 SE was 0.602. The calculated paired t -test value is -10.68 (p> 0.05) was greater than table value 2.05 at 0.05 level of highly significance.

SECTION-V

Chi-square test finding of association between the pre-test and post-test knowledge regarding Consequences of consanguineous marriage.

Table No.-5: Shows the chi-square test value of association between the pre-test knowledge regarding Consequences of consanguineous marriage with demographic variables.

N=30

SL .No.	Demographical variables	Pre-test knowledge score				Chi-square		DF	Inference
		P	A	G	E	X^2	p		
1.	**Age in year**								
	a. 18 - 20	01	17	09	00	3.93	12.59	06	**P>0.05 S***
	b. 21 - 23	01	01	01	00				
	c. 24 - 26	00	00	00	00				
2.	**Gender**								
	• Boys	00	03	01	00	0.569	15.51	08	**P>0.05 S***
	• Girls	02	15	09	00				
3.	**Religion**								
	• Hindu	01	11	06	00	0.088	16.92	09	**P>0.05 S***
	• Muslim	00	00	00	00				
	• Christian	01	07	04	00				
	• Others	00	00	00	00				

4.	**Type of family**								
	• Nuclear	01	12	09	00	3.393	12.59	06	**P<0.05 S***
	• Joined	01	04	01	00				
	• Extended	00	02	00	00				
5.	**Area of residence**								
	• Urban	00	04	02	00	0.551	7.82	04	**P<0.05 S***
	• Rural	02	14	08	00				
6.	**Educational status**								
	• I year	01	17	07	00	4.511	12.59	06	**P>0.05 S***
	• II year	01	01	03	00				
	• III year	00	00	00	00				

7.	**History of consanguineous marriage in the family**								
	• Yes	00	04	00	00	3.0661	7.82	03	**P>0.05 S***
	• No	02	14	10	00				
8.	**If yes specify the relationship**								
	• Parents	00	03	00	00	0.5833	12.59	06	**P<0.05 S***
	• Siblings	00	00	00	00				
	• Cousins	00	01	00	00				
9.	**Knowledge regarding the impacts of consanguineous marriage**								
	• Yes	00	04	04	00	1.8263	7.82	03	**P>0.05 S***
	• No	02	14	06	00				
10.	**If yes specify the source of information**								
	• Family	00	04	00	00	7	16.92	09	**P>0.05 S***
	a) Friends	00	00	01	00				
	b) Health personnel	00	00	00	00				
	c) Mass media	00	00	03	00				

S*-Significant **NS*- Non significant**

Table no.-5: Shows the chi square test value of association between the pre test knowledge regarding consequences of consanguineous marriage with age of the student , Gender, Religion , Type of family , Area of residence , Educational status, History of consanguineous marriage in the family, Specify the relationship , Previous knowledge and source of consanguineous marriage

Table No.-5.1: Shows the chi square test value of association between the pre test knowledge regarding Consequences of consanguineous marriage with Age of student.

N=30

Sl. No.	Age in year	Pre-test knowledge score				Chi-square		DF	Inference
		P	A	G	E	X^2	p		
	a) 18 – 20	01	17	09	00	3.93	12.59	06	P>0.05 S*
	b) 21 – 23	01	01	01	00				
	c) 24 – 26	00	00	00	00				

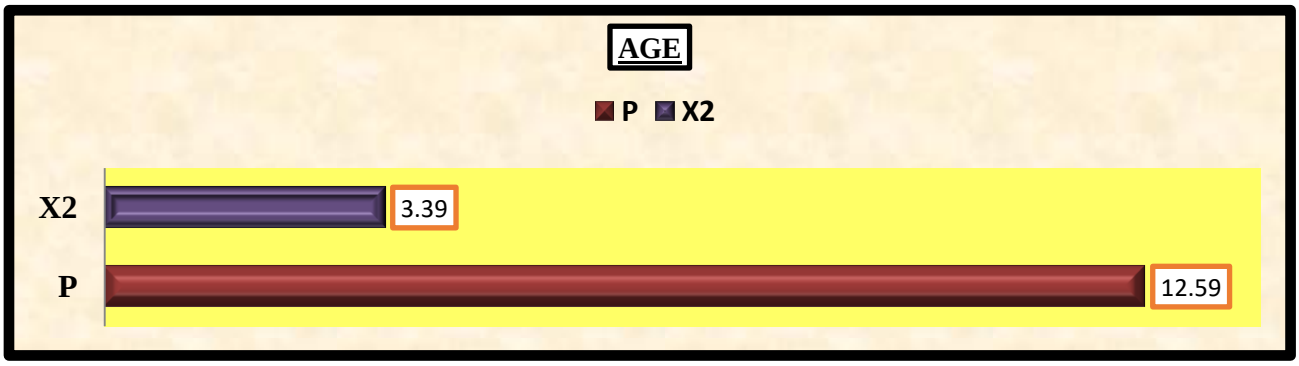


Figure No.-7.1: Bar diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with age of student.

