METHODOLOGY

3.0 METHODOLOGY

Planning denotes the sequence of points which helps in preceding a work. Planning must be made in the beginning of the work. In this chapter the researcher has discussed the plan and procedures that one adopts while carving out a study in order to achieve the particular objectives specified for one's study. Methodology is concerned with how one goes about actually conducting the study.

The purpose of present study was "Perception of Teachers and Trustees towards Secondary School Principal's Leadership qualities in Surat city." i.e. to find out how the teachers and trustees of secondary school perceive the leadership qualities of principals' keeping in mind gender, types of schools, years of experience and educational qualifications. It was an effort to study the leadership qualities of principals' from teachers and trustees point of view.

The study needs a quantitative date of various types of information which has been collected from the teachers and trustees with the self developed standardized leadership quality measurement scale. The whole approach for conducting the study has been very systematic and has been explained in a precise manner in this chapter. This chapter is a brief description about the methodology adopted for the study, the method of sample selection, tools used, method of data collection and data analysis.

3.1 METHOD OF THE STUDY

In order to select the most appropriate method for the study, preliminary data were collected from the District Education Officer, Surat and different teachers, trustees and principals of Secondary Schools of Surat city. After a good deal of thought and brain storming, it was decided to adopt the survey type

of research. There are two types of survey, normative survey and descriptive survey. Descriptive survey was more appropriate as it will intend to consider the research proposed to ascertain what the typical condition is at the present. The type of information the survey method procures is in wide demand and is capable of rendering important services because it determines the present trend and helps in solving current practical problem. It also suggests the source of future development. It contributes to advancements of knowledge because it affords penetrating insight into the nature of what one is dealing with. The study was a survey of 'teachers and trustees' perception towards secondary school principals' leadership qualities with respect to gender, types of schools, qualifications and year of experience.

3.2   POPULATION AND SAMPLE

Population

Surat is located in the state of Gujarat, which is in the western India, on the bank of the river Tapi which flows into the Arabian ocean, just 16 Kms from the City. The location of Surat is 21"15'N Latitude and 72"52'E Longitude. Surat city covers an area of 326.515 sq.km having approximate population of 4466826 persons (Census, 2011). Surat Municipal Corporation has been divided into seven zones. The population of the present study comprises of 521 Secondary schools of Gujarat Secondary and Higher Secondary Education Board and 6864 teachers and 1500 trustees constitute the population.

TABLE : 3.1
DETAILS OF SVS (SHALA VIKAS SANKUL)
TOTAL SCHOOLS

No.	SVS No.	Name of SVS	No. of Schools
1	**SVS-1**	**Yagyavalkya** (Rander-Adajan Zone)	73
2	**SVS-2**	**Vashistha** (Bhagal, Muglisara, Shahpore)	74
3	**SVS-3**	**Maharshi Vishwamitra** (Nanpura, Athwalines, Bhatar, Piplod, Vesu)	60
4	**SVS-4**	**Parashar** (Udhna, Pandesara, Limbayat, Bhestan)	120
5	**SVS-5**	**Vedvyas Sabkul** (Varachha, Kapodra, Parvat Patia, Amroli)	86
6	**SVS-6**	**Jamadgni** (Varachha Road, Lambehanuman Road, Punagam, Parvat Patia)	108
		Total	**521**

Table 3.1 shows the details of SVS (Shala Vikas Sankul), their geographical location and number of schools in each SVS.

Sample

Sampling techniques are decided after defining the population and deciding its characteristics. Due to factors of accessibility and availability of time with respondents, it is also not possible to obtain measures form the entire population. Therefore in most research studies it is endeavoured to collect information from a small group in the form of a subset of the population in such a way that the knowledge gained is representative of the total population. Thus, subset, which is manageable group is a stated as a sample of a study.

In the present study multistage sampling was followed. In the first stage 50 private and 50 Aided schools were selected randomly from 6 SVS. In the

second stage 10 teachers from each school were selected randomly. So, total 1000 teachers were selected randomly to study their perception. In the third stage 200 trustees i.e. Chairman and Secretary were selected from the same school. Thus, the selection was done by cluster sampling. The sample size was 1000 Teachers and 200 Trustees for the final data collection.

TABLE: 3.2

DETAILS OF SVS NAME AND NUMBER OF SELECTED SCHOOLS

No.	SVS No.	Name of SVS	No. of Schools
1	**SVS-1**	**Yagyavalkya** (Rander-Adajan Zone)	24
2	**SVS-2**	**Vashistha** (Bhagal, Muglisara, Shahpore)	28
3	**SVS-3**	**Maharshi Vishwamitra** (Nanpura, Athwalines, Bhatar, Piplod, Vesu)	19
4	**SVS-4**	**Parashar** (Udhna, Pandesara, Limbayat, Bhestan)	08
5	**SVS-5**	**Vedvyas Sabkul** (Varachha, Kapodra, Parvat Patia, Amroli)	08
6	**SVS-6**	**Jamadgni** (Varachha Road, Lambehanuman Road, Punagam, Parvat Patia)	13
		Total	**100**

Table 3.2 shows the details of SVS (Shala Vikas Sankul), their geographical locations and number of schools selected for the present study from each SVS.

TABLE: 3.3

LIST OF SCHOOLS AND TYPE OF SCHOOL

Sr. No.	Name of School	SVS	School Type	Medium
1	Sararwati Vidyalaya Honey Park Road, Adajan, Surat	1	NG	G
2	Navsarjan Vidyalay Palanpor Jakatnaka, Surat.	1	NG	G
3	Saint Marks Adajan, Surat.	1	NG	E
4	D.R.Rana School Palanpor Patia, Surat	1	NG	G
5	Boghra & Agrawal Sec. School Adajan, Surat	1	NG	G
6	Sindhu Seva Samiti Sec. School Anand Mahal Road, Surat.	1	NG	E
7	L.P.Savani School (Palanpor Branch) T.P.8, At. Palanpor, Surat.	1	NG	G
8	Sardar Patel Vidhyalaya At. Pal, Dist. Surat.	1	G	G
9	Shantiniketan Vidyavihar Palanpor Patia, Surat	1	G	G
10	A.A.Mulla & M.A. Nana Girls High School MMP(Girls) Rander, Surat.	1	G	G
11	M.M.P. High School, (Boys) Rander, Surat.	1	G	G
12	Sanskar Bharti Vidhyalaya Palanpor Patia, Surat.	1	G	G
13	L.P.Savani Vidhyabhavan Adajan, Surat.	1	NG	G
14	L.P.Savani International School Pal, Surat.	1	NG	E
15	Vidhyakunj Eng. Med. School Palanpor Patia, Surat.	1	NG	E
16	T.M.Patel Sec. School Gujarat Gas Circle, Adajan, Surat.	1	NG	G
17	V.N.Godhani Kanya Vidhyalaya Karatgam, Surat/	2	NG	G
18	Maruti Vidhyalaya Opp. Akhand Anand School, Ved Rd. Surat.	2	NG	H
19	Lilaba Girl's High School Lal Darwaja, Station Road, Surat.	2	G	G

Sr. No.	Name of School	SVS	School Type	Medium
20	Smt. KLS Khandwala H. School (Balaji Girl), Balaji Road, Surat.	2	G	G
21	Shree H.J. Gajera Eng. Med. School Katargam, Surat.	5	NG	E
22	Pramukh Vidhyalaya Singanpor, Surat.	2	NG	G
23	Hansvahini High School Singanpor Road, Surat.	2	NG	G
24	Swaminarayan Gurukul Vidhyalaya Ved Road, Surat.	2	NG	G
25	Swaminarayan Gurukul Vidhyalaya Ved Road, Surat.	2	NG	E
26	Nilkanth Kanya Vid. Singanpor Char Rasta, Ved Road, Surat.	2	NG	G
27	Ankur Vidyabhavan Katargam, Surat.	2	NG	G
28	I.P.Mission (Boys) Muglisara, Surat.	2	G	G
29	I.P.Mission (Girls) Muglisara, Surat.	2	G	G
30	Gautami Kanya Vidhyalaya Amroli, Surat.	5	G	G
31	R.N.Naik High School Udhna, Surat	4	G	G
32	Ratnasagar Jain High School Gopipura, Surat.	2	G	G
33	H.M.Bachkaniwala Sardar Eng. High School, Palanpor Patia, Surat.	1	G	E
34	Akhand Anand Vidhyabhavan Ved Road, Surat.	2	G	G
35	R.C.M Punawala Sarvajanik Experimental School Athwalines, Surat.	3	G	G
36	Shree Krishna H Vid. Pandesara, Surat	3	NG	H
37	Mansarovar Vidhyalaya Punagam, Surat.	6	NG	G
38	Siddhkutir (Sadhna Vid.) Varachha Road, Surat.	5	NG	E

