

CHAPTER 4



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DATA ANALYSIS AND INTERPRETATION

CHAPTER 4:- DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

In the first chapter researcher has stated the problems and brought out the needs and importance of the study on stated problem. Further in the first chapter objectives were formulated and delimitation were set.

In the second chapter brief review of research presents with methodology of research adopted for the study.

Third chapter deals with the methods and procedure including sampling, selection of tools, pre-testing their reliability and validity, data analysis and statistical techniques employed.

In the fourth chapter researcher logically organised and analyses the collected data obtained from tools constructed by researcher and make meaningful interpretation and applied necessary statistics along with graphical representation of data as per objective and hypothesis set by researcher for the current study.

Data analysis and interpretation is the process of organizing data into logical, sequential and assigning meaning to the collected information and determining the conclusions, significance and implications of the findings. It is an important and exciting step in the process of research. In all research studies, analysis follows data collection.

Why do we analyse data - The purpose of analysing data is to obtain usable and useful information. The analysis, irrespective of whether the data is qualitative or quantitative, may:

- describe and summarise the data
- identify relationships between variables
- compare variables
- identify the difference between variables
- forecast outcomes

According to **C.R.Kothari (1989)**, "The term analysis refers to the computation of measures along with searching for patterns of relationship that exist among data-groups "Analysis involves estimating the values of unknown parameters of the population and testing of hypotheses for drawing inferences.

The aim of present study is to find out the "Awareness and Attitude of Vocational Education among students of senior secondary schools of Bhopal –A Study" The collected data are arranged properly, analysed systematically and interpreted precisely.

4.2 DATA BASE

The investigator collected data from 200 Students with Science and Commerce stream from Four Senior Secondary Schools of Bhopal.

The following table 4.2 shows the schools of Bhopal selected for study:-

| S.NO | NAME OF SCHOOL | TYPE | TOTAL |
|------|---------------------|----------------|-------|
| 1 | KV BAIRAGARH | GOVERNMENT | 63 |
| 2 | MODEL HIGH SCHOOL | SEMIGOVERNMENT | 58 |
| 3 | BAL BHAVAN | PRIVATE | 38 |
| 4 | KOPAL PUBLIC SCHOOL | PRIVATE | 41 |

4.3 OBJECTIVE1

- To study the awareness of Vocational Education among students of senior secondary schools of Bhopal.

For measure the given objective researcher arrange the data sequentially and logically and analyse the responses of Questionnaire filled by respondents of senior secondary schools of Bhopal and find out the level of awareness in different categories with different code set by researcher to know awareness of Vocational Education.

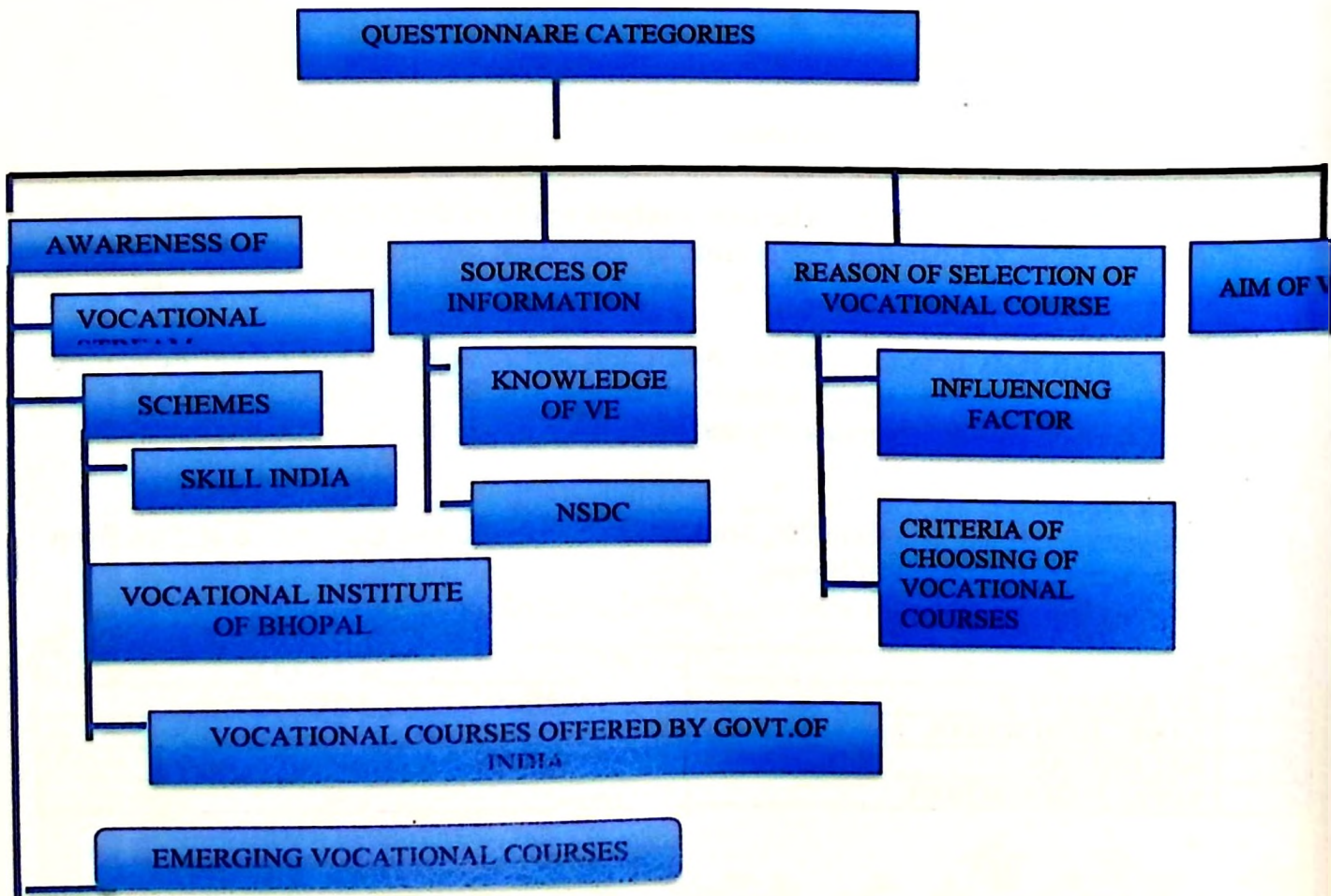
- Full awareness-FA, Partial awareness-PA, Low awareness-LA

The investigator categorised the respondent's responses into level of awareness by set the following parameters:-

- For full awareness: - if respondents tick the option "all of these" or more than half choices from given no. of choices then researcher consider it full awareness.
- For partial awareness: - if respondents tick the half of the boxes or more than one choice from the given no. of choices then researcher consider it partial awareness.
- For low awareness: - if respondents tick the option "none of these" or any distractor then researcher consider it low awareness.

But there are few respondents who not attempted the questions in this case researcher not marked their responses in terms of categories of level of awareness.

Self-constructed Questionnaire consists of 15 questions and researcher put them in a four main categories and includes subcategories under the given categories.



4.4 Interpretation of Dimension and Item under them consist in Questionnaire is followings:-
First dimension constructed by researcher is Awareness: - Through this dimension researcher wants to know the awareness of students regarding different Vocational streams, different Vocational Scheme, emerging Courses in the field of Vocational Education

4.4.1 Awareness of Different Vocational Field:-This dimension consists of six different vocation streams with different choices. For each stream respondents have to recognise the choices by tick the boxes from given different choices. Researcher for the convenience of respondents the given choices includes options like “all of these” and “none of these” and in few stream the given choices includes distractors to check whether respondents carefully attempted the questions.

The six vocation stream are given below with no. of choices for particular Vocational stream excluding two options i.e. “all of these” and “none of these”

1. Commerce: - it has eight choices .
2. Engineering:-it has eight choices.
3. Health:-it has six choices.
4. Home science: - it has five choices.
5. Agriculture:-it has 3 choices related to particular and one choice is distractor.
6. Hospitality:-it has 4 choices related to particular and one is distractor.

4.4.2 Awareness Of Schemes:-

This is a part of first dimension through this category researcher want to know the awareness of Vocational Schemes related to

- SKILL INDIA to promote skill education across the country and it consists of 3 options set by researcher.
- Vocational Institute in Bhopal city in which Vocational Courses are part of curriculum. It consists of 5 choices.
- Vocational Courses as initiatives taken by government of India. It consists of 5 choices.

4.4.3 Awareness Of Emerging Courses In Vocational Education:- This is a third category of first dimension which includes 22 Courses as a choices introduced by CBSE researcher want to know the awareness of emerging Vocational Courses in India.

4.4.4 Aim Of Vocational Institutes: - This is a fourth important categories of the first dimension through which researcher want to know the awareness of students related to motive of Vocational Institutes.

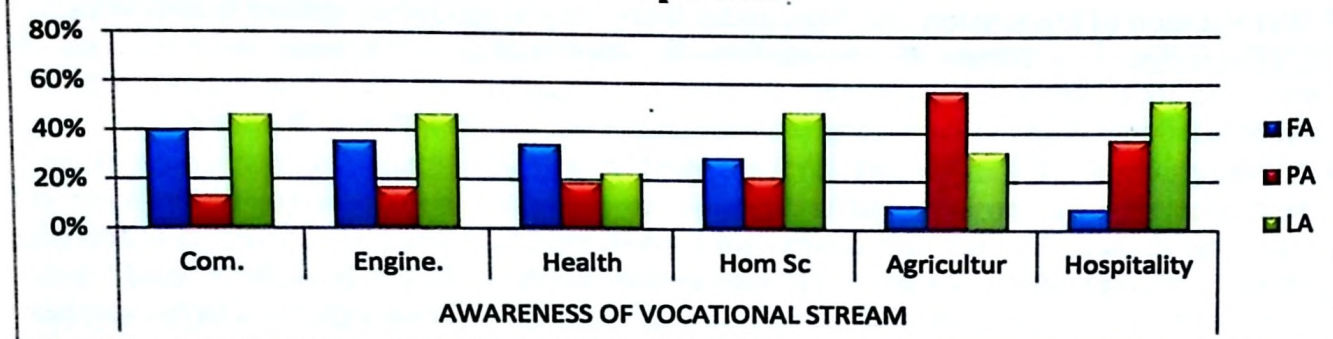
ANALYSIS AND INTERPRETATION OF DATA

Table 4.4.1 shows responses of students of senior secondary schools of Bhopal towards Vocational stream.

TABLE 4.4.1

| RESPONSES | AWARENESS OF VOCATIONAL STREAM | | | | | | | | | | | |
|-----------|--------------------------------|-------|-------------|-----|--------|-------|--------------|-------|-------------|-------|-------------|-------|
| | Commerce. | | Engineering | | Health | | Home Science | | Agriculture | | Hospitality | |
| FA | 80 | 40% | 72 | 36% | 69 | 34.5% | 59 | 29.5% | 20 | 10% | 18 | 9% |
| PA | 27 | 13.5% | 34 | 17% | 39 | 19.5% | 44 | 22% | 115 | 57.5% | 75 | 37.5% |
| LA | 93 | 46.5% | 94 | 47% | 92 | 23% | 97 | 48.5% | 65 | 32.5% | 107 | 53.5% |
| TOTAL | 200 | | 200 | | 200 | | 200 | | 200 | | 200 | |

Graph 4.4.1



INTERPRETATION

The above table 4.4.1 data shows that level of awareness of Vocational stream among students of senior secondary schools of Bhopal and from the analysed responses of particular Vocational stream it can be interpreted as:-

If we see the pattern of data in the above table 4.4.1 level of awareness for commerce, engineering, health and home science Vocational stream respectively researcher reached at following conclusion:-

Most of the students fall under the following categories:-

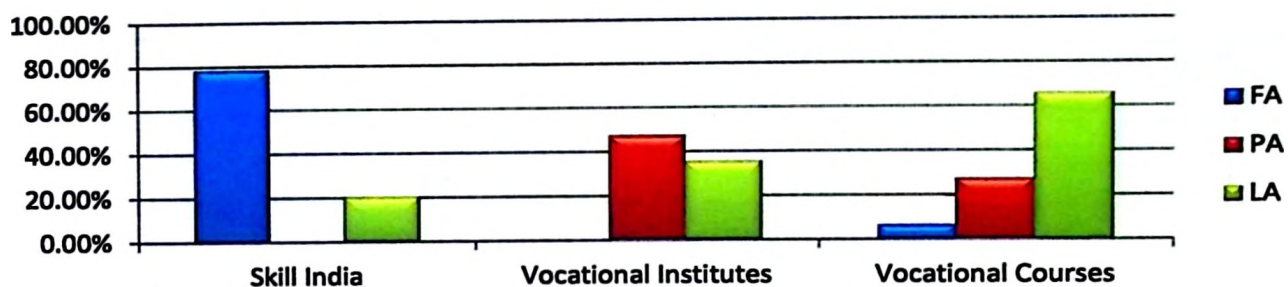
- 40% of students have full awareness and 46.5% of students have shown low awareness in commerce stream same pattern we can see in engineering, health, home science vocation respectively, which means Students are either well aware of choices or they have little awareness of the choices available in respective vocational courses.
- Few no. of students have shown partial awareness of the given choices available under commerce, engineering, health, home science vocation respectively.
- 10% of students of agriculture and 9% of hospitality&Tourism have shown full awareness which means very few no. of students have full awareness or well aware of the choices given under these particular stream.
- On the whole according to data given in table Researcher conclude that
 - 40% of students have shown Well awareness of commerce Vocational stream.
 - 57.5% of students have shown Partial awareness of agricultural Vocational stream.
 - 53.5% of students have shown Low awareness of hospitality& tourism.

