CHAPTER 3

METHODOLOGY

3.0 INTRODUCTION

This chapter deals with the methodology adopted by the investigator. It deals with the plan, process and procedure adopted by the investigator to achieve the objectives during the entire research endeavor. This chapter gives idea about how the whole research study was conducted. It gives idea regarding the sampling procedure adopted by the investigator, design and development of tools for the study with respect to various objectives, method used for the collection of data and data analysis done for interpretation of the results.

The purpose of the present study on "A Study of Professional Commitment of Secondary School Teachers of Vadodara District" is to prepare and standardize tools for professional commitment and job satisfaction, to study professional commitment of secondary school teachers with respect to gender, teaching experience, educational qualification, medium of instruction, category, area and job satisfaction.

The data collected from secondary school teachers during the study was in quantitative form. The investigator adopted survey method for collecting the data. The whole approach for conducting the study has been systematic and is described in this chapter in precise manner.

3.1 DESIGN OF THE STUDY

The first step in the design of the study was to decide the most appropriate technique for the collection of data. Preliminary information for this was collected from the DEO and various teachers of secondary schools of Vadodara District. After a great deal of thought it was decided to adopt the survey method for research. There are two types of survey: normative survey and descriptive survey.

Here descriptive survey was more appropriate as it is intended to study the typical conditions at contemporary times. Descriptive method of survey is also concerned with the analysis of the relationships between non manipulated variables and the

development of generalizations, extending its conclusions beyond the sample observed. The type of information procured by the survey method gives in depth idea of the present scenario and present trends. It also suggests the source of future developments. It contributes to advancement of knowledge because it affords penetrating inside into the nature of what one is dealing. In the present study survey was conducted to study professional commitment among secondary school teachers of Vadodara district with respect to gender, teaching experience, educational qualification, medium of instruction, category, area and job satisfaction.

3.2   POPULATION

Vadodara District is in the eastern part of Gujarat State located in western India. It covers an area of 7,794 sq. km. It is bounded by Panchmahal and Dahod districts to the north, Kheda and Anand kistricts to the west, Narmada and Bharuch districts to the south and the state of Madhya Pradesh to the east. It is divided into twelve talukas. The population for the study comprised of all secondary schools run by Gujarat State Secondary and Higher Secondary Education Board, Gandhinagar.

TABLE: 3.1

TOTAL SCHOOLS IN VADODARA DISTRICT

Group No. (SVS)	SECONDARY SECTION		HIGHER SECONDARY SECTION			
	Grant In Aid	Non Grant In Aid	Grant In Aid		Non Grant In Aid	
			Commerce Stream	Science Stream	Commerce Stream	Science Stream
1	30	09	09	01	08	---
2	42	06	11	04	---	---
3	45	06	07	02	03	---
4	39	02	17	02	01	---
5	12	17	28	08	04	01
6	07	21	19	10	09	09
7	13	24	15	07	02	---
8	06	15	19	19	10	06
Total	194	100	125	53	37	16
Total	525					

(Source: Sampark Setu of District Education Office – DEO, Vadodara)

The population for the study comprised of 312 secondary schools of Gujarati Medium and 65 secondary schools of English Medium. So the population constituted of all the teachers serving in these 377 Secondary Schools in all. So all the teachers serving in these 377 schools of Vadodara District comprised the population for the study. Approximately, 2262 teachers formed the population.

A detail of SVS wise total schools of Vadodara District is shown in the Table 3.2 below:

TABLE : 3.2

DETAILS OF SVS AND TOTAL SCHOOLS

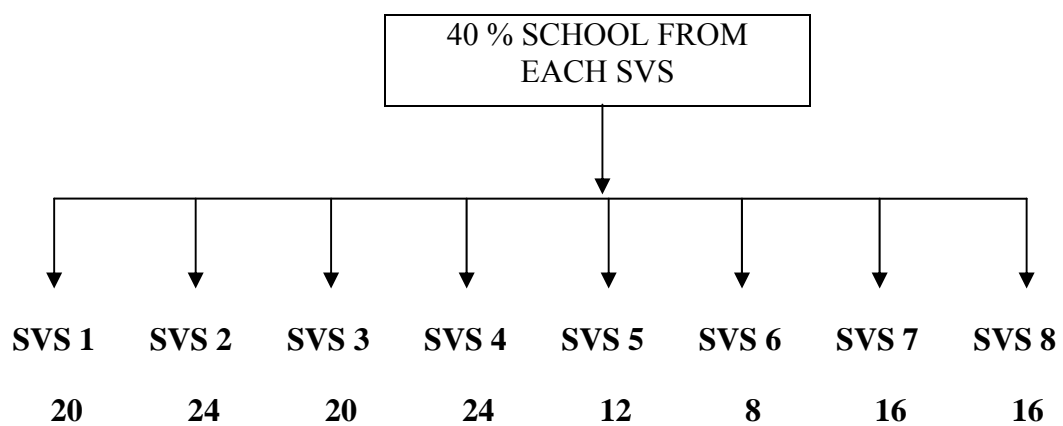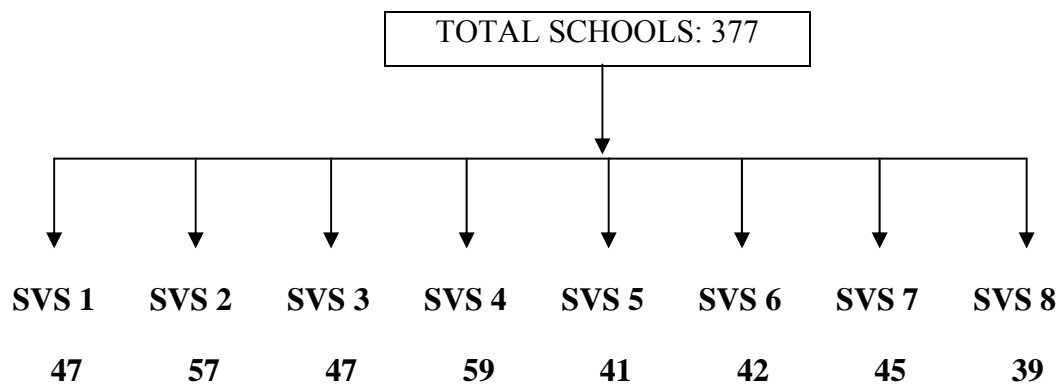| SR. NO.	SVS NO.	NAME OF SVS	TOTAL NO. OF GUJARATI MEDIUM SCHOOLS	TOTAL NO. OF ENGLISH MEDIUM SCHOOLS
01	SVS 1	Dr. Vikram Sarabhai Shala Vikas Sankul	45	02
02	SVS 2	Dayaram Shala Vikas Sankul	54	03
03	SVS 3	Premanand Shala Vikas Sankul	46	01
04	SVS 4	Dr. Ambedkar Shala Vikas Sankul	57	02
05	SVS 5	Maharshi Arvind Shala Vikas Sankul	34	07
06	SVS 7	Dr. C V Raman Shala Vikas Sankul	21	21
07	SVS 7	Dr. Madhubhai Buch Shala Vikas Sankul	32	13
08	SVS 8	Sir Sayajirao Gaekwad Shala Vikas Sankul	23	16
TOTAL			312	65
TOTAL NUMBER OF GUJARATI AND ENGLISH MEDIUM SCHOOLS			377	

(Source: Sampark Setu of District Education Office – DEO, Vadodara)

3.3   SELECTION OF SAMPLE FOR THE STUDY

The sample for the present study was drawn by multi stage sampling technique. The sample consisted of in – service secondary school teachers. All the schools of the sample were grant in aid schools and managed by Gujarat Secondary and Higher Secondary Education Board, Gandhinagar. Also, the researcher has taken care that equal number of male and female candidates serving in rural as well as urban schools were selected. This helped the researcher to effectively study the correlates and motives for joining teaching profession.

The multi stage sampling was done in the following manner:-

a) **Stage I** : All 377 schools located in Vadodara District were divided in eight Shala Vikas Sankul (SVS). In the first stage, all eight SVS were considered by the researcher.

b) **Stage II**: In this stage, forty percent of schools were selected randomly by the researcher from each SVS.

c) **Stage III**: All the teachers serving in these randomly selected schools constituted the sample. Thus, it is cluster sampling in this stage.

	TOTAL SCHOOLS: 377						
SVS 1	SVS 2	SVS 3	SVS 4	SVS 5	SVS 6	SVS 7	SVS 8
47	57	47	59	41	42	45	39

	40 % SCHOOL FROM EACH SVS						
SVS 1	SVS 2	SVS 3	SVS 4	SVS 5	SVS 6	SVS 7	SVS 8
20	24	20	24	12	8	16	16

Since the present investigation is a descriptive survey, more sample is required in that case. So a larger sample was selected by the investigator.

The below given Table : 3.3 describes the details of SVS along with number of schools selected from each SVS.