Sr. No.	Name of School	SVS	School Type	Medium
39	Sahjanand Vidhyalaya Punagam, Surat.	6	NG	G
40	Smt. L.P.D. Patel Sarvajanik Vidhyalaya Pugagam, Surat.	6	G	G
41	Jeevanjyot Amroli, Surat.	5	NG	G
42	Kalakunj Highschool Katargam, Surat.	2	NG	G
43	Shah Gangaba Uderam Sec. School Kosad, Surat.	5	G	G
44	Madhavbaug Vidhyabhavan New Kosad Road, Surat.	5	NG	G
45	Smt. S.H.Gajera High School Katargam, Surat.	5	NG	G
46	M.T. Jariwala Sec. School Athwalines.	3	G	G
47	Shardayatan Eng. Med. School Piplod, Surat.	3	NG	E
48	J.H.Ambani Dumas Road, Surat.	3	NG	E
49	ST. Thomas Eng. Med. High School Bharthana, Vesu, Surat.	3	NG	E
50	Ryan International School Dumus Road, Surat.	3	NG	E
51	Shree R.D. Gheyal Jeevanbharti Se. School. Nanpura, Surat.	3	G	G
52	R.D.Contractor High School Nanpura, Surat.	3	G	G
53	C.C.Shah Sarvajanik Eng. High School (Experimental) Parle Point, Surat.	3	G	E
54	Sir VDT Girls High School (Vanita Vishram) Athwalines, Surat.	3	G	G
55	Symga High School Sagrampura, Surat.	3	G	G
56	T & T.V. Sarvajanik High School Nanpura, Surat.	3	G	G
57	Symga High School Sagrampura, Surat.	3	G	E

Sr. No.	Name of School	SVS	School Type	Medium
58	Karmaveer Sakalchand K Patel Uttar Guj. (KSP) Bhatar Rd., Surat.	3	NG	G
59	Sir VDT Girls High School (Vanita Vishram) Athwalines, Surat.	3	G	E
60	P.R.Khatiwala Dumus Road, Surat.	3	NG	E
61	Vidhya Bharti Hindi Vidhyalaya Bhatar Char Rasta, Surat.	3	NG	E
62	Aadarsh Vidhylaya L.H.Road, Surat.	6	G	G
63	MNJ High School Varachha, Surat.	6	G	G
64	Ramkrishna Vidhyalaya L.H.Road, Surat.	6	G	G
65	Anglo Urdu Highschool Sodagarwad, Surat.	2	G	G
66	K&M.P. Patel Sarvjanik Vid. Amroli, Surat.	5	G	G
67	MUS School, Lal Gate, Nr.Bus Stop.	6	NG	E
68	Pragna Vidhyalaya Dabholi Road, Surat.	2	NG	G
69	Ratnasagar Vidhyalaya Amroli, Surat.	5	NG	G
70	S.P.Zaveri Girl's High School Gopipura, Surat.	2	G	G
71	Kasturba Vidhyabhavan Ved Road, Surat.	2	G	G
72	I.P.Savani school, L.H Road, Varaccha, Surat.	6	G	G
73	P.P.Savani Hirabaug, Surat.	5	G	G
74	M.G.Singapuri Gopipura, Surat.	2	G	G
75	Surat Diamond Asso. Girl's High School Nr. Kapodra Police Station, Surat.	5	G	G
76	T & TV Sarvajanik Vidhyalaya Gopipura, Surat.	2	G	G
77	SPB High School Surat.	6	NG	G

Sr. No.	Name of School	SVS	School Type	Medium
78	M.M.& M.C. Dhamanwala Girl's School Salabatpura, Surat.	2	G	G
79	Smt. M.P.Liliyawala Vidhyabhavan Parvat Patia, Surat.	4	NG	G
80	Sharda Vidhyamandir Puna Gam, Surat.	6	NG	G
81	Archana Vidhya Sankul L.H.Road, surat.	6	NG	G
82	Sararwati Hindi Vidyalay Bhestan, Surat	4	NG	G
83	Sangrace School Udhna, Surat.	4	NG	E
84	Sharda Vidhyalaya At. Icchapore, Ta. Choryasi, Dist.Surat.	1	G	G
85	DLK Shah Sanjivani High School At. Damka, Ta. Choryasi, Dist. Surat.	1	G	G
86	Lokmanya Vidhyalaya Rander, Surat.	1	G	G
87	Salabatpura High School Gopipura, Surat.	2	G	G
88	Vidhyakunj School Palanpur Jakatnaka, Surat.	1	NG	G
89	Swaminarayan Secondary, School Ramnagar, Rander Road, Surat.	1	NG	G
90	Bhulka Vihar Sec. School Bhatha, Hazira Road, Surat.	1	NG	G
91	Presidency School Tadwadi, New Rander Road, Surat.	1	NG	G
92	Noble Public School Puna gam, Surat.	6	NG	E
93	Navsarjan Vidhyalaya G.H.Board, Pandesara Road, Surat.	4	G	G
94	SEM (Samiti) Udhna Gam, Surat.	4	G	E
95	Navdeep Vid. G.H.Board, Pandesara Road, Surat.	4	G	G
96	Sunshine (Matribhumi) Udhna, Surat.	4	NG	G

Sr. No.	Name of School	SVS	School Type	Medium
97	G. & G.V. Kadiwala & M.V.Bunki Sarvajanik High School, Sagrampura, Surat.	5	G	G
98	Union High School Lalagate, Surat.	2	G	G
99	KM Jariwala Shahpore, Surat.	2	G	**G**
100	Gurukul Kanya Vidhyalaya Swaminarayan (Kanya) Kansanagar, Katargam, Surat.	2	G	G

Table 3.3 mentions the names of 100 schools selected for the study, their SVS, their type, i.e grant in aid or non grant in aid and their medium of instruction.

The size of sample according to various variables has been shown in figure 3.1 to 3.9.