Table 4.4.2 Shows responses regarding awareness of Scheme of Vocational Education among students of senior secondary schools of Bhopal.

TABLE 4.4.2

| Sno | Responses | Awareness Of Schemes Of Vocational Education | | | | | |
|-----|-----------|--|-------|-----------------------|---------|--------------------|-------|
| | | Skill India | | Vocational Institutes | | Vocational Courses | |
| 2 | | | | | | | |
| | FA | 159 | 78.5% | 34 | 17%.... | 13 | 6.5% |
| | PA | 0 | 0 | 95 | 47.5% | 55 | 27.5% |
| | LA | 41 | 20.5% | 71 | 35.5% | 132 | 66% |
| | TOTAL | 200 | | 200 | | 200 | |

Graph 4.4.2



INTERPRETATION

From the data of the above table 4.4.2 awareness of Schemes of Vocational Education researcher reached at following conclusion:-

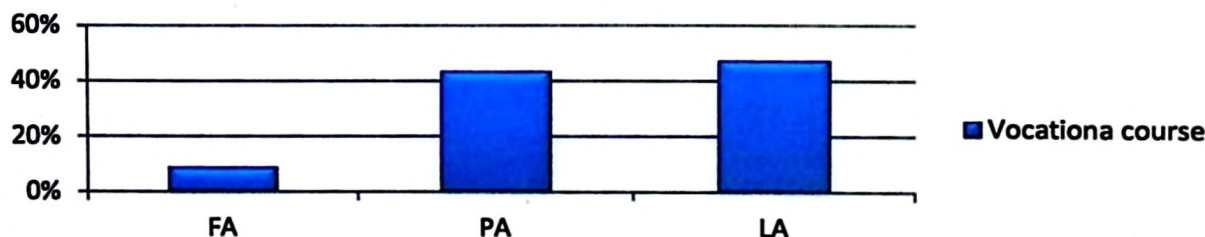
- Skill India Schemes: - 78.5% of students have shown well awareness of the SKILL INDIA Scheme which shows full awareness of the Scheme among students of senior secondary schools of Bhopal.
- Vocational Institutes: - 47.5% of students have shown partial awareness of Vocational Institutes in Bhopal.
- Vocational Courses Schemes: - 66% of students have shown low information of Vocational Courses initiated by govt. of India under various Vocational Schemes.

Table 4.4.3 shows responses of awareness of emerging Courses among students of senior secondary schools of Bhopal.

Table 4.4.3

| Sno | Responses | Awareness Of Emerging Courses | |
|-----|-----------|--------------------------------|-------|
| 3 | | 22 Courses Are Given As Choice | |
| | FA | 18 | 9% |
| | PA | 87 | 43.5% |
| | LA | 95 | 47.5% |
| | TOTAL | 200 | |

Graph 4.4.3



INTERPRETATION OF TABLE 4.4.3

To see the data of above table researcher reached at following conclusion that is:-

- 47.5% of students have shown low awareness of emerging Courses in Vocational Education.

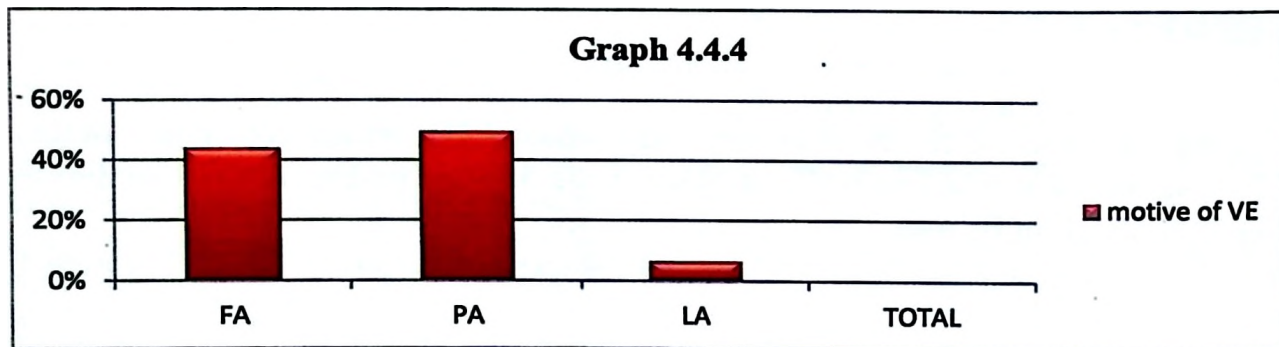
Either students of senior secondary schools of Bhopal have low awareness or partial awareness of emerging Courses introduced by CBSE.

- 9% of students have shown full awareness of the emerging Courses.

Table 4.4.4 shows responses for awareness of motive of Vocational Institutes among students of senior secondary schools of Bhopal.

Table 4.4.4

| 4 | Responses | Motive Of Vocational Institutes | |
|---|-----------|-----------------------------------|-------|
| | | Objective Of Vocational Education | |
| | FA | 88 | 44% |
| | PA | 99 | 49.5% |
| | LA | 13 | 6.5% |
| | TOTAL | 200 | |



INTERPRETATION

From the data of above table researcher reached at following conclusion that is:-

Either students have full awareness or partial awareness of motive of Vocational Institutes which means-

- 49% of students have shown partial awareness of emerging Courses in Vocational Education and 44% of students have shown well awareness of aims of Vocational Institutes.
- 6.5% of students have shown low awareness.

On the whole it can be concluded that students of senior secondary schools of Bhopal have partial awareness of aims of Vocational Education.

4.5 SOURCES OF INFORMATION: -

This is a second dimension of the questionnaire constructed by researcher. Through this dimension researcher want to know which of the sources provides as choices in questionnaire help students to get the knowledge about Vocational Courses and Scheme of Vocational Education. The sources provided by researcher in questionnaire are coded by researcher in the following ways:-

- Internet-1, Teacher-2, Peer group-3, Newspaper-4, Magazine-5, Relatives-6, Parents-7, Television-8.

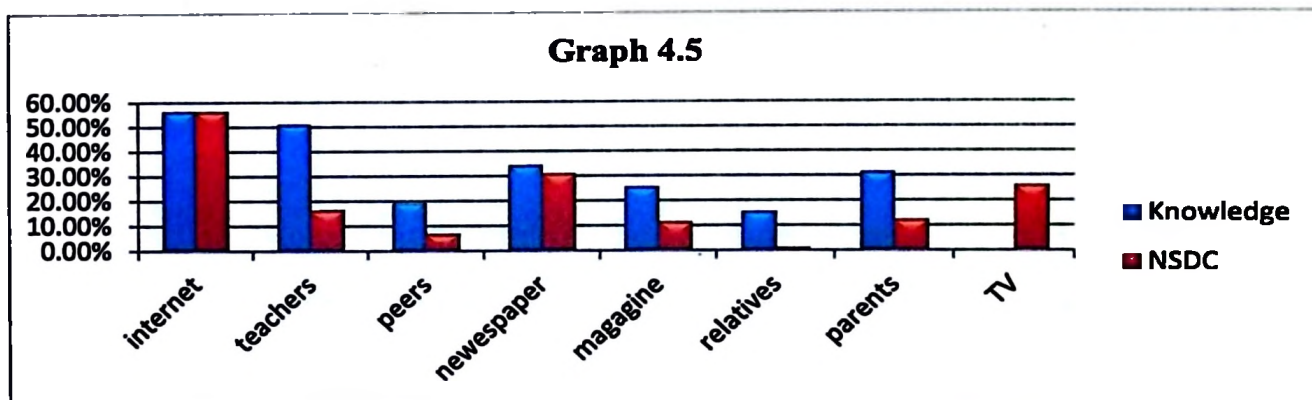
Table 4.5 shows awareness of sources used by students to get information of Vocational Education by students of senior secondary schools of Bhopal.

Table 4.5

| Sno | Sources Of | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----|------------|-----|-----|----|----|----|----|----|----|
| 1 | Knowledge | 113 | 102 | 39 | 69 | 51 | 31 | 63 | 0 |
| 2 | NSDC | 113 | 33 | 14 | 62 | 23 | 2 | 25 | 52 |

TABLE 4.5 Data of 200 students presented in percentage form

| Sources Of | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|--------|--------|--------|--------|--------|--------|--------|-----|
| Knowledge | 56.50% | 51% | 19.50% | 34.50% | 25.50% | 15.50% | 31.50% | 0 |
| NSDC | 56.50% | 16.50% | 7% | 31% | 11.50% | 1% | 12.50% | 26% |



INTERPRETATION

From the data of above table 4.5 researcher reached at following conclusions-

- 56.5% of students use internet to get awareness of vocational education and NSDC scheme.
- 51% of students selected Teachers to get awareness of vocational education.
- 34.50% of students use newspaper to get awareness of vocational education.
- 26% of students use Television to get awareness of NSDC schemes.

The mostly used Sources to get information or knowledge of Vocational Education by students of senior secondary schools of Bhopal are Internet, Teachers, newspaper and TV.

REASON OF SELECTION OF VOCATIONAL COURSES

This is the fourth dimension to measure the awareness of Vocational Education among students. In this dimension researcher put two questions which is based on following category i.e.

4.6.1 Most influencing factor behind selection of any Vocational course and what are the best criteria to select any Vocational Courses for respondents. To know the influencing factor researcher provide the 11 choices to respondents with the coded numbers.