Figure No.-7.1(Figure No.-7.1:): Depict that the association between pre-test knowledge regarding consequences of consanguineous marriage with age of student. Hence the chi-square value is 3.9 (P>0.05 S*) at 0.05 level of significance, it shows that there is a high significant association with age of student.

Table No.-5.2: Shows the chi square test value of association between the pre-test knowledge regarding Consequences of consanguineous marriage with gender of student.

N=30

Sl. No.	Gender	Pre-test knowledge Score				Chi-square		DF	Inference
		P	A	G	E	$\chi 2$	P		
a)	Boys	00	03	01	00	0.569	15.51	08	P>0.05 S*
b)	Girls	02	15	09	00				

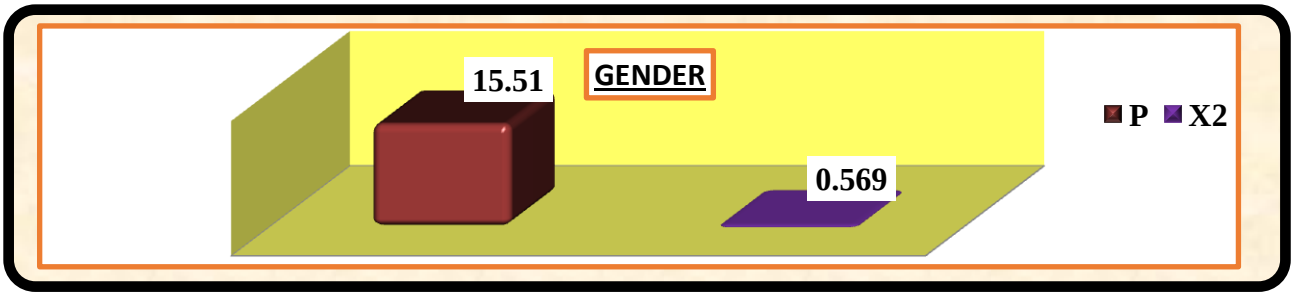


Figure No.-7.2: Column diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with gender of student.

Table No.-5.2(Figure No.-7.2) Depict that the association between pre-test knowledge regarding Consequences of consanguineous marriage with gender of student. Hence the chi-square value is 0.569(P>0.05 S*) at 0.05 level of significance, it shows that there is a high significant association with gender.

Table No.-5.3: Shows the chi square test value of association between the pre test knowledge regarding Consequences of consanguineous marriage with religion of students.

N=30

SL. No.	Religion	Pre-test knowledge score				Chi-square		DF	inference
		P	A	G	E	$\chi 2$	P		
a)	Hindu	01	11	06	00	0.088	16.92	09	**P>0.05 S***
b)	Muslim	00	00	00	00				
c)	Christian	01	07	04	00				
d)	Others	00	00	00	00				

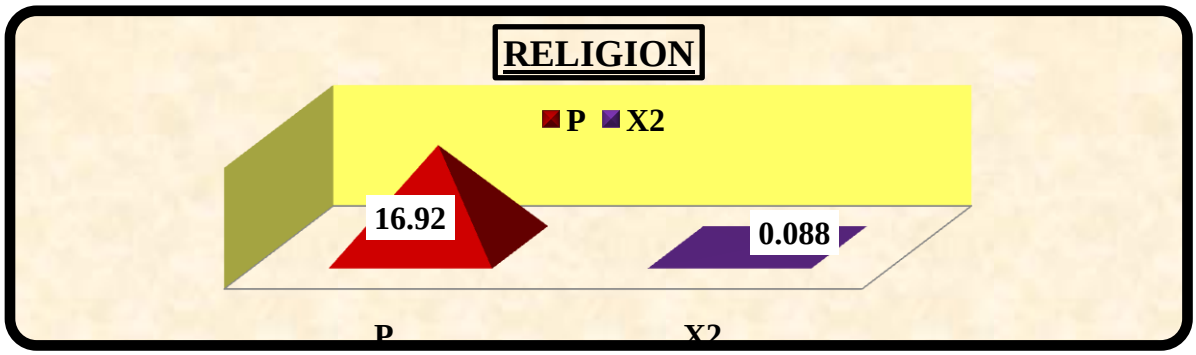


Figure No.-7.3: Pyramid diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with religion of students.

Table No.-5.3: (**Figure No.-7.3)1**Depict that the association between pre-test knowledge regarding Revised Immunization Schedule 2019 by Indian Academy of Paediatrics (IAP) with occupation of father. Hence the chi-square value is 0.088 (P>0.05 S*) at 0.05 level of significance, it shows that there is a highly significant association with religion of students

Table No.-5.4: Shows the chi square test value of association between the pre test knowledge regarding Consequences of consanguineous marriage with type of family of students.