FIGURE: 3.1

DISTRIBUTION OF TEACHERS ACCORDING TO GENDER
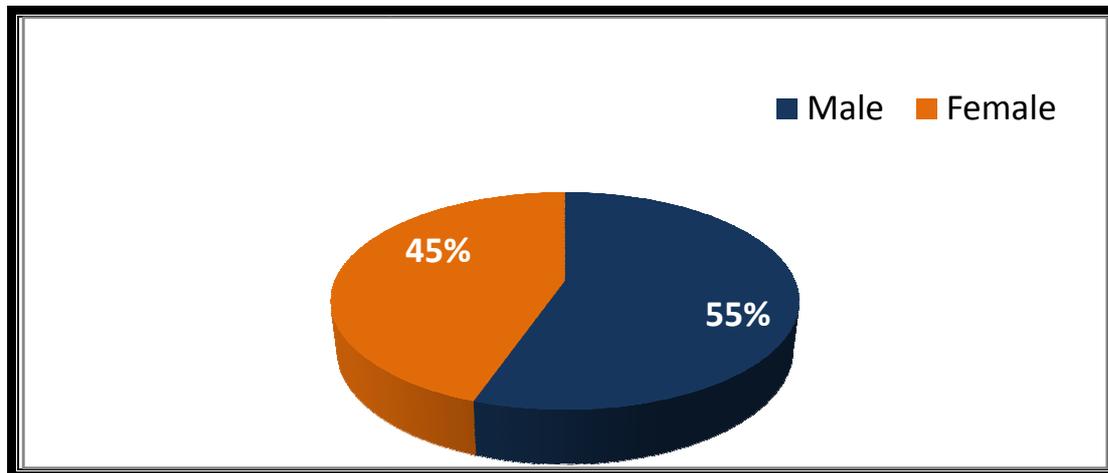
Figure 3.1 shows the sample size with respect to gender. There were 553 (55%) Male teachers and 447 (45%) Female teachers.
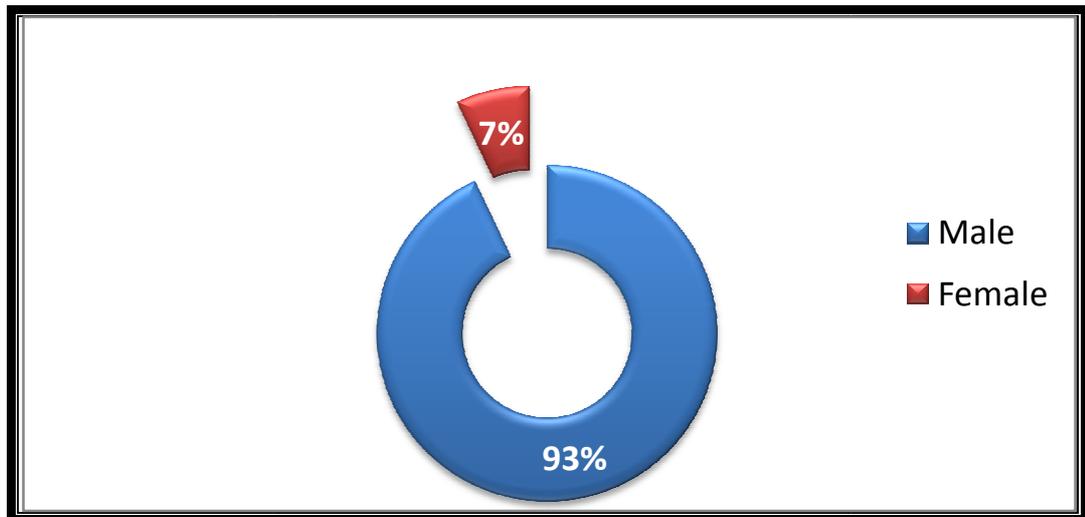
Figure 3.2 shows the sample size with respect to gender. There were 186 (93%) Male trustees and 14 (7%) Female trustees.

FIGURE: 3.3

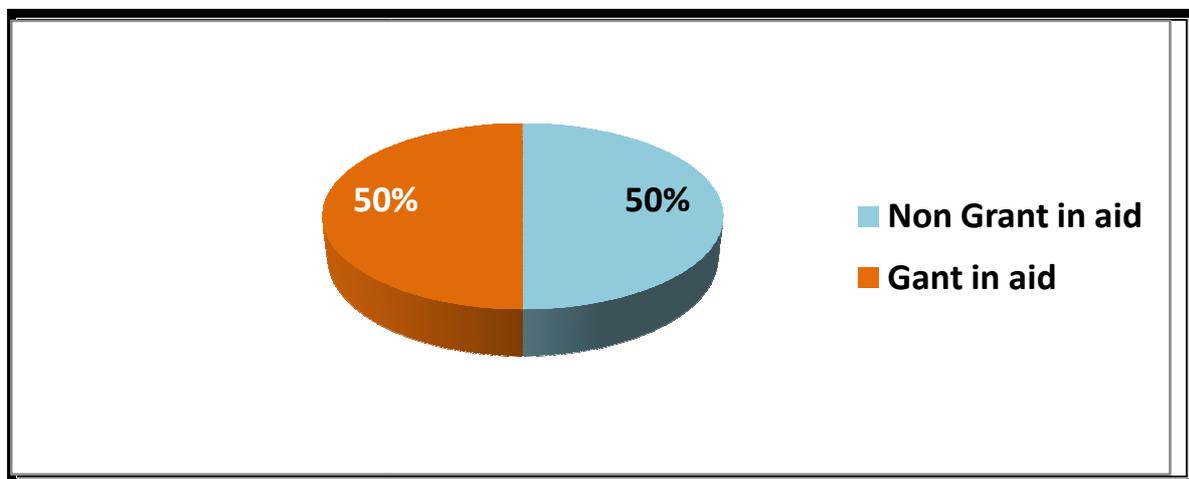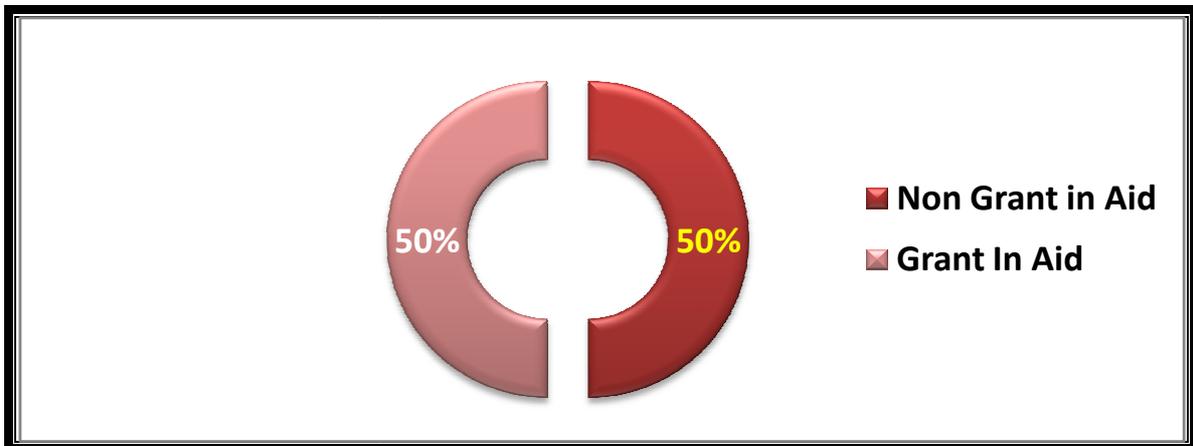**DISTRIBUTION OF TEACHERS ACCORDING TO**

TYPES OF SCHOOLS

Figure 3.3 shows the sample size with respect to type of school. There were 500 (50%) Non Grant in aid School teachers and 500 (50%) Grant in aid School teachers.

DISTRIBUTION OF TRUSTEE ACCORDING TO

TYPES OF SCHOOLS

Figure 3.4 shows the sample size with respect to type of school. There were 50 (50%) Non Grant In Aid Schools trustees and 50 (50%) Grant in Aid School trustees.

FIGURE: 3.5

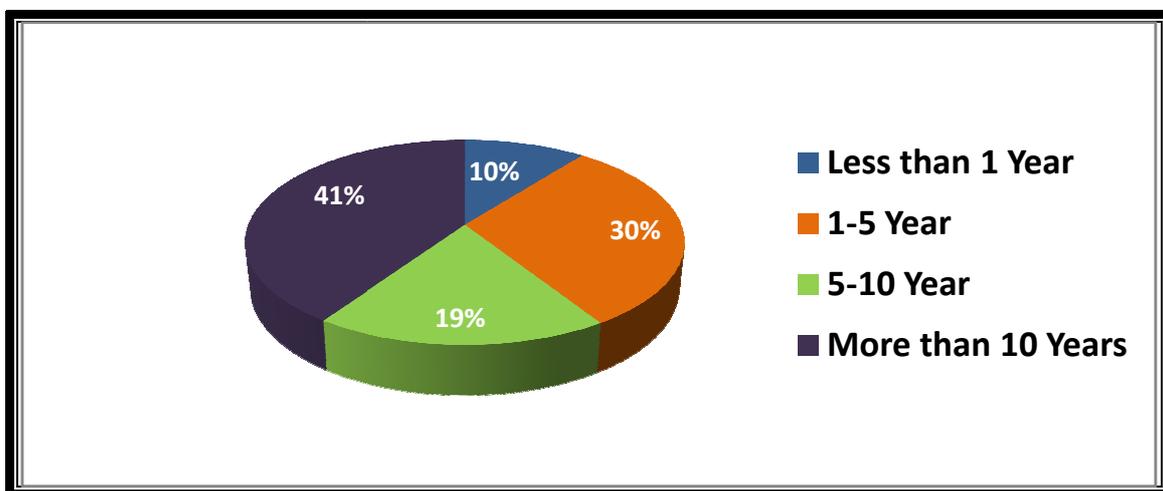**DISTRIBUTION OF TEACHERS ACCORDING TO**

WORK EXPERIENCE

Figure No.3.5 shows the sample size with respect to experience of school teachers. There were 10% teachers with less than 1 year experience, 30% teachers with 1 to 5 years of experience, 19% teachers with 5 to 10 years of experience and 41% of teachers were having more than 10 years of experience.