1. Someone in your family is connected to same field.
2. You are commerce student.
3. You are science student.
4. You think that the selected Vocational course have scope in future.
5. You are passionate for acquiring this selected skill.
6. Your socio economic status does not allow you for higher education.
7. You are well aware of your potential.
8. You think from this course you can apply your learning practically.
9. This course is easy to complete.
10. This course is in market demand.
11. You want to gain extra skills with your studies

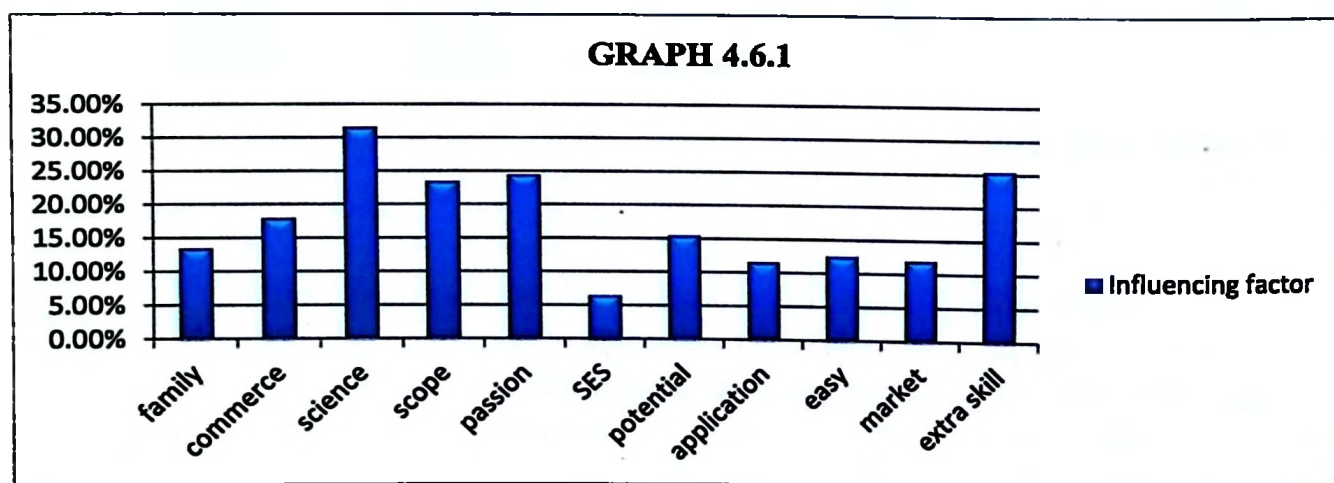
Table 4.6.1 shows responses of students of senior secondary schools of Bhopal towards reason of selection of any Vocational Courses

Table 4.6.1

| SNO | Reason of selection | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-----|---------------------|----|----|----|----|----|----|----|----|----|----|----|
| 1 | Influencing factor | 27 | 36 | 63 | 47 | 49 | 13 | 31 | 23 | 25 | 24 | 51 |

TABLE 4.6.1Data of 200 students presented in percentage form

| Reason of selection | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---------------------|--------|------|--------|-------|--------|-------|-------|--------|--------|-----|--------|
| Influencing factor | 13.5 % | 18 % | 23.5 % | 31.5% | 24.5 % | 6.5 % | 15.5% | 11.5 % | 12.5 % | 12% | 25.5 % |



INTERPRETATION

To see the data of table 4.6.1 the researcher reached at following conclusion i.e 31.5% of students selected a choice no. 4 i.e. students selection of courses is influenced by scope of particular vocations in future.

- 24.5% of students selected a choice no.5 i.e. influence factor is passion for the courses.
- 25.5% of students choose vocational courses with the thinking that it is a extra skills for them,
- 6.5% of students selected a choice no.6 i.e. socio economic status it shows students of senior secondary schools of Bhopal think that the factor socio economic status is not a barrier for their selection of Vocational Courses.

4.6.2 The second category under this dimension is criteria for the selection of Vocational course and choices provided by researcher to respondents with the followings coding

1. Your awareness related to course-A
2. Interest-B
3. Parent Decision-C
4. Gender-D
5. Status of Vocational course-E
6. Additional qualification-F

7. Last option left –G

Table 4.6.2 shows criteria to select any Vocational course among students of senior secondary schools of Bhopal.

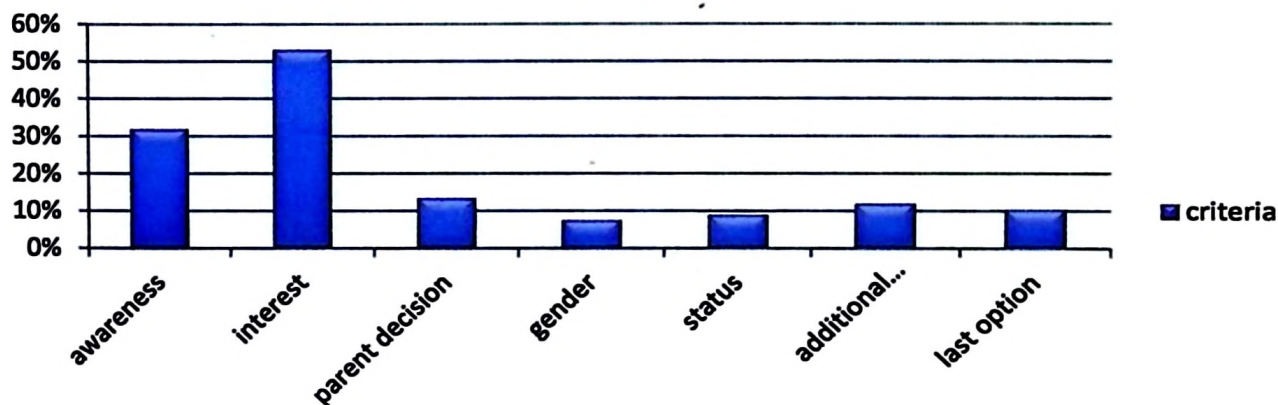
Table 4.6.2

| Sno | Reason of selection Courses | A | B | C | D | E | F | G |
|-----|-----------------------------|----|-----|----|----|----|----|----|
| 1 | criteria | 64 | 106 | 27 | 15 | 18 | 24 | 21 |

TABLE 4.6.1 Data of 200 students presented in percentage form

| Sno | Reason of selection Courses | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|-----------------------------|-----|-----|--------|-------|----|-----|--------|
| 1 | criteria | 32% | 53% | 13.50% | 7.50% | 9% | 12% | 10.50% |

Graph 4.6.2



INTERPRETATION

- To see the data of table 4.6.2 the researcher reached at following conclusion i.e.
- 53% of Students of senior secondary schools of Bhopal are selected choice no. B i.e. "Interest" it shows students is giving preference to their interest in the selection of Vocational Courses
- 32% of Students selected a choice no. A i.e. "awareness related to course "it depicts that students of senior secondary schools of Bhopal is given importance to awareness for Vocational Education.
- 7% of Students of senior secondary schools of Bhopal are giving lowest preference to choice no. D i.e. "Gender "it shows students not consider Gender as a barrier in their selection of Vocational Courses.

4.7 OBJECTIVE 2:

- To Study the differences in awareness of vocational education among students of senior secondary school Bhopal due to gender.

As we see in our society Gender is considering as a barrier for education and selection of courses for higher studies. So here, researcher selected Gender the demographic variable for the present study.

To justify the objective of the researcher analyse the data and arrange it sequentially as per need of objectives i.e gender wise arrangement of data in the following ways:

Table 4.7 shows gender wise arrangement of responses out of 200 students.

TABLE 4.7

| SNO | GENDER | TOTAL NO. OF STUDENTS |
|-----|--------|-----------------------|
| 1 | Male | 100 |
| 2 | Female | 100 |
| | Total | 200 |

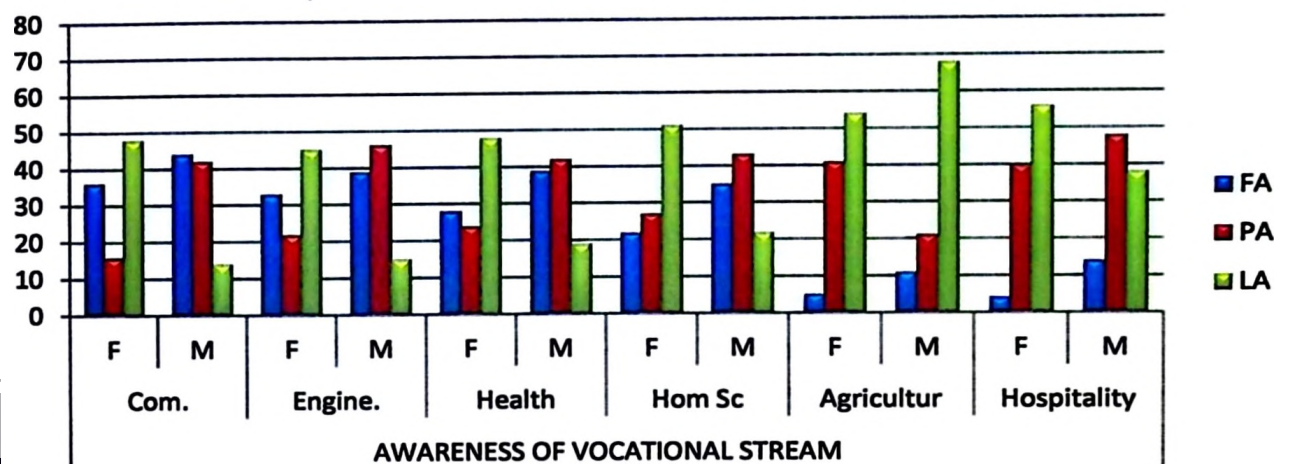
4.7.1 First dimension is Students awareness of vocational education: - It comprises of following responses shown by table given below:

Table 4.7.1.1 shows level of awareness of Vocational stream among female and male respondents.

TABLE 4.7.1.1

| Sn o. | Responses | AWARENESS OF VOCATIONAL STREAM | | | | | | | | | | | |
|-------|-----------|--------------------------------|----|--------------|----|--------|----|--------------|----|-------------|----|-------------|----|
| | | Commerce | | Engineerin g | | Health | | Homscien ce. | | Agriculture | | Hospitality | |
| | Gender | F | M | F | M | F | M | F | M | F | M | F | M |
| 1 | FA | 36 | 44 | 33 | 39 | 28 | 39 | 22 | 35 | 5 | 11 | 4 | 14 |
| | PA | 16 | 42 | 22 | 46 | 24 | 42 | 27 | 43 | 41 | 21 | 40 | 48 |
| | LA | 48 | 14 | 45 | 15 | 48 | 19 | 51 | 22 | 54 | 68 | 56 | 38 |

Graph 4.7.1.1



INTERPRETATION:

The above table 4.4.1 data shows responses of male and female students awareness of particular vocational stream. After analysing the data of female and male students researcher concluded the followings:

Gender of senior secondary schools of Bhopal depicts following results as per collected data:-

- In Commerce vocational stream 36 female and 44 male students have shown full awareness.
- 48 female and 40 male students shown partial awareness for Hospitality & tourism vocational stream.
- Agriculture is a vocational stream in which most of the female and male students of senior secondary schools of Bhopal have shown low awareness.
- As per data of gender it can be concluded that compared with male student, female student have shown low awareness of vocational stream or they have lack of awareness of the given choices under particular stream.
- 5 female and 11 male students in agricultural stream and 4 female and 14 male students in hospitality & tourism vocational stream shown that female students are less well aware of these particular stream as compared with male students responses.

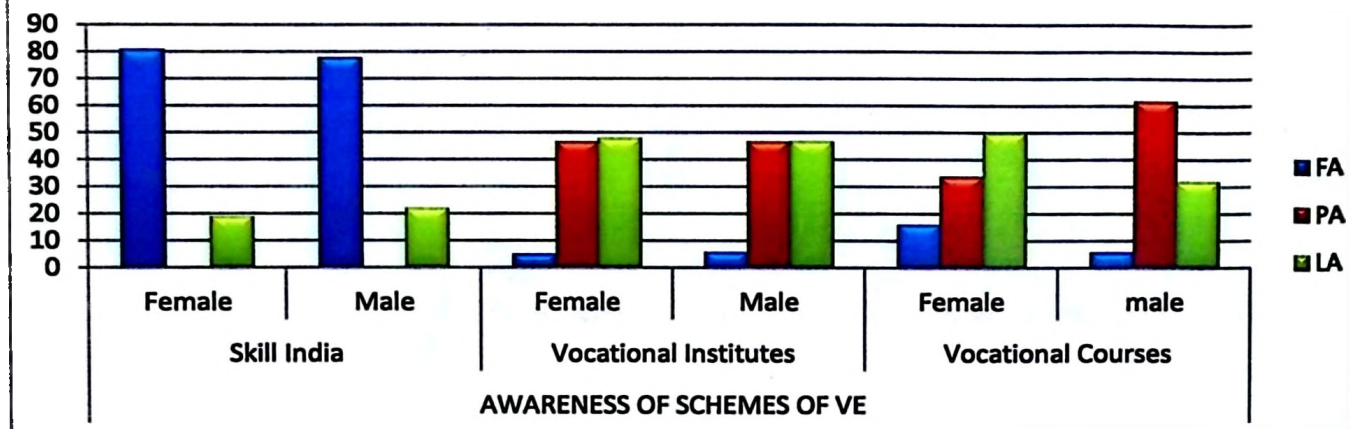
Thus, it can be concluded that vocational stream such as hospitality&tourism and agriculture should be promoted among gender of senior secondary schools of Bhopal.

Table 4.7.1.2 given below shows level of awareness of vocational schemes among male and female respondents.