TABLE : 3.3

DETAILS OF SVS AND TOTAL NUMBER OF SCHOOLS SELECTED

SR. NO.	SVS NO.	NAME OF SVS	NO. OF SCHOOLS SELECTED
01	SVS 1	Dr. Vikram Sarabhai Shala Vikas Sankul	20
02	SVS 2	Dayaram Shala Vikas Sankul	24
03	SVS 3	Premanand Shala Vikas Sankul	20
04	SVS 4	Dr. Ambedkar Shala Vikas Sankul	24
05	SVS 5	Maharshi Arvind Shala Vikas Sankul	12
06	SVS 7	Dr. C V Raman Shala Vikas Sankul	8
07	SVS 7	Dr. Madhubhai Buch Shala Vikas Sankul	16
08	SVS 8	Sir Sayajirao Gaekwad Shala Vikas Sankul	16
		TOTAL	**140**

All the teachers serving in these 140 grant in aid schools of Vadodara District formed the sample for the study. Thus sample consisted of 1262 teachers.

The size of the sample with respect to various variables like gender of teachers, category of teachers, area / location of school, educational qualification of teachers, medium of teaching in school and teaching experience of teachers is shown below.

3.3.1   SAMPLE SIZE WITH RESPECT TO GENDER:

TABLE : 3.4

SAMPLE SIZE WITH RESPECT TO GENDER

GENDER	PERCENT	FREQUENCY
MALE	68.1	860
FEMALE	31.9	402
TOTAL	**100**	**1262**

The above Table : 3.4 shows sample size with respect to gender. From the table it can be seen that the total sample consisted of 1262 teachers serving in secondary grant in aid schools of which 860 (68.1 percent) were males and 402 (31.9 percent) were females. This is depicted in below given pie graph also.
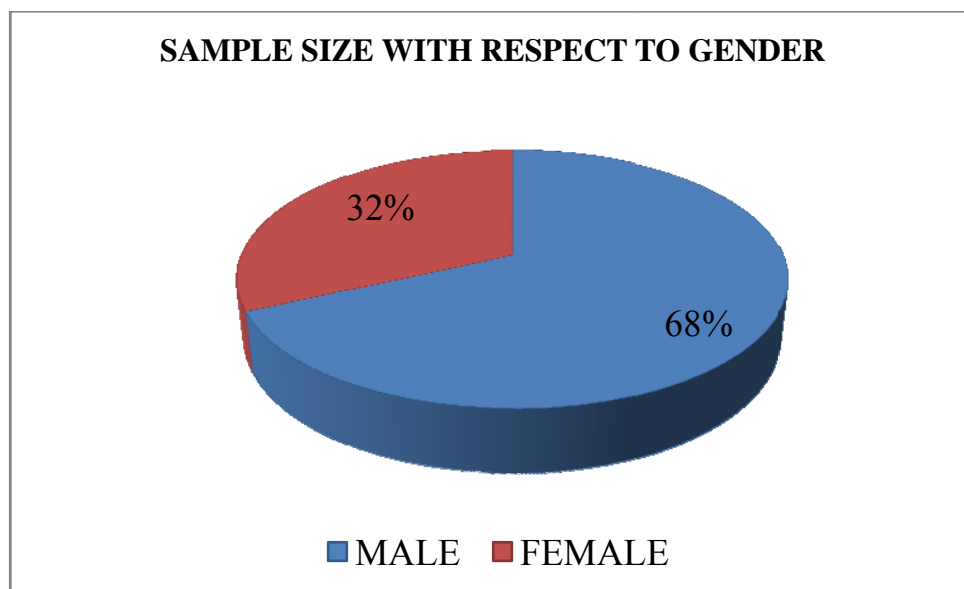
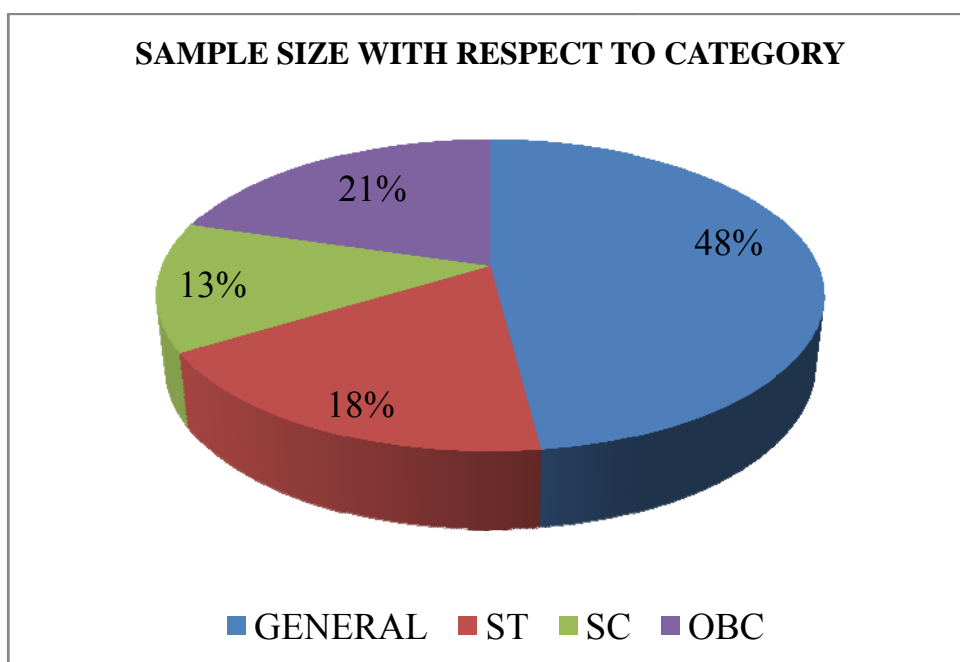**Figure : 3.1 Sample Size With Respect to Gender**