FIGURE : 3.6

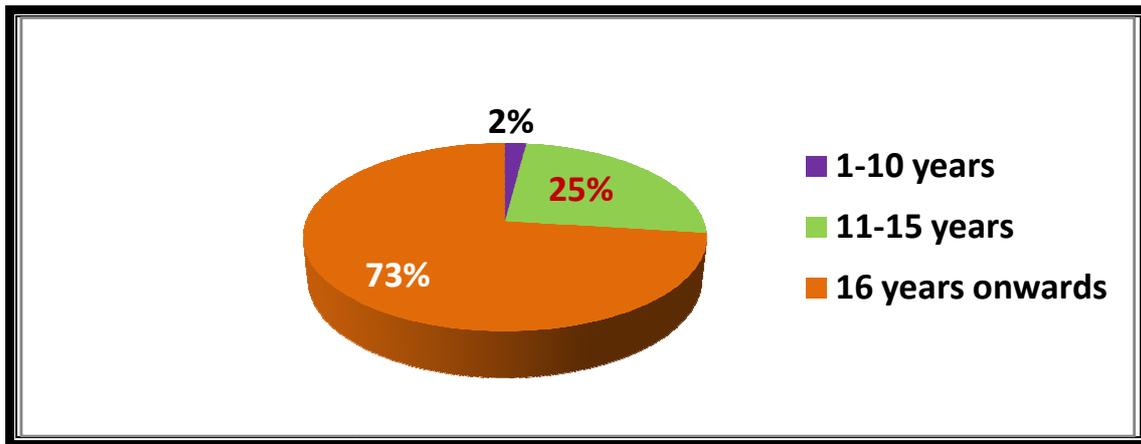**DISTRIBUTION OF TRUSTEES ACCORDING TO WORK EXPERIENCE**

Figure 3.6 shows the sample size with respect to Experience of school trustees. There were 4 (2%) trustees with 1 to 10 years of experience, 50 (25%) with 11 to 15 of experience and 146 (73%) of trustees were having more than 16 years of work experience.

FIGURE: 3.7

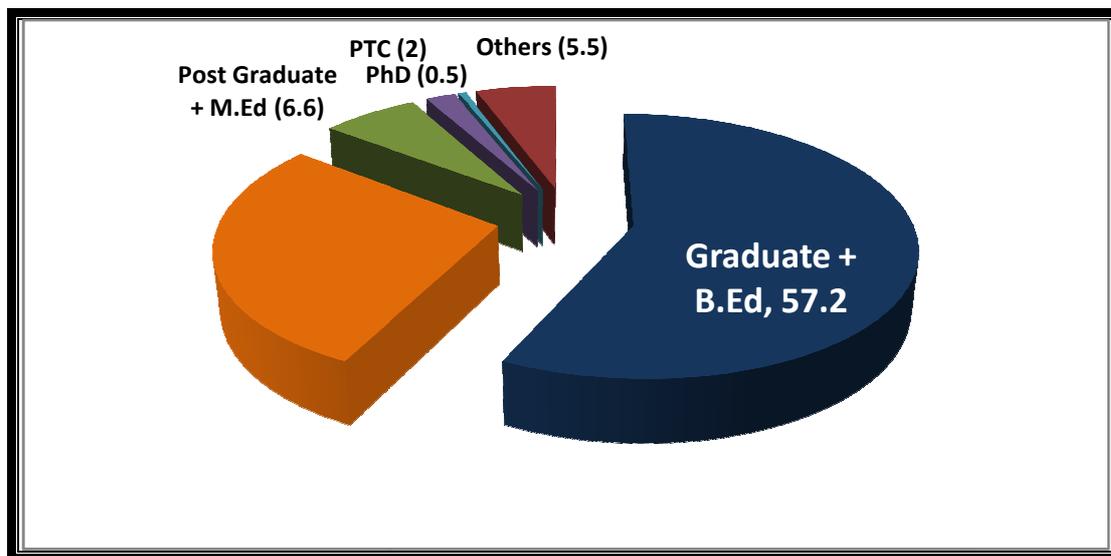**DISTRIBUTION OF TEACHERS ACCORDING TO QUALIFICATIONS**

Figure 3.7 shows the sample size with respect to teachers' qualification. There were 20 (2%) teachers whose qualifications were PTC, 572 (57.2%) graduate and B.Ed., 282 (28.2%) teachers were post graduate and B.Ed., 66 (6.6%) teachers were post graduate and M.Ed., 5 (0.5%) teachers were Ph.D. and 55 (5.5%) were others.

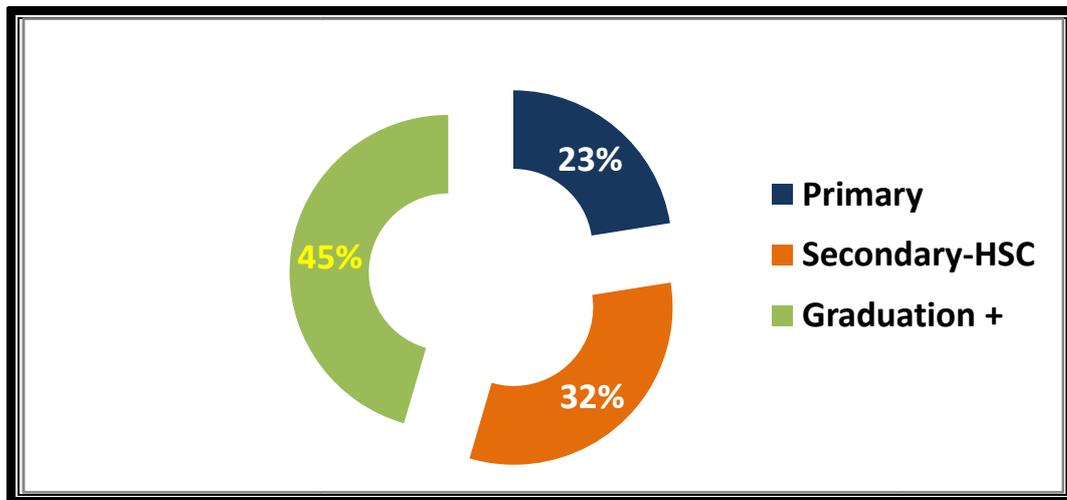**DISTRIBUTION OF TRUSTEES ACCORDING TO QUALIFICATIONS**

Figure 3.8 shows the sample size with respect to qualification of trustees. 44 (22%) trustees have completed primary education, 64 (32%) of trustees have completed secondary education and 92 (46%) of trustees have completed graduation and further studies.

FIGURE: 3.9

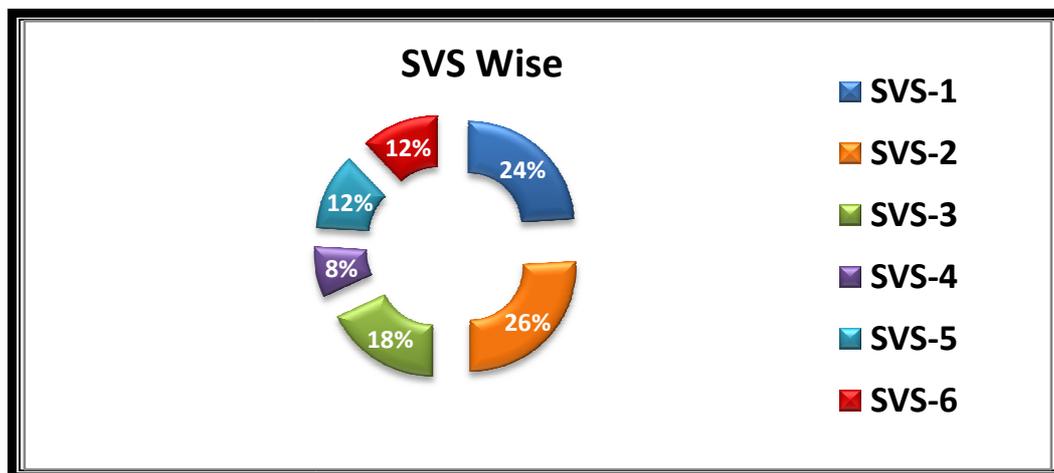**DISTRIBUTION OF SCHOOLS ON THE BASIS OF SVS**

Figure 3.9 shows the sample size of schools with respect to SVS areas. SVS-1 have 24 (24%) of schools, SVS-2 have 26 (26%) of schools, SVS-3 have 18 (18%) schools, SVS-4 have 8 (8%) of schools, SVS-5 have 12 (12%) of schools and SVS-6 have 12 (12%) of schools.