N=30

Sl. No.	Demographical variables	Pre-test knowledge score				Chi-square		DF	Inference
		P	A	G	E	P	$\chi 2$		
Type of family									
a)	Nuclear	01	12	09	00	3.393	12.59	06	**P>0.05 S***
b)	Joined	01	04	01	00				
c)	Extended	00	02	00	00				

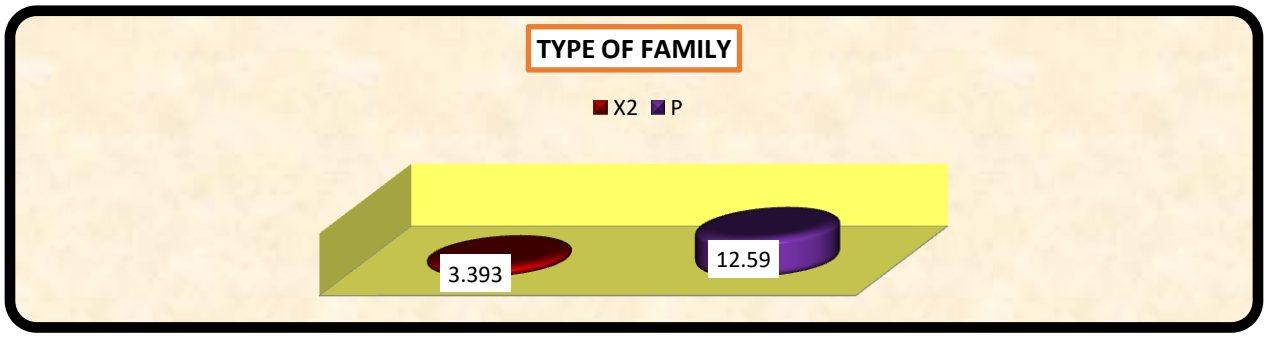


Figure No.-7.4: Cylindrical diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with type of family of students.

Table No.-5.4 (Figure No.-7.:4) Depict that the association between pre-test knowledge regarding Consequences of consanguineous marriage with type of family of students. Hence the chi-square value is 3.393(P>0.05 S*) at 0.05 level of significance, it shows that there is a highly significant association with type of family of student.

Table No.-5.5: Shows the chi square test value of association between the pre-test knowledge regarding Consequences of consanguineous marriage with area of residence of students.

N=30

SL. No	Area of residence	Pre-test knowledge score				Chi-square		DF	Inference
		P	A	G	E	P	$\chi 2$		
a)	Urban	00	04	02	00	0.551	9.49	04	**P>0.05 S***
b)	Rural	02	14	08	00				

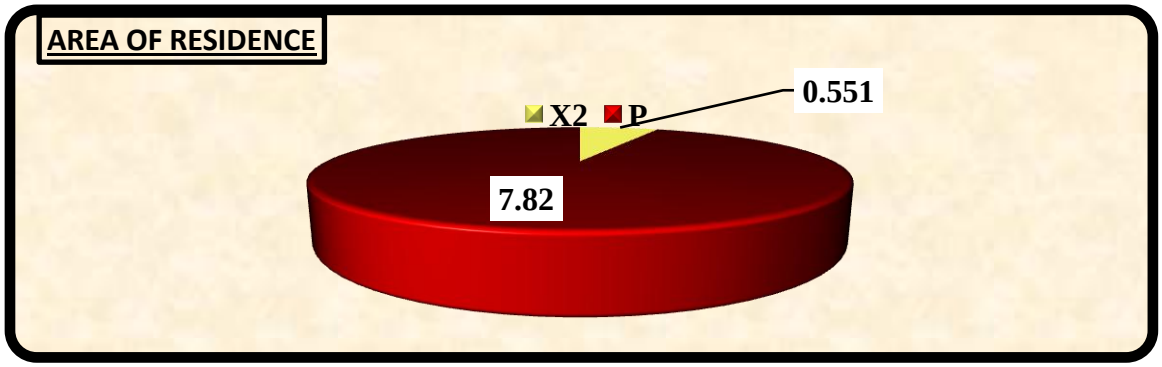


Figure No.-7.5: Pie diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with area of residence of students.

Table No.-5.5: (**Figure No.-7.5)** Depict that the association between pre-test knowledge regarding Consequences of consanguineous marriage with area of residence of students. Hence the chi-square value is 0.551 (P>0.05 S*) at 0.05 level of significance, it shows that there is a highly significant association with Area of residence.

Table No.-5.6: Shows the chi square test value of association between the pre-test knowledge regarding Consequences of consanguineous marriage with educational status of students.

N=30

SL .No.	Demographical variables	Pre-test knowledge Score				Chi-square		DF	Inference
		P	A	G	E	P	χ^2		
Educational status of students.									
a)	I year	01	17	07	00	4.511	7.82	03	**P>0.05 S***
b)	II year	01	01	03	00				