3.3.2 SAMPLE SIZE WITH RESPECT TO CATEGORY/CASTE:

TABLE : 3.5

SAMPLE SIZE WITH RESPECT TO CATEGORY/CASTE

CATEGORY	PERCENT	FREQUENCY
GENERAL	48	606
ST	18.3	231
SC	13.3	168
OBC	20.4	257
TOTAL	**100**	**1262**

The above Table : 3.5 shows sample size with respect to category/ caste. From the table it can be seen that the total sample consisted of 1262 teachers serving in secondary grant in aid schools of which 606 (48 percent) belonged to general

category, 231 (18.3 percent) belonged to scheduled tribe, 168 (13.3 percent) belonged to scheduled class and 257 (20.4 percent) belonged to other backward classes. This is depicted in below given pie graph also.

SAMPLE SIZE WITH RESPECT TO CATEGORY
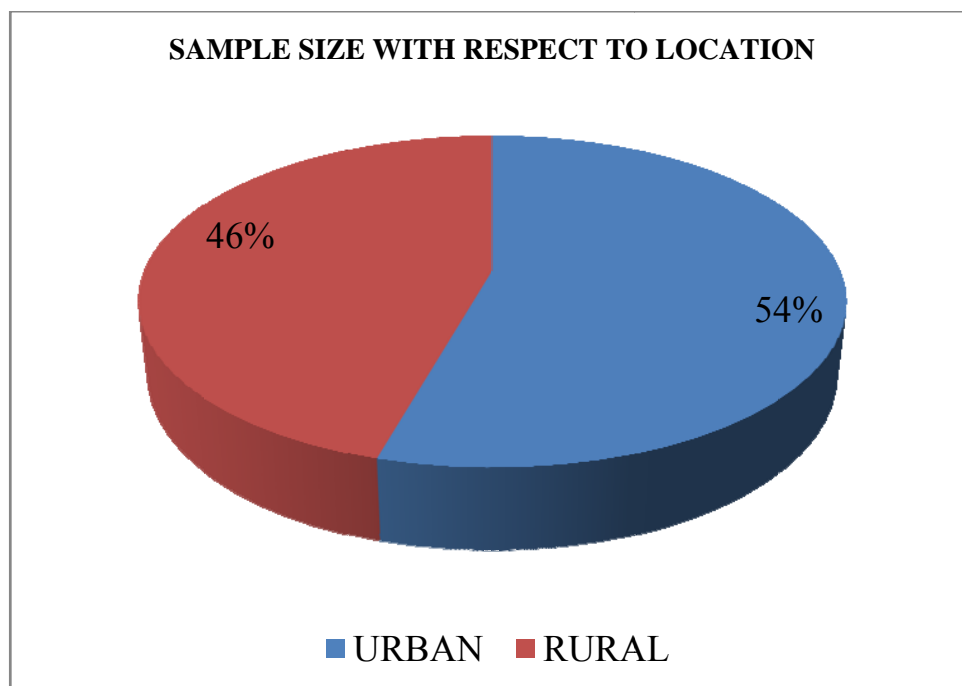
Figure : 3.2 Sample Size With Respect to Caste

3.3.3 SAMPLE SIZE WITH RESPECT TO LOCATION OF THE SCHOOL:

TABLE : 3.6

SAMPLE SIZE WITH RESPECT TO LOCATION

AREA	PERCENT	FREQUENCY
URBAN	54.4	687
RURAL	45.6	575
TOTAL	**100**	**1262**

The above Table : 3.6 shows sample size with respect to area/location. From the table it can be seen that the total sample consisted of 1262 teachers serving in secondary grant in aid schools of which 687 (54.4 percent) served in schools in urban areas where as 575 (54.6 percent) served in schools in rural areas. This is depicted in below given pie graph also.