3.3 TOOL FOR DATA COLLECTION

Data collection is an important part of research. In order to collect the requisite data for any theme of research, one has to devise appropriate tools and use suitable measuring techniques. The tool used in the present study was perception scale measuring principal's leadership qualities for teachers and trustees. The used tool was prepared by the investigator and details of the tool are as follows.

3.3.1 SCALE FOR MEASUREMENT OF PRINCIPALS' LEADERSHIP QUALITIES

The method followed was 'The method of summated ratings' commonly referred to as 'Likert type scale.' The original scale of this type was developed by **'Reneis Likert'**. He reported very satisfactory reliability of data for the scales developed with his procedure. **Edwards and Kenny (1946)** gives the advantages of 'Likert Type' scale over the others as follows.

The Likert type of scales presents a number of positive and negative statements regarding any attitude object. In response to the items on this scale, the subject indicates whether they strongly agree, agree, are undecided, disagree or strongly disagree. With each statement the numerical value assigned to each response depends on the degree of agreement with individual statements. The score of a person is determined by means of summing up of the values assigned to individual responses.

3.4 STAGES OF LIKERT RATING

1. Collect a large number of favorable and unfavorable statements regarding attitude objects.

2. Select from these almost equal number of favorable and unfavorable statements.

3.   Administer these items to a number of individuals, asking them to indicate their opinion regarding each statements by determining whether they strongly agree, agree, are undecided, disagree or strongly disagree with each statement.

For positive statements the scoring pattern may be

SA – A – UD – DA – SDA   =   5 - 4 - 3 -2 - 1

And for negative statements the scoring pattern may be

SA – A – UD – DA – SDA   =   1 - 2 - 3 -4 – 5

4.   Item analysis is carried out and 't' value for each statement is calculated. For these statements, if 't' value is not significant it is rejected from the final scale. Validity and reliability are established for this scale.

3.5   STEP-1: IDENTIFICATION OF PRINCIPALS' LEADERSHIP QUALITIES COMPONENTS

The components of principal's leadership qualities were identified with their behaviors seeking the opinion of eminent experts in the field of education. The behaviors of each component were specified. It was necessitated since such a tool was not readily available at the time of inception of the study and it is a requirement in the context of principals' leadership base system.

Literature pertaining to criteria for essential of principal leadership qualities was studied and exhaustive list of items were prepared. These items were categorized keeping in mind the work areas; the importance of an item in context with principals power, duties and assigned responsibilities. These criteria define external as well as internal qualities of Educational Leadership. The experts were given some possible areas of Leadership qualities of principals' by investigators. The investigator personally met and discussed his views about Leadership qualities. The experts were given a request letter and a list of Leadership qualities components and asked an opinion about these qualities. They were also asked to add Leadership qualities components if they

wish to add in the list. The eminent experts happily co-operated and added a few components. The eminent experts, educationalists, school administrators and the state education authority representative identified 22 leadership qualities which were closely related to principals' nature of job profile as a whole. The number of experts was 15. The experts were asked to give ratings from 1-10 range areas. Based on the importance and a must required leadership quality, each expert respondent rated an identified area of leadership qualities.

<div align="center">

TABLE: 3.4

IDENTIFICATION OF LEADERSHIP QUALITIES

</div>

Frequency	Components
80-100	7
70-79	3
10-69	12
Total	**22**

The rating scale was given numerical weightages as shown in Table 3.4.

In the final analysis and keeping in mind the weightage of marks, 7 components with score of 80% and more were retained in the first stage. Rest 15 components were again retained, with precious suggestions given by the experts, to combine those in proximity. Out of these 15 components 3 more were added. Finally 10 points of criteria was arrived at. The components and their behaviors are given below.

<div align="center">

TABLE: 3.5

CATEGORIES OF EXPERTS FOR PRINCIPALS' QUALITY COMPONENTS

</div>

Sr. No.	CATEGORIES OF EXPERTS	NO OF EXPERTS
1	Professors	1

2	Trustees	5
3	Principals	7
4	Educationalist	1
5	School management Consultant	1
	Total	**15**

Table 3.5 depicted that there were five categories of experts to whom the scale was administered for the content validity and language aspect. The total numbers of experts were fifteen (Appendix-4)

The suggestion /opinions of the above experts were collected through their responses about the various items in the scale that is presented in following lines.

Expert No. 1 Suggested that "Principal as a leader as a whole cannot be the leadership quality criteria. It has to be defined clearly as it sounds bit vague which is not reflecting any particular quality. Added 4 more qualities areas to the analysis sheet which covered HRM with Subordinates, Library recourse uses, separate areas of controlling examinations, evaluation, and result. Moreover, co-curricular activities leadership areas should be separately included.

Expert No. 2 Did not give any major suggestions related to major components.

Expert No. 3 Suggested to give equal importance to each components. Strongly emphasized on the soft skills part of the leadership qualities. Has suggested a few more components to add related with current scenario management styles.

Expert No. 4 Appreciated the components but raised a question regarding Financial Management quality to be perceived by teachers and trustees.

Expert No. 5 did not have any major suggestions.

Expert No. 6 Did not have any major suggestions stated that principal as a community leader should be given more importance while framing the scale.

Expert No. 7 Suggested that in component II, item no. 8, 9 and in component II, item no. 1 & 6 are very long. A possible suggestion to cut them short sentences without changing the meaning. From language point of view it was suggested not to use 'or' in any items.

Expert No. 8 Suggested that in component IX, item no.3 is not clear in meaning. In the same component item no.6 should be split into two items.

Expert No. 9 Suggested to review each component and no. of items. The scale must maintain the balance of external and internal personality of a principal, keeping in mind his or her job profile.

Expert No. 10 Suggested that the number of item in each component is adequate and there is a consistency between them. But after each component or key item some space should be provided to trustees and teachers. In this space they can be encouraged to write some critical incidence-reason for specific ratings.

Expert No. 11 Was a language expert and provided some suggestions related to grammatical errors and in content validity. It was also suggested that in component IV, item no.1 in which the word 'climate' is not properly used. So, it

should be replaced with 'healthy work climate'. It was also advised to delete item no. 5 from component no. VII as it was irrelevant.

Expert No. 12 Informed that scale was good and all the items were related to the topic.

Expert No. 13 Appreciated the investigator for component selection. The only suggestion was to differentiate component no. I and VIII so that they do not overlap with each other.

Expert No. 14 & 15 Did not give a single suggestion and appreciated the scale.

After considering the valuable suggestions and discussion with the guide the following components were modified. The modified scale was used for the pilot study. Suggestions for each component was also given by the experts that is presented in Table 3.6.

<div align="center">

TABLE: 3.6

IDENTIFICATION OF PRINCIPALS' LEADERSHIP QUALITIES

</div>

No.	Component	Description
I	Visionary	Principal should have clear vision about growth of school, kids and employees with a long term planning.
II	Life Long Learner	Should have clear vision to learn new innovative and practical practices for self improvement. Should have positive approach to accept new ideas, theories and concepts.
III	Academician	Should be a good academic planner, implementer and monitor. Should take keen interest in all kinds of academic activities.