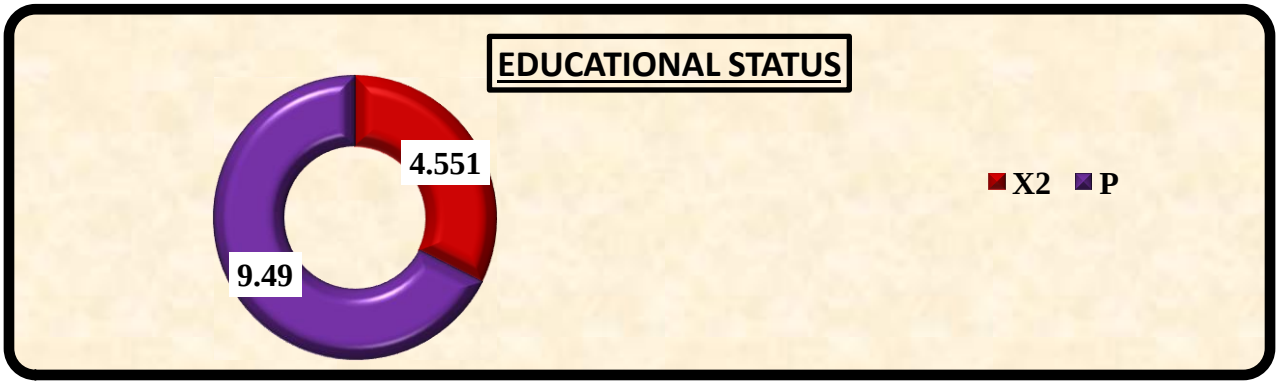


Figure No 7.6: Doughnut shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with educational status of students.

Table No.-5.6 (Figure No.-7.6): Depict that the association between pre-test knowledge regarding Consequences of consanguineous marriage with educational status of students. Hence the chi-square value is 4.511(P>0.05 S*) at 0.05 level of significance, it shows that there is a high significant association with educational status of student.

Table No.-5.7: Shows the chi square test value of association between the pre-test knowledge regarding Consequences of consanguineous marriage with History of consanguineous marriage in their family of students.

N=30

SL. No.	History of consanguineous marriage	Pre-test knowledge score				Chi-square		DF	Inference
		P	A	G	E	P	χ^2		
a)	Yes	00	04	00	00	3.0661	7.82	03	**P>0.05 S***
b)	No	02	14	10	00				

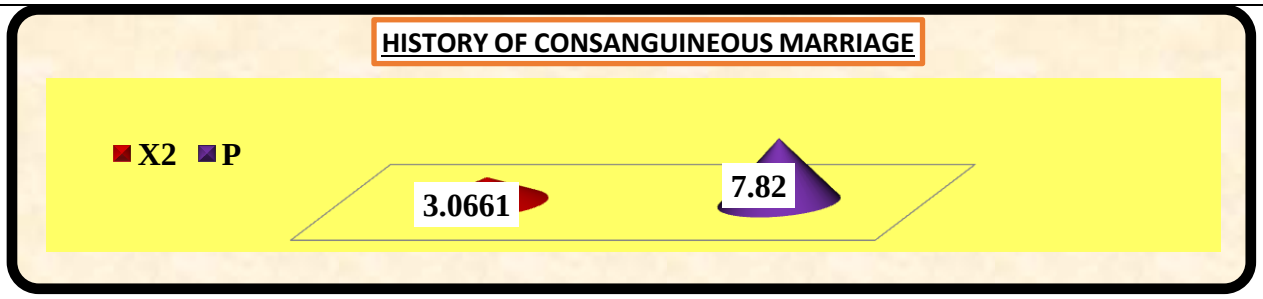


Figure No.-7.7: Cone diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with history of consanguineous marriage in family of students.

Table No.-5.7(Figure No.-7.7): Depict that the association between pre-test knowledge regarding Consequences of consanguineous marriage with history of consequences of consanguineous marriage of students. Hence the chi-square value is 3.0661 (P>0.05 S*) at 0.05 level of significance, it shows that there is a highly significant association with Occupation of Mother.

Table No.-5.8: Shows the chi square test value of association between the pre test knowledge regarding Consequences of consanguineous marriage with specify relationship of students.

N=30

SL. No	Specify the relationship	Pre-test knowledge score				Chi-square		DF	Inference
		P	A	G	E	P	χ^2		
a)	Parents	00	03	00	00	0.5833	12.59	06	P>0.05 S*
b)	Siblings	00	00	00	00				
c)	Cousins	00	01	00	00				

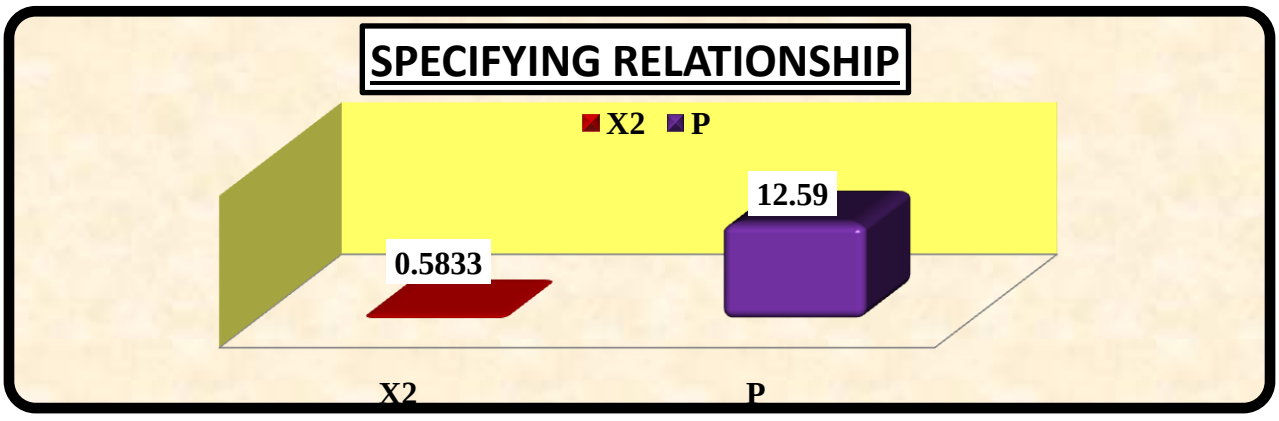


Figure No.-7.8: Column diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with specifying relationship of students.