SAMPLE SIZE WITH RESPECT TO LOCATION

46%

54%

URBAN RURAL
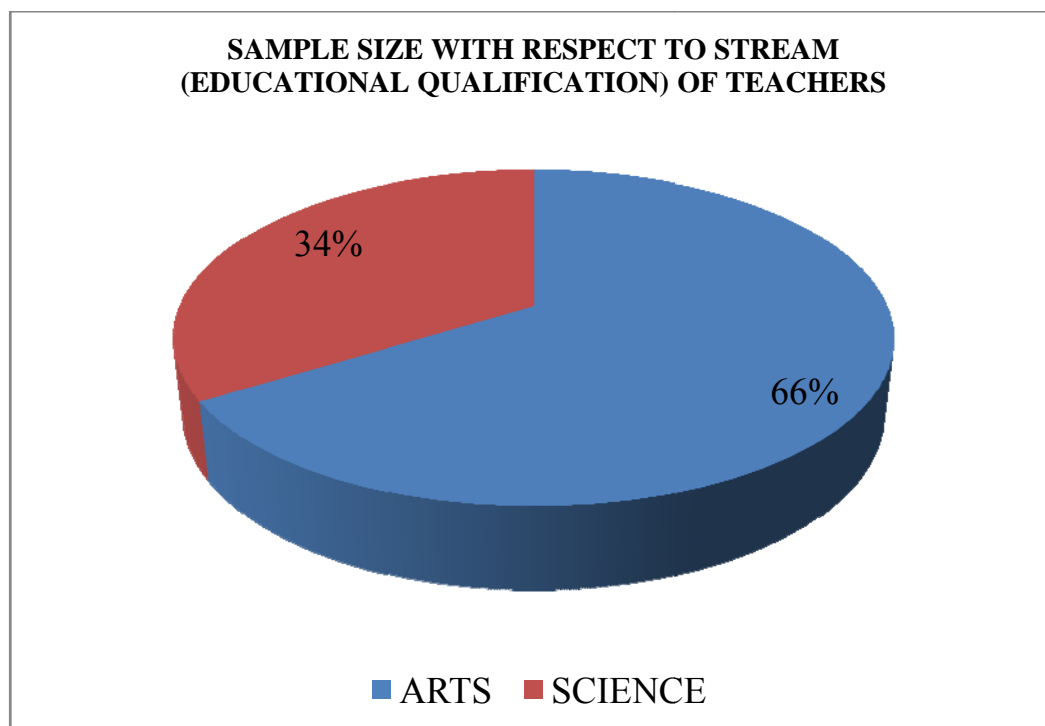
Figure : 3.3 Sample Size With Respect to Location

3.3.4 SAMPLE SIZE WITH RESPECT TO EDUCATIONAL QUALIFICATION/STREAM:-

TABLE : 3.7

SAMPLE SIZE WITH RESPECT TO QUALIFICATION

STREAM	PERCENT	FREQUENCY
ARTS	66.2	836
SCIENCE	33.8	426
TOTAL	**100**	**1262**

The above Table : 3.7 shows sample size with respect to Educational Qualification of Teachers/ stream. From the table it can be seen that the total sample consisted of 1262 teachers serving in secondary grant in aid schools of which 836 (66.2 percent) had done their graduation or post graduation with arts as their major subject where as 426 (33.8 percent) had done graduation or post graduation with science stream. This is depicted in below given pie graph also.