TABLE 4.7.1.2

| sno | RESPONSE | AWARENESS OF SCHEMES OF VOCATIONAL EDUCATION | | | | | |
|-----|----------|--|------|-----------------------|------|--------------------|------|
| | | Skill India | | Vocational Institutes | | Vocational Courses | |
| | Gender | Female | Male | Female | Male | Female | male |
| | FA | 81 | 78 | 5 | 6 | 16 | 6 |
| | PA | 0 | 0 | 47 | 47 | 34 | 62 |
| | LA | 19 | 22 | 48 | 47 | 50 | 32 |

Graph 4.7.1.2



INTERPRETATION:

The above table 4.7.1.2 data shows responses of male and female Students awareness of vocational scheme. After analysing the data of female and male researcher concluded the followings:

Gender of senior secondary schools of Bhopal shown following results as per collected data:-

- 81 female and 78 male students have shown good awareness of Skill India scheme initiated by Prime Minister Narendra Modi or both male and female students are fully aware of Skill India.
- 47 male and female students have shown partial awareness of the vocational Institutes of Bhopal.
- 48 female and 47 male students have shown low awareness of the vocational institute of Bhopal.

This can be said that male and female students either have low awareness or good awareness of vocational institutes of Bhopal.

- 34female and 62 male students have shown low awareness of choices given for vocational courses initiated by govt. of India under the scheme of vocational education.
- This can be said that female students are lacking in partial awareness as compared with male.
- 16 female and 6 male students have shown full awareness or well aware of vocational Institutes.

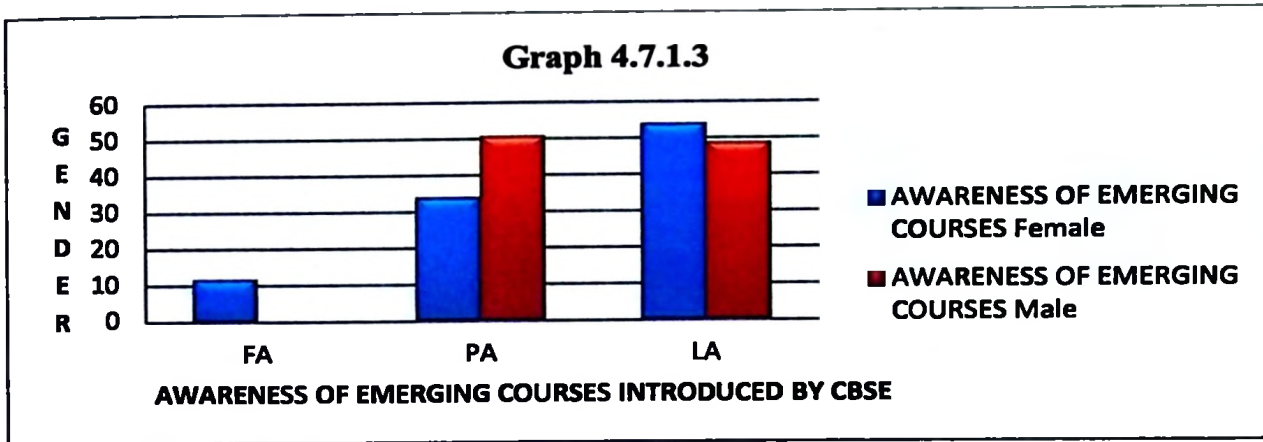
This can be said that male students are lacking in full awareness of vocational courses as compared with female.

Thus, it can be concluded that there is need to promote full awareness of vocational schemes related to vocational institutes of Bhopal and various schemes for vocational courses among gender of senior secondary schools of BHOPAL.

Table 4.7.1.3 shows level of awareness of emerging courses among male and female respondents.

TABLE 4.7.1.3

| SNO | RESPONSE | Emerging Courses Introduced By CBSE | |
|-----|----------|-------------------------------------|------|
| | | Female | Male |
| 3 | Gender | | |
| | FA | 12 | 0 |
| | PA | 34 | 51 |
| | LA | 54 | 49 |



INTERPRETATION:

The above table 4.7.1.3 data shows responses of male and female Students awareness of emerging courses. After analysing the data of female and male students researcher concluded the followings:

➤ 54female and 49 male students of senior secondary schools of Bhopal have shown low awareness of choices given for emerging courses introduced by CBSE.

Or

Both male and female students have shown low awareness of emerging courses in vocational education.

➤ 12 female and 0 male students have shown full awareness of emerging courses.

This can be said that male students are lacking in full awareness compared with female students.

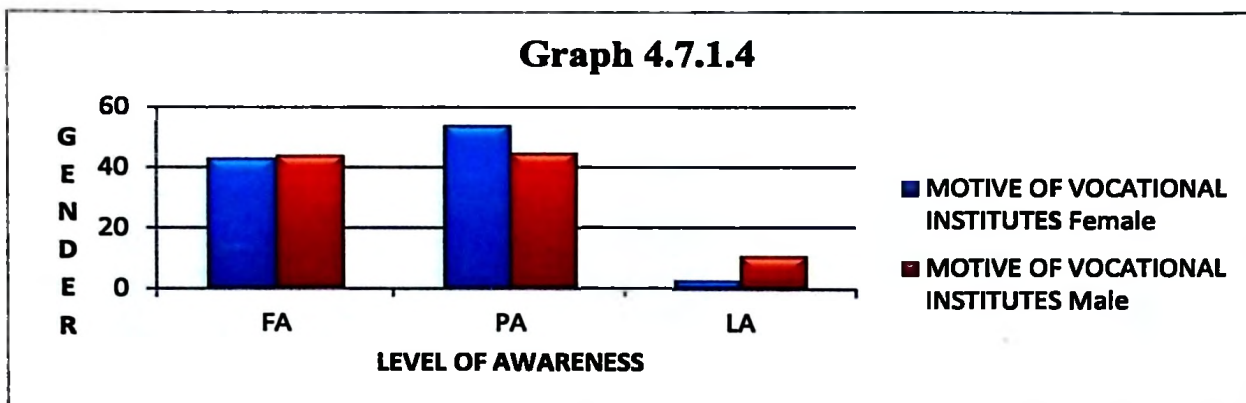
➤ 51 male and 34 female students have shown partial awareness. Hence this can be said that Compared with female students, Male students have shown good awareness or partial awareness of choices given for emerging courses introduced by CBSE.

Thus, it can be concluded that there is need to promote awareness among Gender with more focus on male students of senior secondary schools of Bhopal for awareness of emerging courses introduced by CBSE.

Table 4.7.1.4 shows level of Students awareness of motive of vocational education among senior secondary schools of Bhopal respondents.

TABLE 4.7.1.4

| SNO | RESPONSE | MOTIVE OF VOCATIONAL INSTITUTES | |
|-----|-----------------------------------|---------------------------------|------|
| 4 | Objective Of Vocational Education | | |
| | Gender | Female | Male |
| | FA | 43 | 44 |
| | PA | 54 | 45 |
| | LA | 03 | 11 |



INTERPRETATION:

The above table 4.7.1.4 data shown responses of male and female Students awareness of motive of vocational institutes. After analysing the data of female and male students researcher concluded the followings:

- 54 female and 45 male students have shown partial awareness of motive of vocational education which means they have good awareness of aims of vocational education.
- 3 female and 11 male students have shown low awareness which means female students have shown good awareness of aims of vocational Institutes.

Thus it can be concluded that gender of senior secondary schools of Bhopal either have partial awareness or full awareness of motive of vocational education.

Or
Genders of senior secondary schools of Bhopal shown well awareness of motive of vocational education.

4.7.2 SECOND DIMENSION – SOURCES OF INFORMATION:

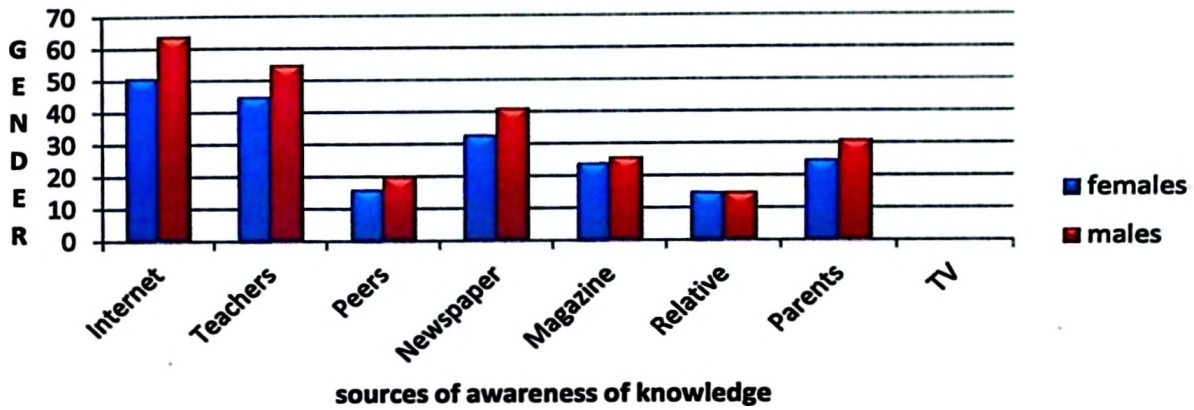
The table given below depicts the responses of male and female students related to awareness of sources of information:

Table 4.7.2.1 shows sources of awareness of Vocational education by Gender

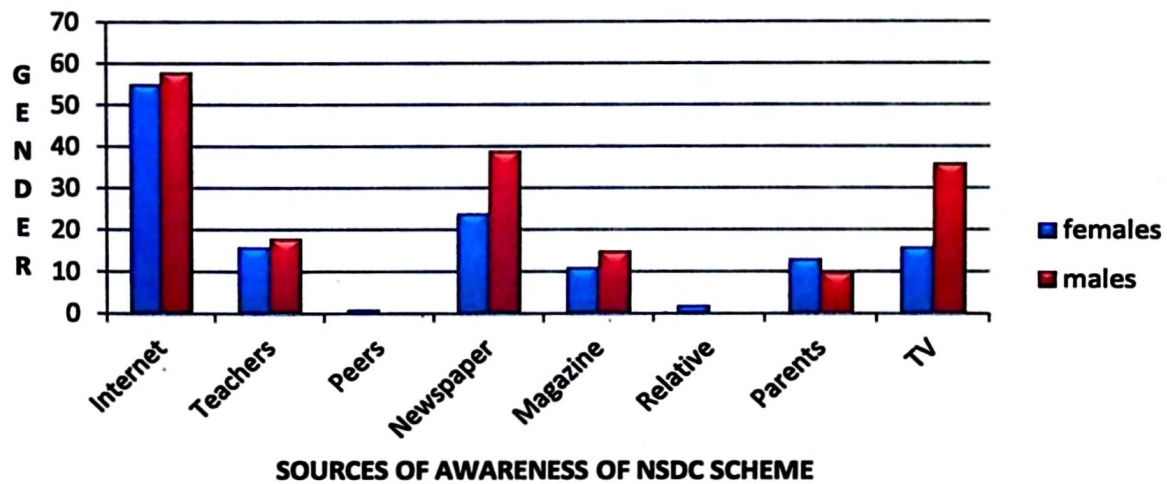
TABLE 4.7.2.1

| Sources of awareness | Internet | Teachers | Peers | Newspaper | Magazine | Relative | Parents | TV |
|----------------------|---------------|----------|-------|-----------|----------|----------|---------|----|
| GENDER | Female | | | | | | | |
| knowledge | 51 | 45 | 16 | 33 | 24 | 15 | 25 | 0 |
| NSDC | 55 | 16 | 1 | 24 | 11 | 2 | 13 | 16 |
| GENDER | Male | | | | | | | |
| knowledge | 64 | 55 | 20 | 41 | 26 | 15 | 31 | 0 |
| NSDC | 58 | 18 | 0 | 39 | 15 | 0 | 10 | 36 |
| | | | | | | | | |

Graph 4.7.2.1



Graph 4.7.2.1



INTERPRETATION:

The above table 4.7.2.1 data shows responses of male and female Students awareness of emerging courses. After analysing the data of female and male students researcher concluded the followings:

- 51 female and 64 male students selected internet to get the knowledge about vocational education and information of NSDC.
- Second highest option to get information of knowledge about VE and NSDC is “teachers and newspaper “ among gender of senior secondary schools of Bhopal.
- 36 Male students selected a option” TV” to get awareness of NSDC and they are more in no. as compared to 16 female.