No.	Component	Description
IV	Effective Communicator	Should have good communication skills, fluent speaker and have convincing language with excellent body language.
		Should be the one who reduces communication gaps at all levels.
		Should be able to motivate all the stake holders of the school.
V	Strong Role Model	Should be the first to preach and follow.
		Should practice all kinds of ethical and official practices and turn out as a role model, not only in school but at all levels.
VI	Community Leader/Reformer	Principal comes in contact with people of different segments of the society; he/she should take keen interest in community work. Live, work and act for noble causes in society.
		Should nurture good values, talent and good practices among kids and teacher.
		Should appreciate and motivate kids and teachers to understand the concept of society, and responsibility as an individual as well as a part of the community.
VII	Mentor and Motivator	Should look after all kinds of requirements of all the stake holders of the school. Should appreciate and motivate kids and teacher's to sharpen their skills and learning effectively.
VIII	Human Resource Manager	Should have knowledge to assign right task to right person. Should not have bias approach towards anyone. Should assign and utilize human resources as per the norm and requirement of the organization.

No.	Component	Description
IX	Care Taker	Should have the ability to take utmost care of all the stake holder of the organization. Should have ability to observe and maintain people as well as infrastructure.
X	Administrator and Technocrat	Should have all kinds of operational and managerial qualities. Should be able to use the technology effectively.

3.6 STEP-II : CONSTRUCTION OF ITEMS

After identification of components with their qualities; 100 statements were developed, keeping in mind that the number of statements with positive polarity and the number of statements with negative polarity are almost equal. While wording the statements, the suggestions of Thurstone and Chave (1929) Likert (1932), Wang (1932), Bird (1940), Edwards and Kilpatrik (1948), as summarized by Edwards (1969) were followed. These statements were submitted to the experts for their opinions and suggestions. After following the experts' opinions and suggestions; corrections and changes whenever necessary were being done, and 100 statements were selected. Each statement in the attitude scale express variable degree of agreement / disagreement. Five choices suggesting agreement / disagreement are Strongly Agree, Agree, Not Sure, Disagree, Not Sure, Strongly Disagree represented by SA, A, NS, DA, S.D.A.

TABLE: 3.7
CATEGORIES OF EXPERTS FOR SCALE DEVELOPMENT

Sr. No.	CATEGORIES OF EXPERTS	NO. OF EXPERTS
1	Professors	5
2	Trustees	4

3	Principals	3
4	Educational Govt. Authority Representative	2
5	School Management Consultant	1
	Total	**15**

Table 3.7 shows that there were five categories of experts to whom the scale was sent for the content validity and language aspect. The total numbers of experts were fifteen.

Suggestions were invited in five areas. It was divided in two parts. First overall suggestion and Second is item wise. To complete the procedure a letter was drafted and sent to respective experts along with the final research proposal and personally explained the aim and objective of the study. Experts took almost one weeks time to study and gave their feedback in written forms. The following suggestions were given on the five major areas.

1) **Language, grammar and vocabulary**

Change some of the sentences which carry dual meanings. Instead the word 'visionary', Being Futuristic is more appropriate.- section -1. Use present continuous tense. The word undecissional should be replaced by Not Sure or Indecisive.

- As effective communicator – a few statements should be removed.
- Prepare a separate request letter.
- There is a difference between perception and views. So the word view should be removed.
- Instructional statements should be clear and precise.
- Instead of using dictionary meanings, the word should be used in context.

- Most of the experts appreciated simple structure of language.

2)   Evaluation of the response mode

- Space after each component can be given for written response.

- Response mode is proper.

- The agree disagree format used is the best possible approach keeping in mind the number of components and items.

3)   Number of items in each component- whether adequate or not

- The numbers of items are adequate.

- Some of the items could be clubbed.

- More items are required to be added in item no. five, seven and ten.

- Some items are required to be separated where there are more than one meaning and areas are concern.

4)   Coherence between components and item

- Did not get any comment.

5)   Any other suggestion.

- Statements should be short.

- A few questions should be given open ended where trustees and teacher to express their ideas in details

The suggestion /opinions of the above experts were collected through their responses about the various items in the scale, same is presented in following lines.

Expert No. 1 Suggested that "Principal as a Visionary Leader" is fairly good but instead of 'education', education system should be used. The sentence No.5 is to be changed to ability to differentiate vision and mission. The expert also gave firm opinion that 'government level' and 'local level' are separate areas of work for any principals-they cannot be together. The expert also suggested that in component X, item no.3 should be framed using educational technology merging with nature of work of principal.

Expert No. 2 Suggested that in component II the word learner is not enough, Instead of it quality of a life long learner should be used. He also suggested component no.VI and VIII are different areas for work for any leader. So item no.36, 28 and 77 must be reframed as in single item both the components are reflected.

Expert No. 3 Words like visionary and Life Long Learner will create confusion among the respondent. So, an explanatory note should be given Component III, sentence no. 3 was found with dual meaning. Thus, expert strongly suggested that in component VII the two words mentor and motivator must be separated. Similarly, in component IX, item no. 5 should be split in two sentences.

Expert No. 4 The word scale can be replaced with scale while explaining to the respondent language structure should be very easily understood and accordingly suggested in many items. Component VIII, item no.4 must be change from 'hierarchy' in administration to be changed in MIS (Management Information System). In component X, item 3 should be modified from 'promote the school' to 'setting rules for clarity in governance.

Expert No. 5 Suggested to prepare a request letter for each respondent instead of making it a part of the scale. The difference between 'perception' and 'view' must be very clearly defined. The word 'view' written in the request letter with perception should be removed. It was also suggested to give a separate number to each item.

Expert No. 6 Strongly insisted that space after each component can be given for written response. The number of items in each component should be equal. Coherence between component and items can be considered and set in particular section of the skill.

Expert No. 7 Suggested that in component II, item no. 8, 9 and in component II, item no. 1 & 6 are very long. It was suggested to cut them short without changing the meaning. From language point of view it was suggested not to use 'or' in any items.

Expert No. 8 Suggested that in component IX, item no.3 is not clear in meaning. In the same component item no.6 should be split into two items.

Expert No. 9 Suggested to review each component and no. of items. The scale must maintain the balance of external and internal personality of a principal, keeping in mind his or her job profile.

Expert No. 10 Suggested that the number of items in each component is adequate and there is a consistency between them. But after each component or key item, some space should be provided to trustees and teachers. In this space they can be encouraged to write some critical incidence-reason for specific ratings.

Expert No. 11 Was a language expert and provided some suggestions related to grammatical errors and in content validity. It was also suggested that in component IV, item no.1 in which the word 'climate' is not properly used. So, it should be replaced with 'healthy work climate'. It was also advised delete item no. 5 from component no. VII as it was irrelevant.

Expert No. 12 Informed that scale was good and all the items were related to the topic.

Expert No. 13 Appreciated the investigator for component selection. The only suggestion was to differentiate component no. I and VIII and they should not be overlap with each other.

Expert No. 14 & 15 Did not give a single suggestion and appreciated the scale.

After considering the valuable suggestions and discussion with the guide the following items were modified. The modified tool was utilized further for the pilot project.

3.7   SCORING PROCEDURE

Arbitrary scoring weights 5, 4, 3, 2, 1 are used for SA, A, NS, DA, S.D.A. respectively for statements with positive polarity. The scoring weights of 1, 2, 3, 4 and 5 are used for the respective statement with negative polarity. A teacher's score on the attitude scale is the sum of his rating on all items.

3.7.1   STEP-III – TRY OUT OF THE SCALE

The response sheet consists of two parts; the demographic details of the respondent to be filled in by him / her and the response performa. Name was deliberately not included in the demographic details to protect the privacy of the respondent as well as to give him/her a free hand to express his / her views. Very clear instructions which were to be easily understood by teachers and trustees were included in the response sheet. The principals of the schools selected for the pilot study were approached and explained about the preliminary draft of the scale. After seeking their consent, the response sheets were administered to a sample of 100 teachers and 10 trustees. 10 teachers and a trustee were selected from 10 schools. Out of these 10 schools, 5 schools were granted and 5 non granted. These 100 teachers and 10 trustees were not included for the final study. The response sheets after being answered by the teachers and trustees were collected from the principals on appointed time. Prior appointments were taken from respective teachers and trustees with the help of school principals. They were attended individually and all the scales were filled in the presence of the researcher.