Table No.-5.8(Figure No.-7.8):Depict that the association between pre-test knowledge regarding Consequences of consanguineous marriage with specifying relationship of students. Hence the chi-square value is 3.12 (P>0.05 S*) at 0.05 level of significance, it shows that there is a highly significant association with specifying relationship.

Table No.-5.9: Shows the chi square test value of association between the pre test knowledge regarding Consequences of consanguineous marriage with previous knowledge regarding the impacts of consanguineous marriage of students

N=30

SL. No.	Demographical variables	Pre-test knowledge Score				Chi-square		DF	inference
		P	A	G	E	P	χ^2		
Knowledge regarding the impacts of consanguineous marriage									
a)	Yes	00	04	04	00	1.8263	7.82	03	**P>0.05 S***
b)	No	02	14	06	00				

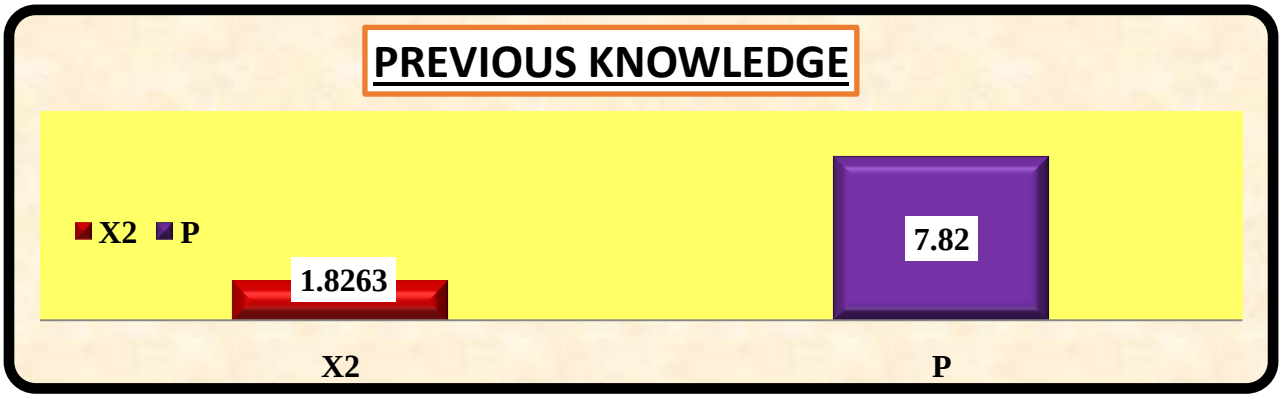


Figure No 7.9: Bar diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with previous knowledge regarding impacts of consanguineous marriage of students.

Table No.-5.9(Figure No.-7.9): Depict that the association between pre-test knowledge regarding Consequences of consanguineous marriage with previous knowledge regarding impacts of consanguineous marriage. Hence the chi-square value is 1.8263 (P>0.05 S*) at 0.05 level of significance, it shows that there is a high significant association with previous knowledge regarding impacts of consanguineous marriage.

Table No.-5.10: Shows the chi square test value of association between the pre test knowledge regarding Consequences of consanguineous marriage with source of information.

Sl. No.	Previous Knowledge	Pre-test knowledge Score				Chi-square		DF	inference
		P	A	G	E	P	χ^2		
a)	Family	00	04	00	00	7	16.92	09	**P>0.05 S***
b)	Friends	00	00	01	00				
c)	Health personnel	00	00	00	00				
d)	Mass media	00	00	03	00				