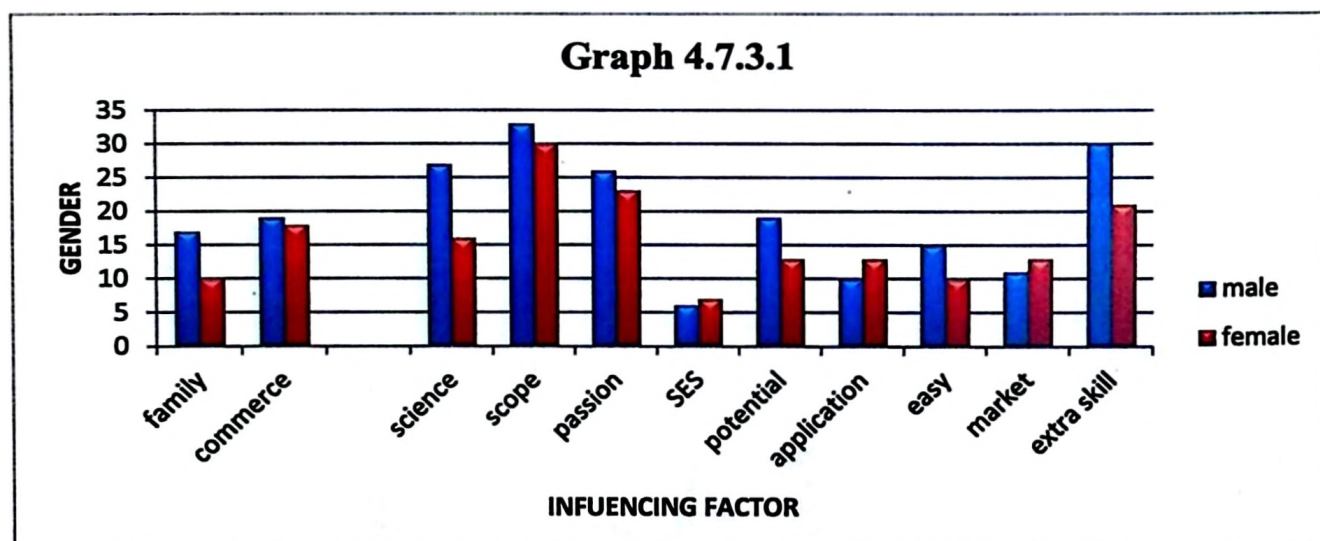
Thus it can be concluded that newspaper, internet, teachers, TV are some sources which is highly famous among gender of senior secondary schools of Bhopal.

4.7.3 THIRD DIMENSION:- REASON OF SELECTION OF VOCATIONAL COURSES:

Table 4.7.3.1 shows Gender responses regarding reason of selection of any Vocational courses.

TABLE 4.7.3.1

| S.no | Reason of selection | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|------|---------------------|--------------------|----|----|----|----|---|----|----|----|----|----|
| | | Influencing factor | | | | | | | | | | |
| 1 | male | 17 | 19 | 27 | 33 | 26 | 6 | 19 | 10 | 15 | 11 | 30 |
| 2 | female | 10 | 18 | 16 | 30 | 23 | 7 | 13 | 13 | 10 | 13 | 21 |



INTERPRETATION:

The above table 4.7.3.1 data shows responses of male and female Students awareness of emerging courses. After analysing the data of female and male students researcher concluded the followings:

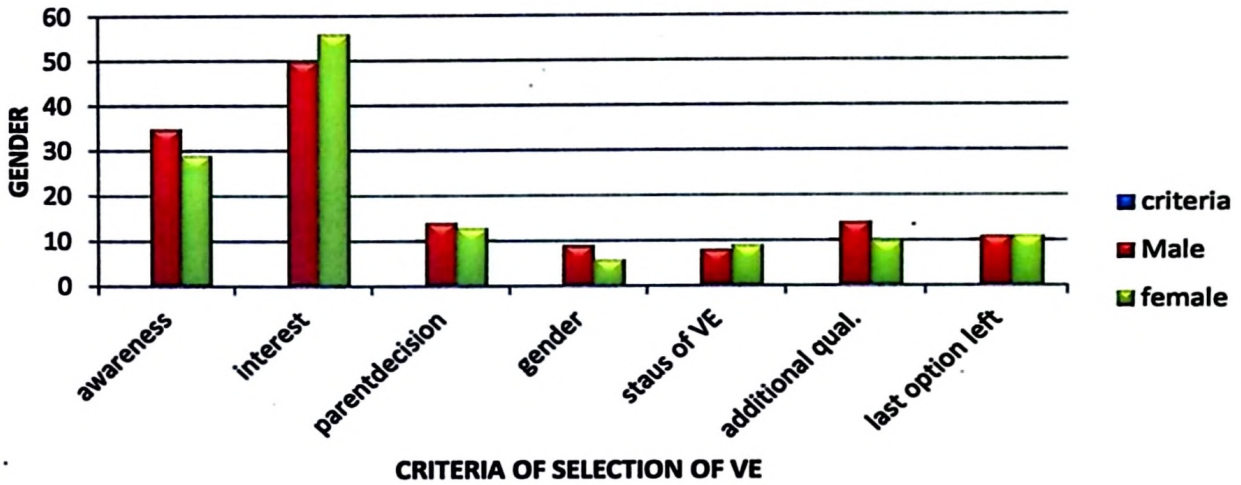
- The influencing factor among gender of senior secondary schools of Bhopal is almost same as per data 33 male and 30 female students selected choice no.4 i.e. scope of particular course in future
- 6 male and 7 male students selected a socio economic status as their choice for reason of selection of vocational course it shows SES is not a barrier among gender for the selection of vocational courses.

Table 4.7.3.2 shows Gender responses regarding criteria to select any Vocational course.

TABLE 4.7.3.2

| Sno | Reason of selection course | A | B | C | D | E | F | G |
|-----|----------------------------|----------|----|----|---|---|----|----|
| | | criteria | | | | | | |
| 1 | Male | 35 | 50 | 14 | 9 | 8 | 14 | 11 |
| 2 | female | 29 | 56 | 13 | 6 | 9 | 10 | 11 |

Graph 4.7.3.2



INTERPRETATION:

- 50 male and 56 female students selected a choice no. 'B' Hence this can be said as per data Gender of senior secondary schools of Bhopal give preference to their INTEREST as a criteria to selecting any vocational education.
- Both male and female students have given low preference to GENDER criteria behind selection of any vocational courses it means they don't think their Gender is barrier in selecting vocational courses.

Thus, it can be concluded that gender giving preference to awareness related to course and their interest in the selection of vocational courses.

4.8 OBJECTIVE 3

➤ To Study the differences in awareness of vocational education among students of senior secondary school Bhopal due to streams.

As we see in our society career decision is influenced by streams selected by students in higher secondary stage of schooling so keeping the importance of stream among senior secondary students here researcher selected stream as the demographic variable for their study.

To justify the objective the researcher analyse the data and arrange it sequentially as per need of objectives i.e.

Table 4.8 stream wise arrangement of data in the following ways:

TABLE 4.8

| Sno | Streams | Total No. Of Students |
|-----|----------|-----------------------|
| 1 | Commerce | 101 |
| 2 | Science | 99 |

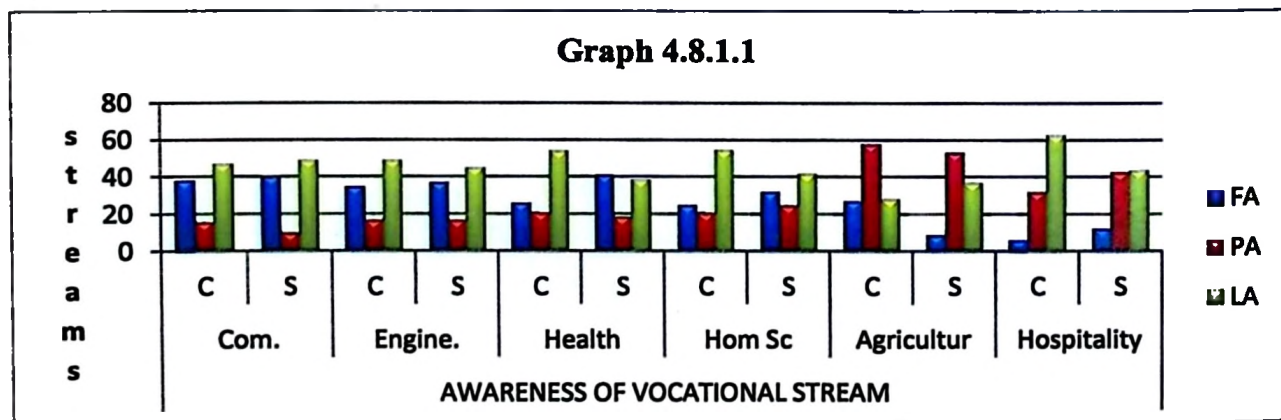
4.8.1 First dimension is Awareness of vocational education:- it comprises of following responses shows by table given below:-

Table 4.8.1.1 shows level of awareness of Vocational stream among Students with commerce and science stream.

TABLE 4.8.1.1

| Sno | RESPONSE | AWARENESS OF VOCATIONAL STREAM | | | | | | | | | | | |
|-----|----------|--------------------------------|----|-------------|----|--------|----|-------------|----|-------------|----|-------------|----|
| | | Commerce | | Engineering | | Health | | Homescience | | Agriculture | | Hospitality | |
| | Streams | C | S | C | S | C | S | C | S | C | S | C | S |
| | FA | 38 | 40 | 35 | 37 | 26 | 41 | 25 | 32 | 27 | 9 | 6 | 12 |
| | PA | 16 | 10 | 17 | 17 | 21 | 19 | 21 | 25 | 58 | 53 | 32 | 43 |
| | LA | 47 | 49 | 49 | 45 | 54 | 39 | 55 | 42 | 28 | 37 | 63 | 44 |

Graph 4.8.1.1



INTERPRETATION

After analysing the data of commerce and science streams students researcher reached at following conclusions:-

➤ 38 students in commerce and 40 students in science shown full awareness of choices given for Commerce as vocational streams.

- 58 students in commerce and 53 students in science shown partial awareness of Agriculture vocational streams.
- 6 students in commerce and 12 students in science shown low awareness of choices given for Hospitality & tourism vocational streams.
- 27 students in commerce and 9 students in science shown full awareness of agriculture vocations.
- 6 students in commerce and 12 students in science shown full awareness for hospitality & tourism vocations.

On the whole,

We can say on the basis of data that in agriculture vocations compared with science stream students, commerce stream students have shown full awareness of choices given for particular stream.

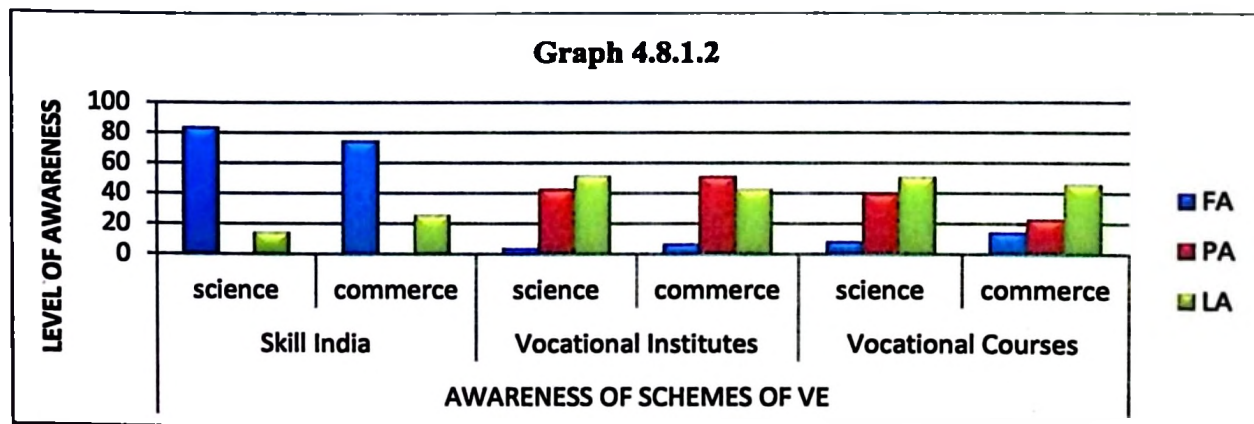
- More no. of Students of both streams shown mostly low awareness for Commerce, Engineering, Health, Home science Vocational Streams respectively.
- As per given data Commerce and science streams students have shown similar pattern of level of awareness in the given vocational streams.