PILOT STUDY SCHOOLS

Sr. No.	Name of School	Type of School	Teacher Respondent	Trustee Respondent
1	V.D.Desai Wadiwala Adajan, Surat.	Grant in Aid	10	1
2	I.N.Tekrawala High School Palanpur Patia, Surat.	Grant in Aid	10	1
3	Piperdiwala English Medium School Rander, Surat.	Grant in Aid	10	1
4	LNB Dalia High School Adajan, Surat.	Grant in Aid	10	1
5	Bachkaniwala Ring Road, Surat.	Grant in Aid	10	1
6	Sharda Vidyamandir Singanpore, Cause Way Road, Surat.	Non Grant in Aid	10	1
7	G.G.Zadafia Vidhyalaya A.K.Road, Surat.	Non Grant in Aid	10	1
8	Navchetan Vidhyalaya L.H.Road, Surat.	Non Grant in Aid	10	1
9	Riverdale Academy Adajan, Surat.	Non Grant in Aid	10	1
10	Hastaful Secondary School Palanpur Patia, Surat.	Non Grant in Aid	10	1
		5 + 5 = 10	**100**	**10**

Table 3.8 depicts the total number of schools, their types, number of teachers and trustees respondents in pilot study.

3.7.2 SELECTION OF STATEMENTS AND PREPARATION OF THE FINAL DRAFT

After collection of the response sheets, the responses were scored as mentioned in the scoring procedure. Thereafter total score of each respondent (teacher and trustee) was calculated. For 100 statements maximum score attainable on a scale was 550 minimum score was 100. These total scores of all the 110 teachers and trustees were arranged in descending order from the highest to the lowest and 20% of the teachers-trustees with high scoring totals and 20% of the teachers with the low scoring totals were considered for item analysis.

At confidence interval of 95% for value of $t \geq 1.95$ indicated that the average response of the high and low groups to a statement differences significantly. Twelve values were there whose t-values were not significant and those statements were rejected. Out of the rest of the statements 88 statements with significant t-values were selected including different statements in each component.

TABLE: 3.9

ITEMS DELETED FROM COMPONENTS

No.	Component	Deleted No. Items
I	Visionary	3
II	Life Long Learner	2
III	Academician	NIL
IV	Effective Communicator	2
V	Strong Role Model	1
VI	Community Leader	NIL
VII	Mentor and Motivator	1
VIII	Human Resource Manager	1

No.	Component	Deleted No. Items
IX	Care Taker	1
X	Administrator and Technocrat	1
	Total	**12**

Table 3.9 enlists the 12 items that were deleted from the components.

3.8   THE FINAL DRAFT

The final format of the perception contained 88 statements. The distribution of 88 statements as achieved after item analysis on ten components is shown in Table 3.10.

TABLE: 3.10

DISTRIBUTION OF 88 STATEMENTS ACCORDING TO COMPONENTS AND POLARITY

(SELECTED FOR FINAL DRAFT)

No.	Component	Statements No.
I	Visionary	1, 11, 21, 31, 41, 51, 61
II	Life Long Learner	2, 12, 22, 32, 42, 52, 62, 71
III	Academician	3, 13, 23, 33, 43, 53, 63, 72, 80, 87
IV	Effective Communicator	4, 14, 24, 34, 44, 54, 64, 73
V	Strong Role Model	5, 15, 25, 35, 45, 55, 65, 74, 81
VI	Community Leader/Reformer	6, 16, 26, 36, 46, 56, 66, 75, 82, 88
VII	Mentor and Motivator	7, 17, 27, 37, 47, 57, 67, 76, 83,
VIII	Human Resource Manager	8, 18, 28, 38, 48, 58, 68, 77, 84
IX	Care Taker	9, 19, 29, 39, 49, 59, 69, 78, 85
X	Administrator and Technocrat	10, 20, 30, 40, 50, 60, 70, 79, 86

The final perception scale was administered to 1000 teachers and 200 trustees selected from 100 schools which were randomly selected from Surat city schools. The data of 1000 teachers and 200 trustees were available for further analysis.

3.9   PSYCHOMETRIC PROPERTIES OF THE DEVELOPED SCALE

Reliability and the validity are essential to the effectiveness of developed scale. Validity is often thought of as the "accuracy" of the scale, while reliability is its "precision". Reliability of a scale is closely associated with its validity. A scale cannot be valid unless it is reliable. However, the reliability of a scale does not depend on its validity.

3.10   RELIABILITY

Reliability is concerned with the ability of a scale to measure consistently reliability. Reliability of the developed attitude scale was estimated by Cronback's Alpha as shown in table 3.11. It is expressed as a number between 0 and 1. For the developed, scale with 88 statements, Cronback's Alpha was found to be 0.963 showing that the scale has excellent consistency, and hence the scale is reliable. Standard error of measurement is 0.00.

TABLE: 3.11

REALIBILITY STASTICS (Case Processing Summary)

		N	**%**
	Valid	107	**97.3**
Cases	Excluded[a]	3	2.7
	Total	**110**	**100.0**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.961	**0.963**	100

3.11 VALIDITY

Validity is concerned with the extent to which an instrument measures what it is intended to measure. Scales that lack validity have systematic to them. When we attempt to validate a scale we try to demonstrate that our theoretical interpretation of the responses to the scale is correct. Validity therefore measures the match between a variable representing a true measure of the construct and the scale responses. Face validity of the developed scale was ensured by showing the same to the experts and modifications or the suggestions were followed. Construct validity was established by factor analysis. Items reveled that all the items were suitable items of the Likert type Most of the items exhibited adequate homogeneity in substantiating item validity with respect to the whole attitude scale the data were analyzed by means of principal component analysis, with Varimax rotation. The various indicators of factorability were good. The residual indicates that the solution was a good one. 13 items with Eigen values greater two (2) were found. The maximum Eigen value is 23.145 and minimum Eigen Value is 1.019. The higher the Eigen value, the higher is the value of variance explained by the factor. The Scree plot also indicated 13 components. Looking at the cumulative percentage, it was found that the 3 components extracted together account for 60.794% of total variance with Eigen values (23.145, 1.019). All five variables of Component-1 Strong Role Model with loadings of 0.687, 0.569, 0.615, 0.539, 0.541, four variables of Component-2 Effective Communicator with loadings of 0.581, 0.642, 0.540, four variables of Component-3. Community

Leader with loadings of 0.765, 0.731, 0.574, 0.552. The details are shown in Table 3.12

<p style="text-align:center; color:red;">TABLE: 3.12</p>

<p style="text-align:center; color:red;">PRINCIPAL COMPONENT ANALYSIS</p>

Item	Initial Eigen values		
	Total	**% of Variance**	**Cumulative %**
1	**23.145**	**23.145**	**23.145**
2	5.320	5.320	28.465
3	4.655	4.655	33.119
4	3.806	3.806	36.925
5	3.467	3.467	40.392
6	3.294	3.294	43.686
7	2.892	2.892	46.578
8	2.687	2.687	49.265
9	2.577	2.577	51.841
10	2.370	2.370	54.212
11	2.247	2.247	56.458
12	2.181	2.181	58.639
13	2.154	2.154	60.794
14	1.962	1.962	62.756

Item	Initial Eigen values		
	Total	**% of Variance**	**Cumulative %**
15	1.828	1.828	64.584
16	1.754	1.754	66.338
17	1.596	1.596	67.934
18	1.539	1.539	69.473
19	1.478	1.478	70.952
20	1.463	1.463	72.414
21	1.330	1.330	73.745
22	1.263	1.263	75.008
23	1.200	1.200	76.208
24	1.158	1.158	77.366
25	1.132	1.132	78.498
26	1.056	1.056	79.554
27	**1.019**	**1.019**	**80.573**
28	.970	.970	81.543
29	.931	.931	82.474
30	.887	.887	83.360
31	.883	.883	84.244
32	.802	.802	85.046
33	.752	.752	85.798
34	.746	.746	86.544
35	.698	.698	87.242
36	.682	.682	87.924
37	.670	.670	88.594
38	.626	.626	89.220
39	.601	.601	89.820
40	.590	.590	90.410
41	.531	.531	90.941
42	.513	.513	91.454
43	.479	.479	91.933
44	.459	.459	92.391
45	.441	.441	92.833