SAMPLE SIZE WITH RESPECT TO STREAM (EDUCATIONAL QUALIFICATION) OF TEACHERS

34%

66%

■ ARTS ■ SCIENCE

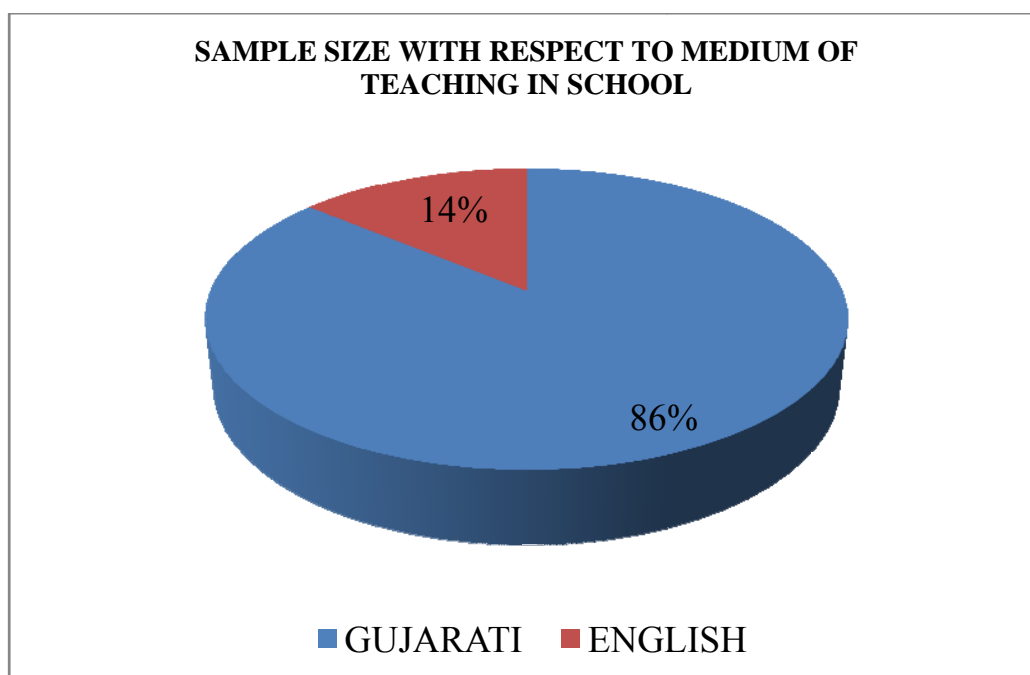**Figure : 3.4 Sample Size With Respect to Educational Qualification**

3.3.5 SAMPLE SIZE WITH RESPECT TO MEDIUM OF TEACHING IN SCHOOLS:-

TABLE : 3.8

SAMPLE SIZE WITH RESPECT TO MEDIUM

MEDIUM	PERCENT	FREQUENCY
GUJARATI	86.05	1086
ENGLISH	13.95	176
TOTAL	**100**	**1262**

The above Table : 3.8shows sample size with respect to Medium of Teaching in schools. From the table it can be seen that the total sample consisted of 1262 teachers serving in secondary grant in aid schools of which 1086 (86.05 percent) served in Gujarati Medium schools where as 176 (13.95 percent) served in English Medium Schools . This is depicted in below given pie graph also.

SAMPLE SIZE WITH RESPECT TO MEDIUM OF TEACHING IN SCHOPOL

14%

86%

■ GUJARATI ■ ENGLISH

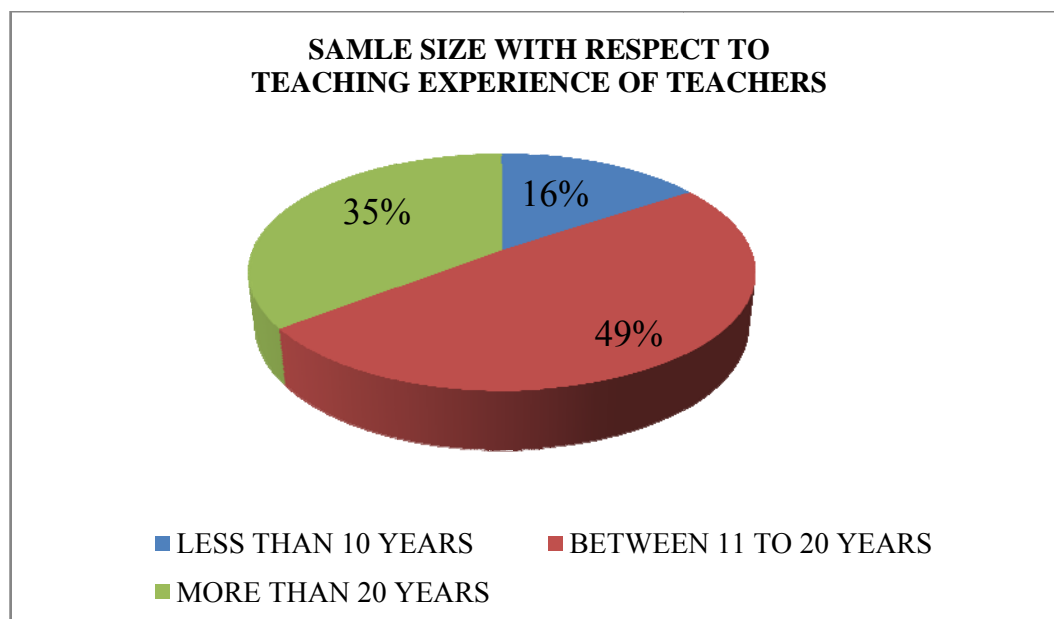**Figure : 3.5 Sample Size With Respect to Medium of Teaching**