Thus, it can be concluded that streams of students of senior secondary schools of Bhopal does not affect the level of awareness on vocational streams.

Table 4.8.1.2 shown level of awareness of Vocational Schemes among Students with science and commerce streams

TABLE 4.8.1.2

| SNO | RESPONSE | AWARENESS OF SCHEMES OF Vocational Education | | | | | |
|-----|----------|--|----------|-----------------------|----------|--------------------|----------|
| | | Skill India | | Vocational Institutes | | Vocational Courses | |
| | STREAMS | science | commerce | science | commerce | science | commerce |
| | FA | 84 | 75 | 4 | 7 | 8 | 14 |
| | PA | 0 | 0 | 43 | 51 | 40 | 23 |
| | LA | 15 | 26 | 52 | 43 | 51 | 46 |



INTERPRETATION

After analysing the data of table 4.8.1.2 which shown responses of science and commerce respondents the researcher reached at following conclusion:-

- 84 students in science streams and 75 students in commerce streams have shown full awareness of Skill India scheme initiated by PM Narendra Modi.
- 43 students in science streams and 51 students in commerce streams shown partial awareness.
- 52 students in science streams and 43 students in commerce streams show low awareness. This can be said that students either have low awareness or partial awareness of vocational institutes of Bhopal.

Students with science and commerce streams of senior secondary schools of Bhopal

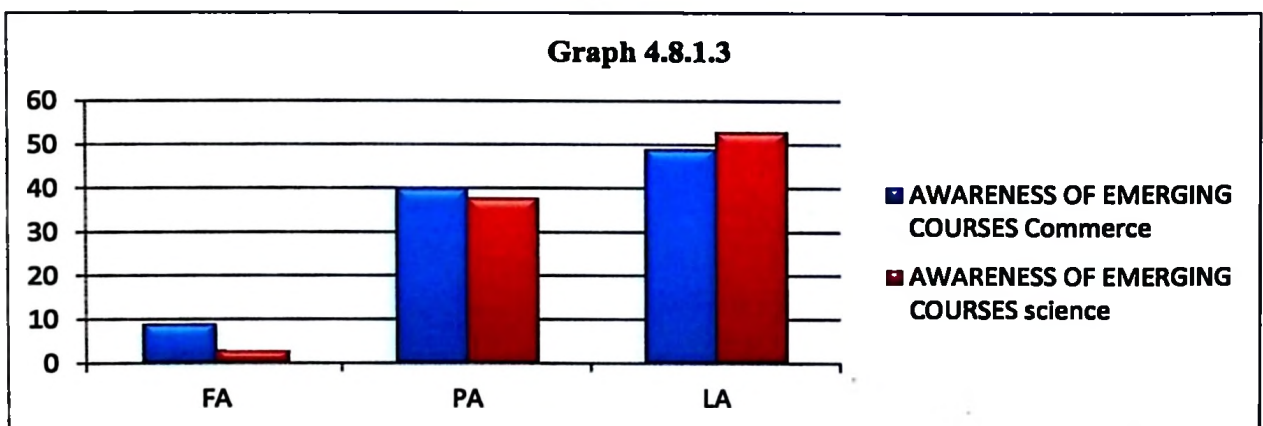
- Either have low information or partial information of choices given for vocational courses initiated by govt. Of India under the scheme of vocational education.
- Have not shown well awareness or full awareness of vocational institutes of Bhopal and vocational courses initiated by Govt. of India.

Thus, it can be concluded that there is need to promote full awareness of schemes related to vocational institutes of Bhopal and various schemes for vocational courses among students with different streams with more focus on science streams of senior secondary schools of Bhopal.

Table 4.8.1.3 shown level of awareness of emerging courses among Students with commerce and science streams.

TABLE 4.8.1.3

| Sno | RESPONSES | AWARENESS OF EMERGING COURSES | |
|-----|-----------|-------------------------------|---------|
| | | COMMERCE | SCIENCE |
| 3 | | | |
| | FA | 9 | 3 |
| | PA | 40 | 38 |
| | LA | 49 | 53 |



INTERPRETATION

After analysing the data of table 4.8.1.3 which shown responses of science and commerce respondents the researcher reached at following conclusion:-

- 49 Students in science and 53 students in commerce streams of senior secondary schools of Bhopal shown low awareness of emerging course introduces by CBSE.

This can be said that commerce and science streams students data shown almost same pattern for low awareness and partial awareness of choices given for emerging courses.

- Students of both streams have lack of full awareness of emerging courses introduced by CBSE in vocational education.

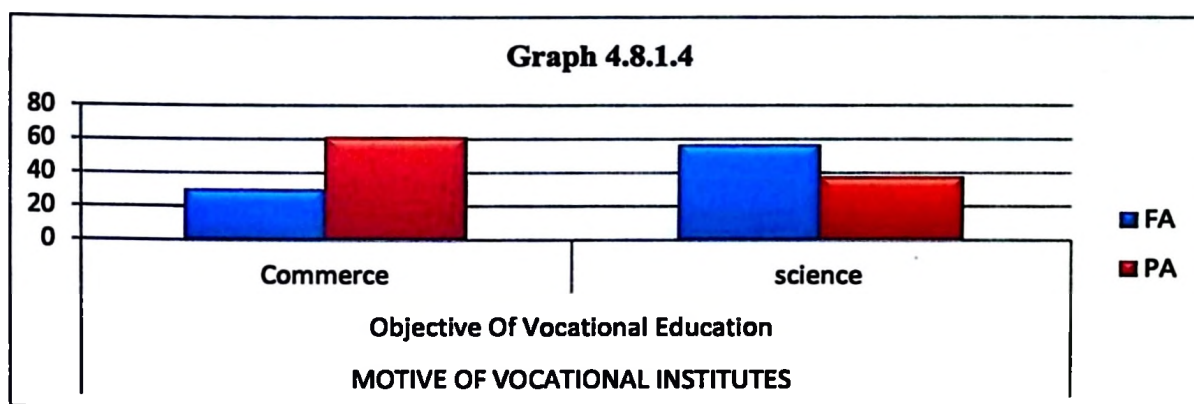
➤ Compared with science streams students, commerce streams students data shown good partial awareness of choices given for emerging courses introduced by CBSE.

Thus, it can be concluded that there is need to promote awareness of emerging courses introduced by CBSE among students with different streams, more focus on science streams students of senior secondary schools of Bhopal.

Table 4.8.1.4 shown level of awareness of motive of Vocational institutes among Students with commerce and science streams.

TABLE 4.8.1.4

| SNO | RESPONSE | MOTIVE OF VOCATIONAL INSTITUTES | |
|-----|----------|-----------------------------------|---------|
| | | Commerce | science |
| | | Objective Of Vocational Education | |
| | | Commerce | science |
| | FA | 30 | 57 |
| | PA | 61 | 38 |
| | LA | 10 | 4 |



INTERPRETATION

After analysing the data of table 4.8.1.4 which shown responses of science and commerce respondents the researcher reached at following conclusion:

- 61 students in commerce and 38 students in science streams respectively have shown Partial awareness of objective of vocational institution.
- 30 students in commerce and 57 students in science streams respectively have shown Partial awareness of objective of vocational institution.
- This can be said that science stream students of senior secondary schools of Bhopal have shown well awareness of vocational aims of institution as compared with commerce stream students.

OR

- Compared with science stream students, more no. Of commerce stream students have shown good partial awareness of motive of vocational institute.

Thus, it can be concluded that students with science and commerce streams of senior secondary schools of Bhopal have well awareness of motive of vocational education.

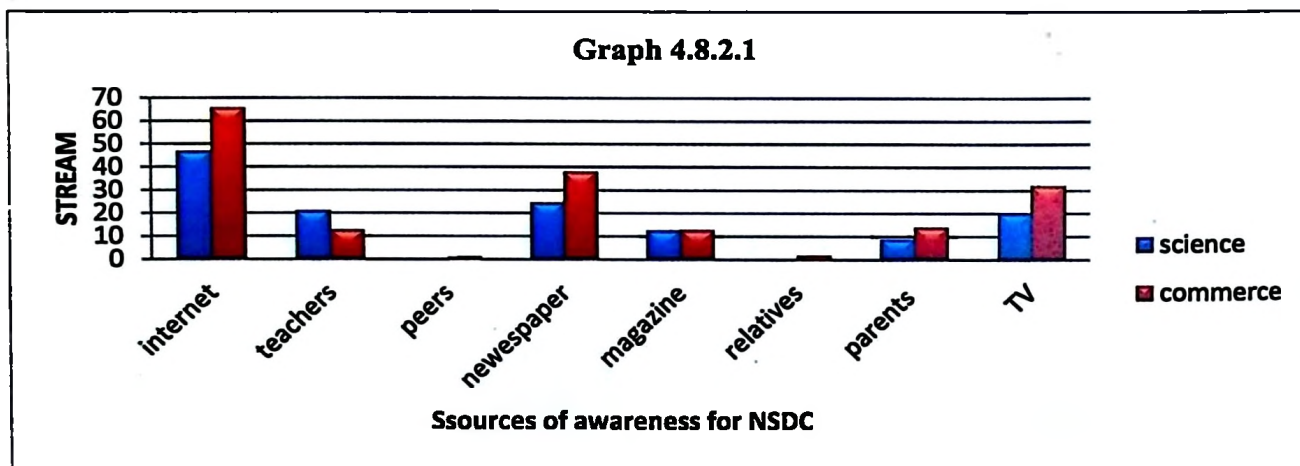
4.8.2 SECOND DIMENSION – SOURCES OF INFORMATION:-

The table 4.8.2.1 given below depicts the responses of science and commerce stream students related to awareness of sources of information:-

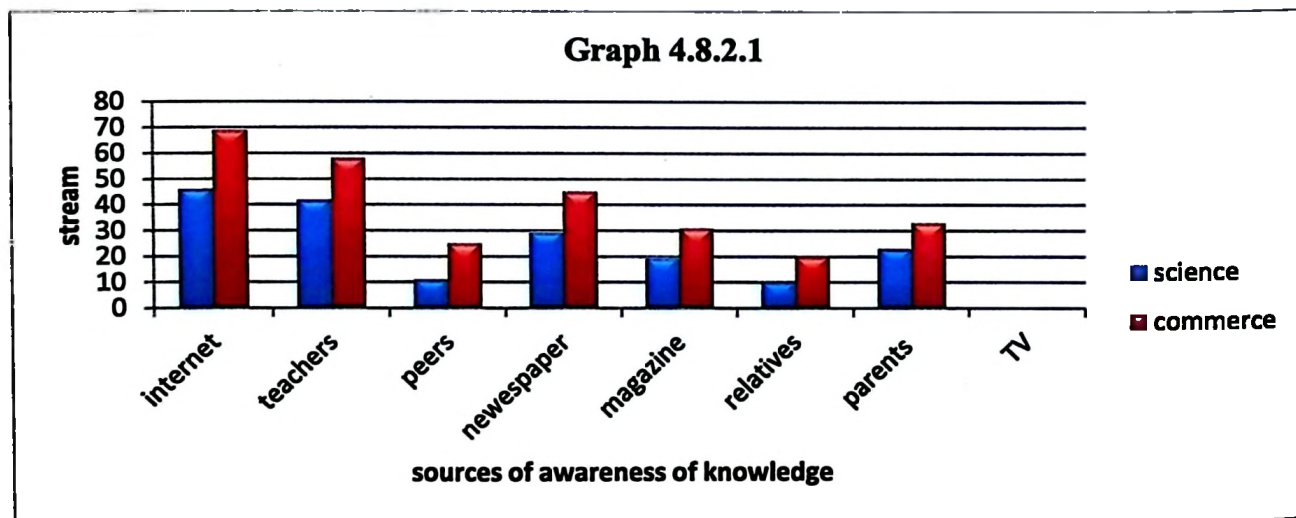
TABLE 4.8.2.1

| Sno | Sources Of Information | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------|------------------------|----|----|----|----|----|----|----|----|
| Science | | | | | | | | | |
| 1 | KNOWLEDGE | 46 | 42 | 11 | 29 | 19 | 10 | 23 | 0 |
| 2 | NSDC | 47 | 21 | 0 | 25 | 13 | 0 | 9 | 20 |
| Commerce | | | | | | | | | |
| 1 | KNOWLEDGE | 69 | 58 | 25 | 45 | 31 | 20 | 33 | 0 |
| 2 | NSDC | 66 | 13 | 1 | 38 | 13 | 2 | 14 | 32 |

Graph 4.8.2.1



Graph 4.8.2.1



INTERPRETATION

After analysing the data of table 4.8.1.4 which shown responses of science and commerce streams respondents the researcher reached at following conclusion:-

- 46 students in science and 69 students in commerce streams respectively selected Internet to get the knowledge about vocational education.