Item	Initial Eigen values		
	Total	% of Variance	Cumulative %
46	.412	.412	93.245
47	.409	.409	93.654
48	.405	.405	94.059
49	.377	.377	94.436
50	.345	.345	94.782
51	.332	.332	95.114
52	.319	.319	95.433
53	.299	.299	95.732
54	.293	.293	96.026
55	.283	.283	96.309
56	.254	.254	96.563
57	.248	.248	96.811
58	.240	.240	97.051
59	.225	.225	97.276
60	.197	.197	97.473
61	.186	.186	97.659
62	.171	.171	97.830
63	.166	.166	97.996
64	.163	.163	98.159
65	.152	.152	98.311
66	.150	.150	98.461
67	.140	.140	98.601
68	.132	.132	98.734
69	.124	.124	98.857
70	.117	.117	98.974
71	.101	.101	99.075
72	.100	.100	99.175
73	.092	.092	99.266
74	.082	.082	99.348
75	.077	.077	99.425
76	.076	.076	99.501

| Item	Initial Eigen values		
	Total	**% of Variance**	**Cumulative %**
77	.058	.058	99.559
78	.052	.052	99.611
79	.049	.049	99.660
80	.046	.046	99.706
81	.043	.043	99.749
82	.038	.038	99.787
83	.031	.031	99.819
84	.029	.029	99.847
85	.024	.024	99.871
86	.022	.022	99.894
87	.019	.019	99.913
88	.017	.017	99.930
89	.015	.015	99.945
90	.013	.013	99.958
91	.010	.010	99.968
92	.007	.007	99.975
93	.007	.007	99.982
94	.005	.005	99.987
95	.005	.005	99.992
96	.003	.003	99.996
97	.002	.002	99.998
98	.001	.001	99.999
99	.001	.001	100.000
100	8.509E-005	8.509E-005	100.000

FIGURE: 3.10 SCREE PLOT
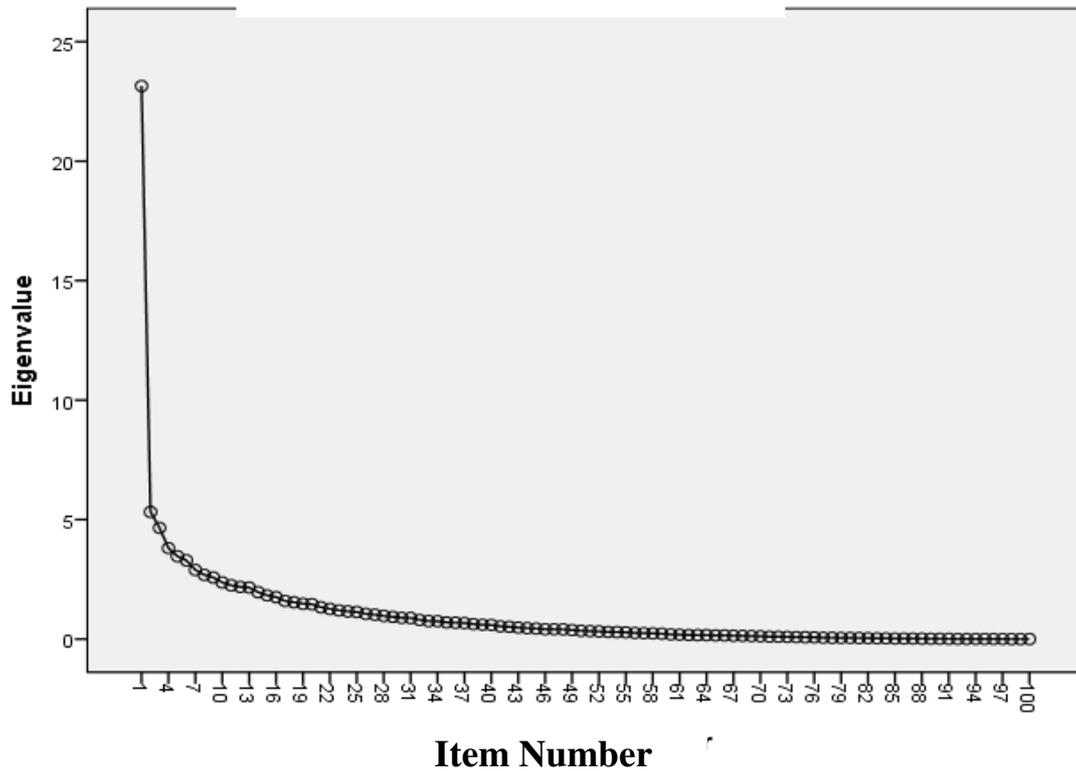
Table 3.12 and figure 3.10 shows that factors are to be retained for factor with Eigen values over one .All the Eigen values are shown in the decreasing order. The plot looks like the side of a mountain, and "scree" refers to the debris fallen from a mountain and lying at its base. Hence, items which scored more Eigen value were considered significant from the respective components.

TABLE: 3.13

DISTRIBUTION OF VARIOUS COMPONENTS

COMPONENT 1	COMPONENT 2	COMPONENT 3
Sharing values and goals	Self SWOT	Having good social and political relations
Creating trustworthy environment	No bias attitude	Making strong linkages with NGO
Takes others view point	Having strong values and morale	Seeking funds for deprived people
Act as a bridge among all	Being assertive	Sensitive to social issues

Maintaining proper records and management

Table 3.13 shows the components found by the principal component analysis and the variable that loads on them.

Looking at the cumulative percentage the investigator found that the 3 components extracted together account for 60.794% of total variance with Eigen values (23.145, 1.019). All five variables of Component-1 Strong Role Model with loadings of 0.687, 0.569, 0.615, 0.539, 0.541, four variables of Component-2 Effective Communicator with loadings of 0.581, 0.642, 0.540, four variables of Component-3. Community Leader with loadings of 0.765, 0.731, 0.574, 0.552.The psychometric test was which resulted Twelve values which had not t-values significant statements were rejected.

Hence, the Final tool was reliable and valid. Total items in the tool was 88.

3.12   COLLECTION OF DATA

All the data were gathered from the primary sources. For the collection of data from the teachers and trustees of the Secondary schools, investigator took permission from the DEO, Surat. After getting a written permission from the DEO, the investigator collected data from 100 schools in two different phases; which is presented under:

PHASE 1

In this phase the investigator personally visited the selected secondary schools of Surat City and first met the Principal of the particular school and explained the purpose of the study. The respective principals were given permission letter issued by the District Education Office, Surat. After getting the principals' approval, the investigator met the teachers who are teaching in class 9th to 12th. Forwarding letter was also drafted for these teachers. The self developed final perception scale were administered to them and explained to them the importance of data. The investigator assured that the data will be used only for the research work and will be kept confidential. As it was a scheduled meeting with the permission, on the spot data were collected by the investigator.

PHASE 2

In this phase, the investigator again personally visited the selected secondary schools of Surat City and first met the trust office administrators to get the appointment from the respective trustees of the particular school and explained the purpose of the study. The respective personnel scheduled meeting with the respective trustees. After getting the trustees' approval, the investigator met the trustees who are officially managing the school campus as trustees as per the norms by the Bombay Act 1030 and Charity Commissioner office. Forwarding letter was also drafted for theses trustees. The self developed final perception scale was administered to them and importance of data was explained to them. The investigator assured that the data will be used only for research work and will be kept confidential. As it was a scheduled meeting with the prior permission, on the spot data were collected by the investigator. Some of the trustees were not available in the respective schools, so exceptional ones asked to meet at other than school premises to collect their opinion. Thus all the trustees of selected schools were generous to provide required data.

3.13   DATA ANALYSIS

Data analysis was carried out using computer (SPSS Software), Data collection with the help of different tools were analyzed through appropriate methods. The data collected by perception scale were calculated analyzed with the help of Mean, Median, Standard Deviation and ANOVA. Analysis of variance is a parametric test. It requires certain assumptions to be taken care of. In the present study, sampling was done with randomization. Also score available was in interval scale. The nature of distribution was almost normal so ANOVA was applied. To know the nature of distribution skewness was also plotted. The data collected through the scale was analyzed and presented using frequencies and percentages.