3.3.6 SAMPLE SIZE WITH RESPECT TO TEACHING EXPERIENCE OF TEACHERS:-

TABLE : 3.9

SAMPLE SIZE WITH RESPECT TO TEACHING EXPERIENCE

TEACHING EXPERIENCE	PERCENT	FREQUENCY
LESS THAN 10 YEARS	15.6	197
BETWEEN 11 TO 20 YEARS	48.9	617
MORE THAN 20 YEARS	35.5	448
TOTAL	**100**	**1262**

The above Table : 3.9 shows sample size with respect to Teaching Experience of teachers serving in Grant in aid schools of secondary section of Vadodara district. From the table it can be seen that the total sample consisted of 1262 teachers serving in secondary grant in aid schools of which 197 teachers (15.6 percent) had experience of less than ten years, 617 teachers (48.9 percent) had experience between eleven to twenty years   where as 448 teachers (35.5 percent) teachers had experience of more than twenty years . This is depicted in below given pie graph also.

Figure : 3.6 Sample Size With Respect to Teaching Experience

3.4   TOOLS FOR DATA COLLECTION

Data collection is an essential part of research. In order to collect required data for the research, appropriate tools are devised with suitable measuring techniques. The tools used in the present study were Professional Commitment Scale and Job Satisfaction Scale. These tools were administered on the sample of secondary school teachers of grant in aid schools. The tools were constructed and standardized by the investigator for the study. The process / steps of standardization of both the scales will be discussed in chapter 4.

3.4.1   PROFESSIONAL COMMITMENT SCALE

The professional commitment scale was constructed and standardized for measuring professional commitment of secondary school teachers. The tool for Professional commitment was constructed based on five components. The investigator arrived to these components after reviewing various literature studies. While reviewing the studies it was revealed that most of the studies of commitment focused on organizational commitment and were conducted in Industries and in foreign countries. Since the study was based in India and the investigator wanted to study Professional commitment of secondary school teachers, there was a need for an indigenous and self made tool. For preparing the tool for professional commitment, the investigator used components of commitment given by **Dave (1999).** The tool used for measuring professional commitment of secondary school teachers had following components:

1. **Commitment to the learner**- This component focussed on love for learner, readiness to help learner, concern for all round development of learner

2. **Commitment to the society**-This component focussed on awareness and concern on the impact of teachers work on the degree of advancement of families, communities and Nation as a whole.

3. **Commitment to the profession**- This component focussed on internal acceptance of the role and responsibility of the teacher's profession, no matter under what circumstances one has entered into it.

4. **Commitment to achieve excellence**- This component focussed on care and concern shown by the teacher for doing everything in the society and in the community in the best possible manner, the do-it well attitude (whatever is done, is done well)

5. **Commitment to the basic human values**- This component focussed on genuine practice of professional values such as impartiality, objectivity intellectual honesty, national loyalty with consistency. (Role model)

Based on these components, researcher prepared tool for professional commitment which had fifty statements of both positive and negative polarity. These fifty statements were based on all the above five components. The reliability and validity of the tool was established using appropriate techniques. The further details of standardisation of the tool are discussed in the following chapter.

3.4.2 JOB SATISFACTION SCALE

For the present study job satisfaction was one of the variables. The investigator prepared a scale to study the job satisfaction of secondary school teachers in teaching profession. From the review it was revealed that various variables had effect on professional commitment of teachers. So in order to study job satisfaction of secondary school teachers, a questionnaire was prepared based on following components:

1. **Individual Characteristics:** This included individual characteristics of the teacher with respect to his confidence, zeal, cheerfulness, enthusiasm,

initiative taken up for doing new assignments and hope for the entire teaching field.

2. **Behavioral characteristics:** This component included behavioural characteristics of individual teachers like discipline of teacher, extra effort put in by the teacher for students, personal adjustments done by the teacher with the school, efficiency of the teacher and willingness of teacher to work beyond his/her limits.

3. **Group Spirit Characteristics:** This component included pride for the group, feeling of cohesiveness, developing cohesive climate, own feelings for institutional goals, individual ambitions for accomplishment of goals and leadership quality of teacher.