- 47 students in science and 66 students in commerce streams respectively selected Internet to get the awareness of NSDC vocational schemes.

This can be said that internet is the source use by students of both streams to get awareness of Vocational Education.

- As per above data Second highest option to get awareness of knowledge and NSDC about Vocational Education are teachers and newspaper among students with different streams of senior secondary schools.
- Compared with 20 science students, 32commerce students have selected TV as their source of awareness of NSDC.

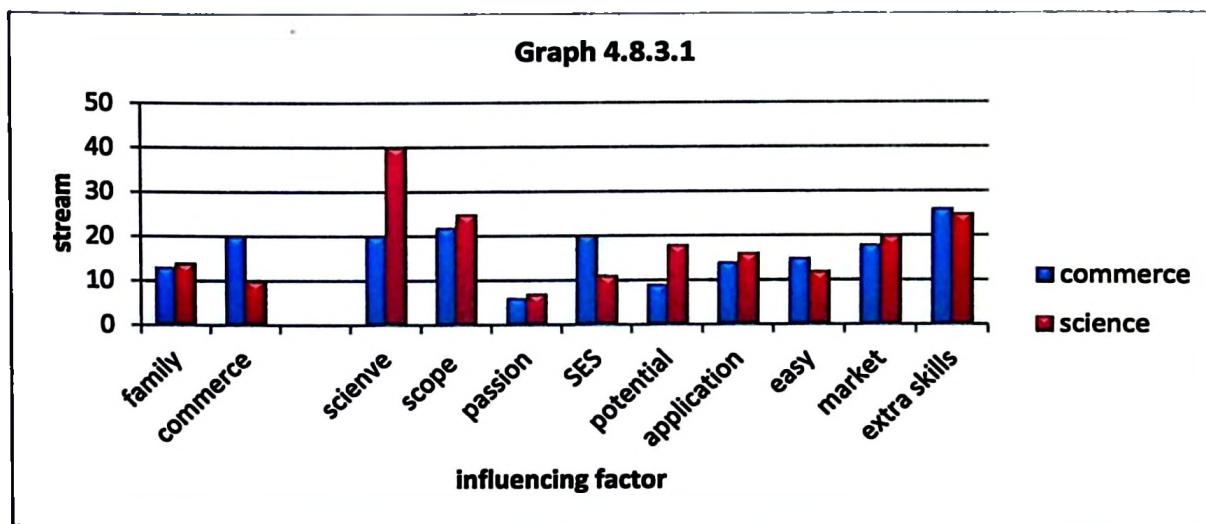
Thus, it can be concluded that newspaper, internet, teachers, TV are some sources which well-known sources among gender of senior secondary schools of Bhopal.

4.8.3 THIRD DIMENSION- REASON OF SELECTION OF VOCATIONAL COURSES:-

The table 4.8.1 given below shown the responses of the students in commerce and science streams related to the influencing factor in the selection of vocational courses.

TABLE 4.8.3.1

| Sno | Reason of selection | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-----|---------------------|--------------------|----|----|----|---|----|----|----|----|----|----|
| | | Influencing factor | | | | | | | | | | |
| 1 | commerce | 13 | 20 | 20 | 22 | 6 | 20 | 9 | 14 | 15 | 18 | 26 |
| 2 | science | 14 | 10 | 40 | 25 | 7 | 11 | 18 | 16 | 12 | 20 | 25 |



INTERPRETATION

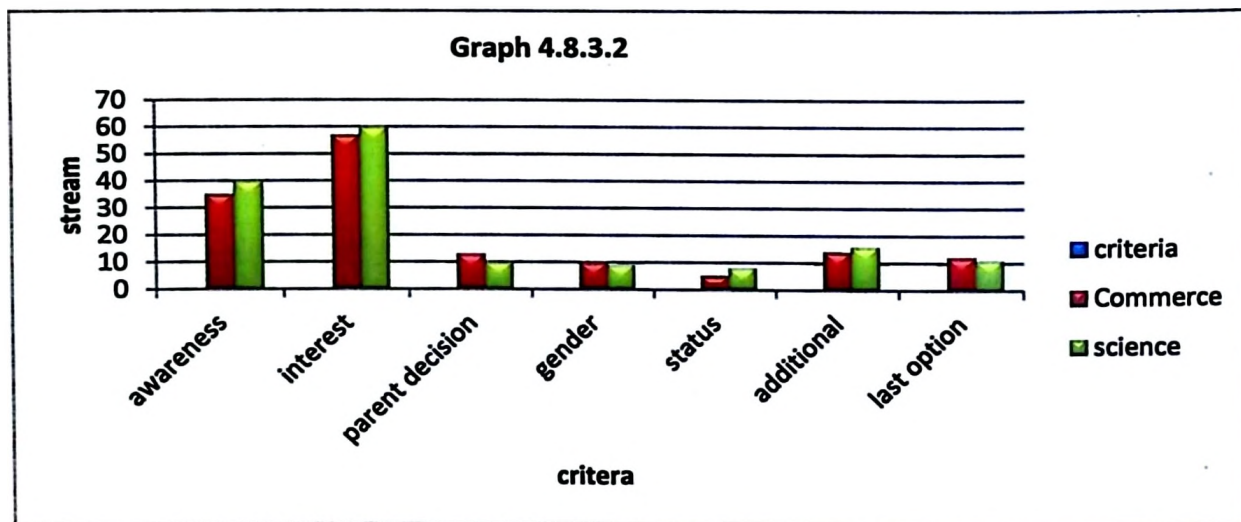
- 20 students in commerce and 40 students in science selected their streams as a influencing factor for the selection of any vocational courses,
- 22 students in commerce and 25 students in science streams respectively selected a choice. 4 as their influencing factor for the selection of any vocational courses which means students of both streams given preferences to scope of vocational course in future.
- 26 students in commerce and 25 in science streams respectively given preference to choice no.11 i.e. extra qualification as a influencing factor for the selection of any vocational courses.

Thus it can be concluded that streams is a most effective influencing factor for the selection of vocational courses among students of different streams of senior secondary schools of Bhopal.

The table 4.9.1 given below shown the responses of the students in commerce and science streams related to the criteria to select the vocational course.

TABLE 4.8.3.2

| Sno | Reason of selection course | A | B | C | D | E | F | G |
|-----|----------------------------|----------|----|----|----|---|----|----|
| | | criteria | | | | | | |
| 1 | Commerce | 35 | 57 | 13 | 10 | 5 | 14 | 12 |
| 2 | science | 40 | 60 | 10 | 9 | 8 | 16 | 11 |



INTERPRETATION

- 57 students in commerce and 60 students in science streams respectively selected 'interest' as there criteria for selection of any vocational courses.
- Very few no. of students selected a status of vocational education as criteria for the selection of any vocational courses it means students are aware of vocational education.

On the whole this can be concluded that interest is the reason of selection of any vocational course among students with different streams of senior secondary schools of Bhopal.

4.9 OBJECTIVE 4

- To Study the Attitude of vocational education among the students of senior secondary schools of Bhopal.

To measure the given objectives related to attitude, the researcher constructed a Rating scale which consist of following dimensions:-



- The researcher analysed and arranged the data sequentially after this ,the responses are calculated in terms of the three point scale with particular score for each positive and negative statements i.e.

- Positive statement negative statement
- AGREE- 2 AGREE -0
- DISAGREE-0 DISAGREE-2
- NEUTRAL-1 NEUTRAL-1

- The following table 4.9.1 given below justify the first objective related to the Attitude of vocational education.

TABLE 4.9.1

| Sno | RESPONSES | STATUS OF VOCATIONAL EDUCATION | | | | | | | |
|-----|-----------|--|-----|-----|-----|-----|-----|-----|-----|
| | | -S1 | -S2 | S3 | -S4 | S5 | S6 | S7 | S8 |
| 1 | AGREE | 100 | 70 | 98 | 55 | 63 | 137 | 119 | 116 |
| | DISAGREE | 68 | 81 | 68 | 107 | 83 | 39 | 52 | 43 |
| | NEUTRAL | 32 | 49 | 34 | 38 | 54 | 24 | 29 | 41 |
| 2 | RESPONSES | ECONOMIC OPPORTUNITIES OF VOCATIONAL EDUCATION | | | | | | | |
| | | S1 | S2 | S3 | S4 | S5 | S6 | | |
| | AGREE | 25 | 33 | 90 | 50 | 100 | 111 | | |
| | DISAGREE | 145 | 134 | 36 | 104 | 64 | 39 | | |
| | NEUTRAL | 30 | 33 | 74 | 50 | 36 | 50 | | |
| 3 | RESPONSES | ENROLLMENT IN VOCATIONAL EDUCATION | | | | | | | |
| | | S1 | S2 | S3 | S4 | | | | |
| | AGREE | 110 | 80 | 120 | 100 | | | | |
| | | | | | | | | | |

| | | | | | | | | | |
|---|-----------|---|-----|-----|-----|-----|-----|-----|-----|
| | DISAGREE | 60 | 59 | 36 | 61 | | | | |
| | NEUTRAL | 30 | 61 | 44 | 39 | | | | |
| 4 | RESPONSES | CHALLENGES IN VOCATIONAL EDUCATION | | | | | | | |
| | | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 |
| | AGREE | 156 | 106 | 97 | 128 | 80 | 116 | 119 | 137 |
| | DISAGREE | 26 | 46 | 47 | 37 | 70 | 47 | 43 | 30 |
| | NEUTRAL | 18 | 48 | 56 | 35 | 50 | 37 | 38 | 33 |
| 5 | RESPONSES | SOCIAL PERSPECTIVES ON VOCATIONAL EDUCATION | | | | | | | |
| | | S1 | S2 | S3 | S4 | -S5 | -S6 | S7 | |
| | AGREE | 141 | 102 | 126 | 134 | 62 | 59 | 129 | |
| | DISAGREE | 38 | 61 | 31 | 34 | 124 | 114 | 27 | |
| | NEUTRAL | 21 | 37 | 43 | 32 | 14 | 27 | 44 | |

4.10 OBJECTIVE 5

- To Study the differences in Attitude of vocational education among students of senior secondary schools of Bhopal due to gender.

As we see in our society Gender is considering as a barrier for education and selection of courses for higher studies so here researcher selected Gender the demographic variable for their study.

To measure the objective researcher testing the null hypothesis i.e.

4.10.1 HYPOTHESIS (H₀) :-

- There will be no significant differences in attitude of vocational education due to boys and girls student of senior secondary schools of Bhopal.

To test the hypothesis the researcher analyses and calculated the responses by adding the responses of particular respondents in each statement for every dimensions given in rating scale.

The following table 4.10.2 shows the score of males of senior secondary schools of Bhopal to measure the attitude of Vocational Education.