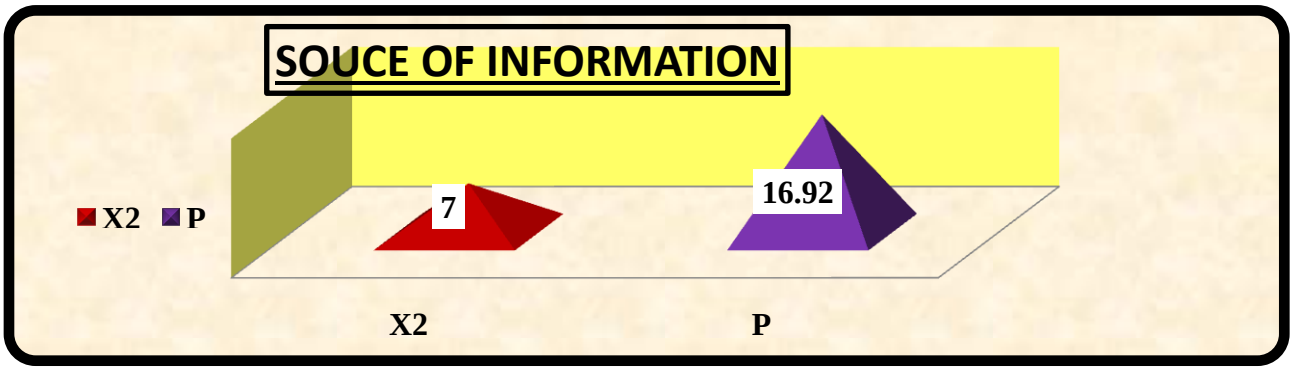
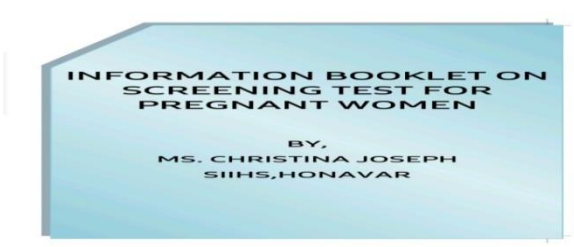


Figure No 7.10: Pyramid diagram shows the chi-square test value of association between pre-test knowledge regarding Consequences of consanguineous marriage with source of information .

Table No.-5.10(Figure No.-7.10): Depict that the association between pre-test knowledge regarding Consequences of consanguineous marriage with source of information.. Hence the chi-square value is 7(P>0.05 S*) at 0.05 level of significance, it shows that there is a high significant association with source of information.

11: CONTRIBUTIONS MADE TOWARDS INCREASING THE STATE OF KNOWLEDGE LEVEL IN THE SUBJECT

Administered computer assisted teaching programme through zoom meeting with ppt. and video.



12.CONCLUSIONS SUMMARIZING THE ACHIEVEMENTS AND INDICATION OF SCOPE FOR FUTURE.

The heart of the research project lies in reporting the finding. This is the most creative and demanding part of the study. This chapter gives a brief according of the present study, suggestions of the study and the nursing implication. The present study was indented to analyse the effectiveness of computer assisted teaching program on knowledge regarding consequences consanguineous marriage.

SUMMARY:

The present study was to assess the effectiveness of computer assisted teaching programme on knowledge regarding consequences consanguineous marriage. It was found to be highly effective in increasing the knowledge level.

CONCLUSION:

Periodic skilled based teaching program is necessary to educate the college students in area about consequences consanguineous marriage. The study was undertaken to Evaluate the Effectiveness of Computer Assisted Teaching Program on Knowledge Regarding Consequences of Consanguineous Marriage among college students of selected colleges of Honavar, Uttara Kannada. The study was conducted in a sample of 30 college students. Among them in pre-test, only 00 (00%) had excellent knowledge, 10 (33%) of subject had good knowledge, 18 (60%) have average and 02 (07%) has poor knowledge in pre-test whereas in post-test 11 (37%) has good knowledge, 18 (60%) has excellent knowledge, 01 (03%) has average and 00 (00%) has poor knowledge. It shows that maximum number of subject had excellent knowledge in the study after post-test. Thus Computer Assisted Teaching was highly effective in upgrading the knowledge level of college students regarding the consequences of consanguineous marriage. Research Hypothesis (H_1) is accepted.

OBJECTIVES OF THE STUDY:

1. To assess knowledge regarding consequence of consanguineous marriage among college students at selected collages of Honavar Uttara Kannada.
2. To assess the effectiveness of computer assisted programme regarding consequence of consanguineous marriage among college students at selected collages of Honavar Uttara Kannada.
3. To assess the association between pre test knowledge score with demographic variables among college students at selected collages of Honavar Uttara Kannada.

HYPOTHESIS

H_0: There will be a significant difference between the pre-test and post-test knowledge score on consequence of consanguineous marriage after intervention.

H_1: There is a significance association between the post-test knowledge with their related demographic variables.

MAJOR FINDING OF THE STUDY:

The present study to evaluate the effectiveness of computer assisted teaching program on knowledge regarding the consequences of consanguineous marriage among the college students of selected colleges of Honavar Uttara Kannada.

The major findings shows that evaluate Effectiveness of computer assisted teaching program in improving knowledge regarding the consequences of consanguineous marriage among the college students of selected colleges of Honavar Uttara Kannada. The pre-test mean knowledge score of subject was 9.3, mean percentage was 46.5% and SD was 2.54 where as in post-test mean knowledge score was 15.73, mean percentage was 78.65% and SD was 2.11 percentage difference was 32.1%. The calculated 'Paired t- test' value is -10.68 ($p>0.05$) was greater than the value of 2.0 at 0.05 level of highly significance. So that, there is an effectiveness of video assisted teaching program regarding consequences of consanguineous marriage and the research hypothesis (H_1) significant.