4. **Attitude towards Job:** This component included stability in job, job satisfaction with respect to salary, workload and curriculum, attitude towards school and students and opportunity for decision making.

5. **Community Involvement:** This component included support as well as pressure from the community on the teacher to work at their level best and achieve the wider goals of education and society.

Based on these components, the investigator prepared tool for job satisfaction which had twenty five statements of both positive and negative polarity. In this tool, the respondents that is, teachers were given various situations based on the above mentioned five components. Also, three alternative options were also given for select for each statement. The reliability and validity of the tool was established using appropriate techniques. Further details of the standardization of tool is discussed in next chapter.

3.5   COLLECTION OF DATA

The data was personally collected by the investigator for the present research. For the collection of data from secondary school teachers serving in grant in aid schools, a permission letter was drafted and investigator collected the data from teachers after permission was granted by respective school principals granted the permission. The data was collected in form of the rating scale which was constructed and standardised for the purpose of the study. The tools used for the

collection of data included: Professional Commitment Scale and Job Satisfaction Scale. The data was collected in various phases discussed below:

Phase 1:

One of the important objectives of the study was to construct and standardise Professional Commitment Scale and Job Satisfaction Scale. So once the scale was constructed by the investigator, it was tried out on a small group of secondary school teachers of grant in aid schools during the phase of Pilot Study. It was conducted from June 2013 to September 2013. For conducting the Pilot Study also, the investigator visited the schools and met the principal to explain the purpose of the study. After getting the approval from the principal, the investigator met the teachers teaching in the secondary section. Convenience of teachers was taken care of by the investigator. A forwarding letter was also drafted for the secondary school teachers. The investigator met the teachers and explained them objective and importance of the study. The investigator assured that the data collected from teachers through two scales would be used for research purpose and would be kept confidential. The investigator gave them fifteen to twenty days time to fill the rating scales. In this way data for the pilot study was collected by the investigator.

Phase 2:

During this phase various changes were made in the tools based on the findings of pilot study. Changes in the tools were made with respect to the language of question, type of question and objectives of the study. Also few changes were made based on suggestions given by the teachers and principal during their informal talk with the investigator. Once the changes were done final draft of the tool was constructed and then administered on the teachers.

Phase 3:

During this phase the final draft of the tools were administered by the investigator. The sample for the study consisted of secondary school teachers serving in grant in aid schools of Vadodara District. The data was collected based on various variables such as gender of the teacher, category / caste of the teacher, area / location of the school, medium of instruction at the school level, educational qualification of teachers and teaching experience.

3.5.1   INSTRUCTIONS FOR COLLECTION OF DATA

The data for the present study was collected from the secondary school teachers serving in grant in aid schools of Vadodara District. The data was collected using tools: Professional Commitment tool and Job satisfaction tool. For the collection of data in different phases, following instructions were provided by the investigator:

- There were 50 statements in the Professional Commitment Scale. The statements were in two languages – English and Gujarati. All the statements were based on the components of Professional commitment scale.

- Similarly in the Job Satisfaction Scale there were 25 statements. All these statements were situations which teachers may come across during teaching learning process. For each statement three different options were further given. All the statements were based on the components of Job Satisfaction Scale. The statements were in two languages – English and Gujarati.

- The statements in both the scales had five options from Strongly Agree to strongly disagree. The teachers were instructed to read and understand the statements and then choose the correct option.

- The teachers were asked to put a tick mark " √ " against the most appropriate option of the five options.

- Teachers were made clear about the importance of the study and importance of their response.

- Teachers were made clear meaning of all the statements and options provided to them.

- Teachers were informed that there was no correct or incorrect answer and so they were informed to attempt all the statements.

- The teachers were also asked to fill section A of the tool which dealt with demographic features like Name of the teacher, Address and location of school, age and experience of teachers, gender, educational qualification of teachers and so on.

3.6   DATA ANALYSIS

Data Analysis was carried out using computer (SPSS Software). Data collected was analyzed using appropriate methods based on the objective of the study. The data was calculated using mean, standard deviation, factor analysis and ANOVA. In the present study sampling was done using randomization. The nature of distribution was normal and so ANOVA was applied. ANOVA is also used in case of studies were more variables are involved and the interaction between the variables is to be studied. The F-ratio calculated through this interaction effects among the variables will guide the investigator regarding selection of null hypothesis at various levels.   Also skewness of the data was calculated. Factor analysis was done to study the effect of various factors on Professional commitment and Job satisfaction where as factor loading was calculated to study the maximum effect of a particular factor on Professional commitment and Job Satisfaction.