TABLE 4.10.2

| Sno | Gender | STATUS OF VOCATIONAL EDUCATION | | | | | | | |
|-----|-----------|--|-----|-----|-----|-----|-----|-----|-----|
| 1 | MALE | -S1 | -S2 | S3 | -S4 | S5 | S6 | S7 | S8 |
| | | 88 | 111 | 128 | 127 | 102 | 150 | 135 | 141 |
| 2 | RESPONSES | ECONOMIC OPPORTUNITIES OF VOCATIONAL EDUCATION | | | | | | | |
| | MALE | S1 | S2 | S3 | S4 | S5 | S6 | | |
| | | 154 | 149 | 128 | 145 | 110 | 123 | | |
| 3 | RESPONSES | ENROLLMENT IN VOCATIONAL EDUCATION | | | | | | | |
| | MALE | S1 | S2 | S3 | S4 | | | | |
| | | 123 | 109 | 148 | 114 | | | | |
| 4 | RESPONSES | CHALLENGES IN VOCATIONAL EDUCATION | | | | | | | |
| | MALE | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 |
| | | 170 | 133 | 131 | 141 | 103 | 149 | 129 | 149 |
| 5 | RESPONSES | SOCIAL PERSPECTIVES ON VOCATIONAL EDUCATION | | | | | | | |
| | male | S1 | S2 | S3 | S4 | -S5 | -S6 | S7 | |
| | | 149 | 126 | 145 | 142 | 125 | 125 | 153 | |

The following table 4.10.3 shows the score of females of senior secondary school of Bhopal to measure the attitude of vocational education:-

TABLE 4.10.3

| Sno | Gender | STATUS OF VOCATIONAL EDUCATION | | | | | | | |
|-----|-----------|--|-----|-----|-----|-----|-----|-----|-----|
| 1 | Responses | -S1 | -S2 | S3 | -S4 | S5 | S6 | S7 | S8 |
| | female | 80 | 100 | 101 | 124 | 78 | 148 | 132 | 132 |
| 2 | RESPONSES | ECONOMIC OPPORTUNITIES OF VOCATIONAL EDUCATION | | | | | | | |
| | female | S1 | S2 | S3 | S4 | S5 | S6 | | |
| | | 166 | 152 | 129 | 109 | 131 | 136 | | |
| 3 | RESPONSES | ENROLLMENT IN VOCATIONAL EDUCATION | | | | | | | |
| | female | S1 | S2 | S3 | S4 | | | | |
| | | 127 | 115 | 138 | 126 | | | | |
| 4 | RESPONSES | CHALLENGES IN VOCATIONAL EDUCATION | | | | | | | |
| | female | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 |
| | | 136 | 127 | 119 | 150 | 106 | 118 | 147 | 152 |
| 5 | RESPONSES | SOCIAL PERSPECTIVES ON VOCATIONAL EDUCATION | | | | | | | |
| | female | S1 | S2 | S3 | S4 | -S5 | -S6 | S7 | |
| | | 155 | 115 | 151 | 156 | 136 | 130 | 150 | |

To testing the null hypothesis researcher applied T-TEST to know the differences in attitude of vocational education due to boys and girls of senior secondary schools of Bhopal. The result of T-TEST is displayed in the table given below:-

TABLE 4.10.4

Comparison of mean score of males and females

| Demographic Variable | Sample Size N | Mean | Standard Deviation | T-Value |
|----------------------|---------------|-------|--------------------|---------|
| Males | 99 | 43.69 | 8.35 | 0.78 |
| Females | 101 | 43.98 | 7.15 | |

INTERPRETATION

From the calculated result this can be concluded that:-

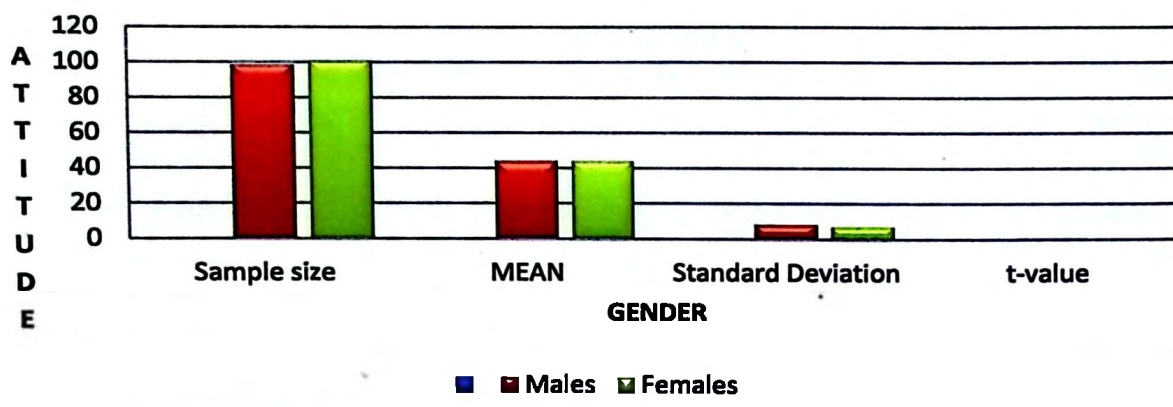
$$T_{\text{calculated}}(h_0) < T_{\text{tabular}}(h_0)$$

$$T_{\text{calculated}}=0.78 \text{ and } T_{\text{tabular}}=1.972 \text{ at } 198 \text{ degree of freedom.}$$

$0.78 < 1.972$ Thus, null hypothesis is accepted.

Table 4.10.4 shows that the calculated t-value 0.78 at 0.05 level with 198 degree of freedom, so it has no significant. Thus null hypothesis stated that there is no significant difference between attitude of vocational education among males and females of senior secondary schools of Bhopal.

Graph 4.10.4



4.11 OBJECTIVE 6

➤ To Study the differences in Attitude of vocational education among students of senior secondary schools of Bhopal due to Streams.

As we see in our society career decision is influenced by stream selected by students in higher secondary stage of schooling so keeping the importance of stream among senior secondary students here researcher selected stream as the demographic variable for their study.

To justify the objective researcher formulate the following null hypothesis:-

4.11.1 HYPOTHESIS (H₀) :-

➤ There will be no significant differences in attitude of vocational education due to commerce and science streams of senior secondary schools of Bhopal.

To test the hypothesis the researcher analyses and calculated the responses by adding the responses of particular respondents in each statement for every dimensions given in rating scale.

The table 4.11.2 given below shows the score of commerce stream of senior secondary schools of Bhopal towards vocational education.

TABLE 4.11.2

| Sno | Stream | STATUS OF VOCATIONAL EDUCATION | | | | | | | |
|-----|-----------|--|-----|-----|-----|-----|-----|-----|-----|
| 1 | Commerce | -S1 | -S2 | S3 | -S4 | S5 | S6 | S7 | S8 |
| | | 66 | 91 | 107 | 122 | 103 | 142 | 128 | 135 |
| 2 | RESPONSES | ECONOMIC OPPORTUNITIES OF VOCATIONAL EDUCATION | | | | | | | |
| | commerce | S1 | S2 | S3 | S4 | S5 | S6 | | |
| | | 158 | 141 | 126 | 127 | 129 | 131 | | |
| 3 | RESPONSES | ENROLLMENT IN VOCATIONAL EDUCATION | | | | | | | |
| | commerce | S1 | S2 | S3 | S4 | | | | |
| | | 116 | 108 | 138 | 115 | | | | |
| 4 | RESPONSES | CHALLENGES IN VOCATIONAL EDUCATION | | | | | | | |
| | commerce | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 |
| | | 165 | 128 | 126 | 136 | 113 | 128 | 136 | 141 |
| 5 | RESPONSES | SOCIAL PERSPECTIVES ON VOCATIONAL EDUCATION | | | | | | | |
| | commerce | S1 | S2 | S3 | S4 | -S5 | -S6 | S7 | |
| | | 145 | 108 | 135 | 147 | 120 | 118 | 152 | |

The table 4.11.3 given below shows the score of science stream of senior secondary schools of Bhopal towards vocational education.

TABLE 4.11.3

| Sno. | STREAM | STATUS OF VOCATIONAL EDUCATION | | | | | | | |
|------|-----------|--|-----|-----|-----|-----|-----|-----|-----|
| 1 | SCIENCE | -S1 | -S2 | S3 | -S4 | S5 | S6 | S7 | S8 |
| | | 102 | 120 | 122 | 129 | 77 | 156 | 139 | 138 |
| 2 | RESPONSES | ECONOMIC OPPORTUNITIES OF VOCATIONAL EDUCATION | | | | | | | |
| | Science | S1 | S2 | S3 | S4 | S5 | S6 | | |
| | | 162 | 160 | 131 | 127 | 112 | 128 | | |
| 3 | RESPONSES | ENROLLMENT IN VOCATIONAL EDUCATION | | | | | | | |
| | Science | S1 | S2 | S3 | S4 | | | | |
| | | 134 | 116 | 148 | 145 | | | | |
| 4 | RESPONSES | CHALLENGES IN VOCATIONAL EDUCATION | | | | | | | |
| | Science | S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 |
| | | 168 | 132 | 124 | 155 | 96 | 139 | 140 | 160 |
| 5 | RESPONSES | SOCIAL PERSPECTIVES ON VOCATIONAL EDUCATION | | | | | | | |
| | science | S1 | S2 | S3 | S4 | -S5 | -S6 | S7 | |
| | | 157 | 131 | 155 | 152 | 141 | 136 | 148 | |

Comparison of mean score of commerce and science students

TABLE 4.11.4

| Demographic variable | Sample size N | MEAN | Standard Deviation STDEV | t-value |
|----------------------|------------------|-------|--------------------------------|---------|
| Commerce | 101 | 45.69 | 7.99 | 0.00589 |
| science | 99 | 42.98 | 7.06 | |

I

INTERPRETATION

From the calculated result this can be concluded that:-

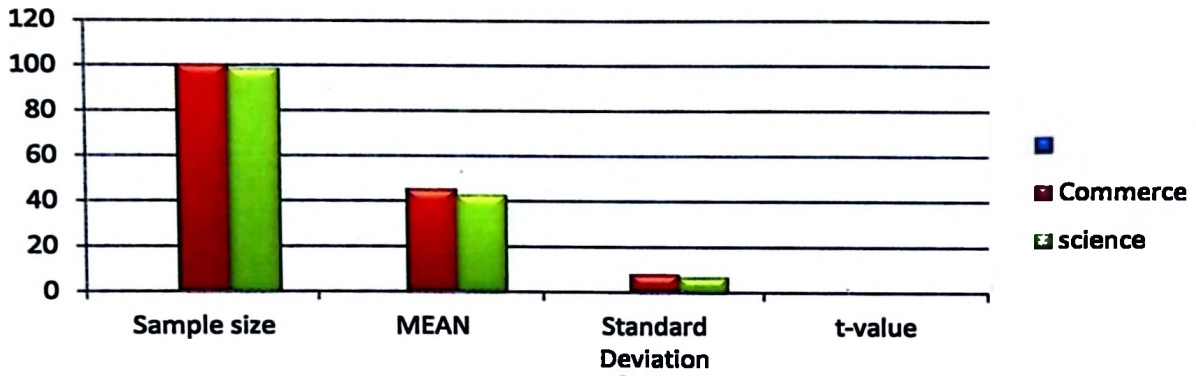
$$T_{\text{calculated}}(h_0) < T_{\text{tabular}}(h_0)$$

$$T_{\text{calculated}}=0.00589 \text{ and } T_{\text{tabular}}=1.972 \text{ at } 198 \text{ degree of freedom.}$$

0.00589 < 1.972 Thus, null hypothesis is accepted.

Table 4.11.4 shows that the calculated t-value 0.00589 at 0.05 level with 198 degree of freedom, so it has no significant. Thus null hypothesis stated that there is no significant difference between attitude of vocational education among senior secondary schools of Bhopal due to streams.

Graph 4.11.5



| t-Test: Two-Sample Assuming Unequal Variances | | |
|---|--------------|-------------|
| | commerce | science |
| Mean | 41.42574257 | 45.15151515 |
| Variance | 63.94693069 | 49.90538033 |
| Observations | 101 | 99 |
| Hypothesized Mean Difference | 0 | |
| df | 196 | |
| t Stat | -3.493748804 | |
| P(T<=t) one-tail | 0.000294368 | |
| t Critical one-tail | 1.652665059 | |
| P(T<=t) two-tail | 0.000588737 | |
| t Critical two-tail | 1.972141222 | |

| t-Test: Two-Sample Assuming Unequal Variances | | |
|---|-------------|-------------|
| | MALE | FEMALE |
| Mean | 43.34343434 | 43.11881188 |
| Variance | 52.63595135 | 69.66574257 |
| Observations | 99 | 101 |
| Hypothesized Mean Difference | 0 | |
| df | 195 | |
| t Stat | 0.203244034 | |
| P(T<=t) one-tail | 0.419578111 | |
| t Critical one-tail | 1.65270531 | |
| P(T<=t) two-tail | 0.839156222 | |
| t Critical two-tail | 1.972204051 | |