Finding of association between the pre-test Knowledge regarding Consequences of consanguineous marriage. With demographic variables Chi-square ($\chi 2$) test showing analysis of association between pre-test knowledge score of college students and their selected demographic variables. Third objective was to find out association between knowledge level and demographic variables of college students. Hence the calculated Chi-square value are lesser than table value ($P >0.05$). It shows there is significant Association with Age of students 3.93 (P=12.59), Gender 0.569(P=15.51), Religion 0.088(P=16.92), Type of family 3.393(P=12.59), Area of residence 0.551 (P=9.49), Educational status 4.511(P=12.59), History of consanguineous marriage in family 3.0661

(P=7.82), specifying the relationship 0.5833 (P=12.59), Previous knowledge regarding the impacts of consanguineous marriage 1.8263(P=7.82), Source of information 7(P=16.92).

Nursing Education:

- The nursing curriculum should consist of knowledge related to consequences of consanguineous marriage and their prevention.
- Nurses at the post-graduate level need to develop skills in preparing health teaching material in various health aspects in health education, newer techniques have to be used for motivating staff participation. Emphasis should be made on in service education and training programmes in the department to increase the knowledge of staff nurses.

Nursing Practice:

- Students as well as Nurses have a vital role in controlling the consanguineous marriage.
- Nurses should enhance their professional knowledge.
- The finding of the study can be used to bring about awareness among the college students regarding the consequences of consanguineous marriage which will help in the improvement in the health of society.
- Nurses can also plan teaching in clinical as well as in the Community.

Nursing Administration:

The finding of the study reveals the need to conduct an ongoing in-service education program for the nurses who are working in the clinical settings as well as in the community. The in-service education program should include both theoretical and practical input. This can also bring awareness among nurse administrators of the need to provide training to new staff nurses regarding consequences of consanguineous marriages on health. Nurse administrators can prepare a new protocol about the teaching.

Nurses can also teach to student nurses about the same. She/he should be able to plan and organize Program taking in to consideration the cost effectiveness and carry out successful educational Program.

Nursing research:

- The finding of the study can be utilized for conducting research on the knowledge regarding consequences of consanguineous marriage among the college students.
- Future investigators can use the finding and the methodology as reference material. It highlights the area, which requires future exploration.

- The suggestion and the recommendation can be utilized by other researchers for conducting further studies in the same field.

LIMITATIONS:

The following factors were beyond the control of the investigator:

- This study is limited to those college students of selected colleges only who are readily available.
- Purposive sampling was done which restrict the generalization of the study.
- The assessment of effect of computer assisted teaching is limited to one post test conducted on the eighth day of computer assisted teaching Programme.
- Since the study was mainly based on the responses of the subjects through multiple choice questionnaire, and no other tool was undertaken for the generalization of the finding remains limited.
- The study is limited to population that read and understands English.
- The study will be limited to college students the study was limited to the experience level of the investigator.

RECOMMENDATION:

Measures which can be implemented for college students in order to improve their knowledge regarding consequences of consanguineous marriage:

- A similar study can be replicated for larger samples, in different setting for making broad generalization.
- A similar study can be done in the form of a comparative study between urban and rural area.
- The Nursing school curriculum should include current and more information to update the knowledge regarding consequences of consanguineous marriage in health.
- A similar study can be conducted in communities through various audio –visual aids.
- A study can be done on association between various demographic variables which were significant on longer sample.

INDICATION OF SCOPE FOR FUTURE:

The present study findings insists the future scholars to create awareness among college students in order to improve their knowledge regarding consequences of consanguineous marriage and create healthy nation.

13. ABSTRACT

BACKGROUND: *Consanguineous marriage result in increased risk of obstetric complications like ante partum haemorrhage, The congenital malformations like congenital cataract, bifid tongue, cyanotic heart disease, cleft palate, hydrocephalus, etc. Only 7.6% of the women were aware about the hazards of a consanguineous marriage. The level of inbreeding found in Karnataka is more prevalent in villages rather than the cities or towns. The prime cause of large inbreeding is high rate of uncle – niece marriages among the Hindus (32.26%). Millions of children are born with congenital disorders every year. This tragic fact results in many problems in the family and the society. Most of us do not even recognize the pros and cons of such marriages. Also, consanguineous pregnancy leads to reduced rates of involuntary sterility and prenatal losses.*

OBJECTIVES: *To assess the effectiveness of computer assisted programme regarding consequence of consanguineous marriage among college students at selected collages of Honavar, Uttara Kannada.*

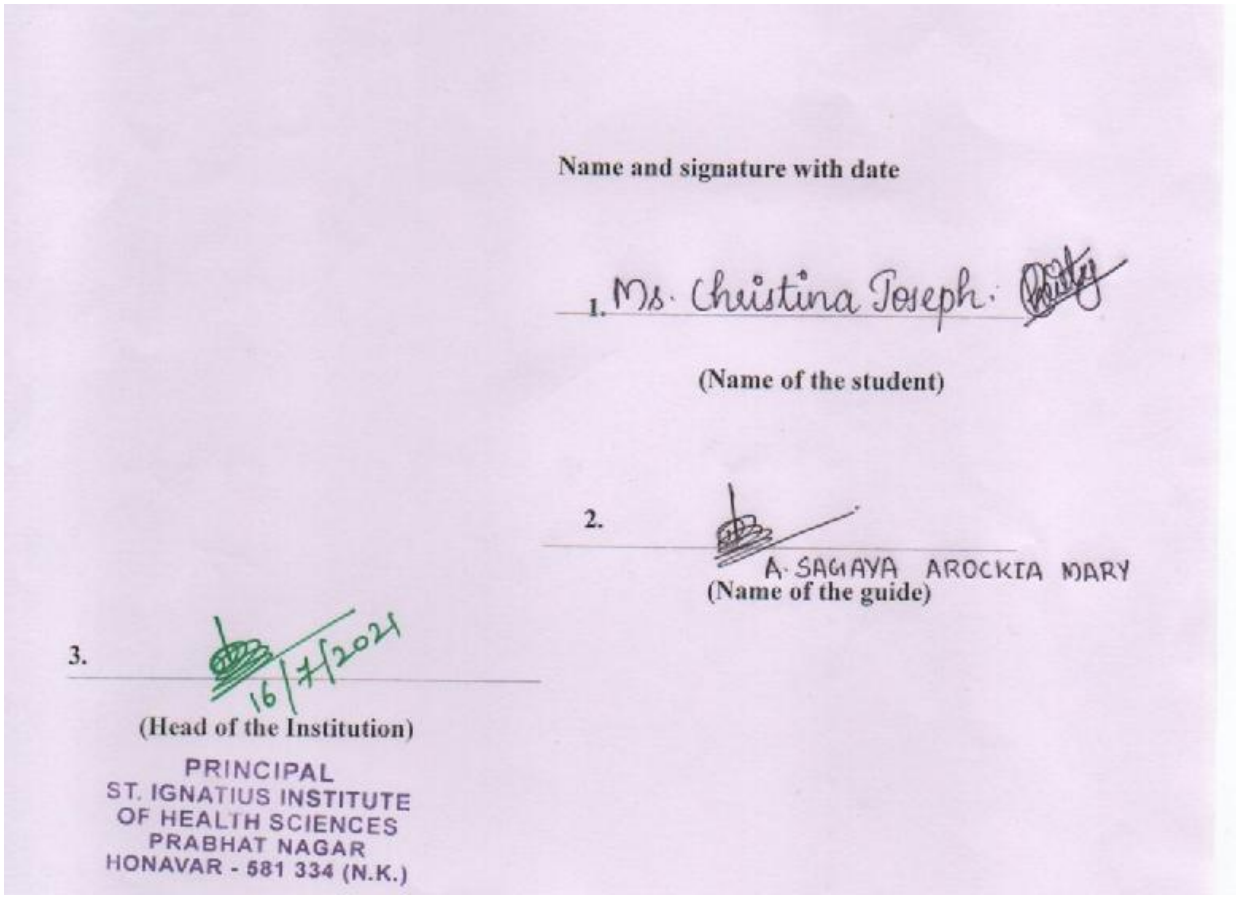
METHODS*: A pre-experimental method with one group pre and post test design is used for the present study. The subject consisted of 30 college students of selected colleges of Honavar selected by non-random sampling (convenient) method. Data was collected through testmoz web page and CATP was administered by using Zoom app. Data analysed by descriptive and statistical methods (chi-square and paired t-test).data interpreted effectively through tables and diagrams.*

RESULTS: *The pre-test means knowledge score of subjects was 9.3, mean percentage was 46.5% and SD was 2.54 where as in post-test mean knowledge score was 15.73, mean percentage was 78.65% and SD was 2.11 percentage difference was 32.1%. The calculated 'Paired t- test value is -10.68 ($p>0.05$) was greater than the value of 2.05 at 0.05 level of highly significance. So that, there is an effectiveness of computer assisted teaching programme regarding consequences of consanguineous marriage and the null hypothesis (H_0) was rejected. Chi-square ($\chi 2$) test showing analysis of association between pre-test knowledge score of college student and their selected demographic variables. Hence the calculated Chi-square value are lesser than table value ($P > 0.05$). It shows there is significant Association with Age of students 3.93 (P=12.59), Gender 0.569(P=15.51), Religion 0.088(P=16.92), Type of family 3.393(P=12.59), Area of residence 0.551 (P=9.49), Educational status 4.511(P=12.59), History of consanguineous marriage in family 3.0661 (P=7.82), specifying the relationship 0.5833 (P=12.59), Previous knowledge regarding the impacts of consanguineous marriage 1.8263(P=7.82), Source of information 7(P=16.92).*

CONCLUSION: *The finding of the study showed that there was deficit knowledge regarding*

consequence of consanguineous marriage among selected college students before administration of CATP on consanguineous marriage and the study was concluded as the intervention was effective in increasing the knowledge of college students on consequence of consanguineous marriage, it was evidenced by enhancement in post-test knowledge score.

(Key words: Effectiveness, CATP, Consanguineous marriage, Knowledge)



Name and signature with date

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