
PLAN AND PROCEDURE OF THE STUDY

3.0 Introduction

In this chapter an attempt is made to describe the steps taken by the investigator to plan the research. It also deals with the nature of procedure adopted for the research. Planning included a sequence of points which helped the investigator to proceed step by step. Procedure included the methodology investigator adopted to achieve the objectives specified for the research. This chapter includes detailed description of design of the study, population, sample size, sampling techniques, source of data, collection of data and data analysis.

3.1 Method of the study

The investigator went through the available related literature, discussed with different teachers and resource persons, referred some books and developed an understanding about the methodology to be followed. According to Allport (1942), “if one has to know the people’s problem, one of the best ways is to ask them”. After reading and discussing, the investigator finally decided to adopt a survey method. There are two types of survey: Normative survey and Descriptive survey. Normative survey is a survey method that involves establishing norms for abilities, performances, beliefs, and attitudes. According to Best and Kahn (2009), descriptive survey is a survey method that describes and interprets ‘what is’. It is concerned with conditions and relationships that exists, opinions that are held, processes that are going on, effects that are evident or trends that are developing. It is primarily concerned with the present, although it often considers the past events and influences as they are related to current conditions. It also suggests some source of the future developments.

Descriptive study is characterized by disciplined inquiry and requires expertise, objectivity and careful execution. It develops knowledge and adds to what is already known. It is not merely a clerical routine of gathering and tabulating figures but involves a clearly defined problem and definite objectives. It requires expert and imaginative planning, careful analysis & interpretation of the data gathered. Logical

and skillful reporting of the findings is equally important. Survey method can be studied with number of aspects and details. Most of them basically enquire into the status quo. They make an attempt to measure what exists, what already came into existence and what was the procedure in the past and also can give some directions for the future developments.

Individuals of a society have different types of problems. Some arise due to personal reasons while some are societal issues. Thus it becomes evitable to study their problems at micro, macro and mezzo levels. The present study is an attempt in this direction. The study concerns with the academic and non academic problems of the women students of higher education. Special focus is laid in each category to know about and to be aware of the problems that women students face but fail to report. The problems may be related to academic or non academic aspects of women students and they were inquired in detail by the investigator. The study aimed at studying, categorizing and highlighting the problems of women students enrolled in the year 2013-2014 in The Maharaja Sayajirao University of Baroda, Vadodara.

3.2Population

The present study was an attempt to trace out the problems faced by women students. This study also tried to find out the nature of the problems reported to the authorities and the measures taken by the authorities to solve them. The present study was based on the women students of The Maharaja Sayajirao University of Baroda, Vadodara. The population of the present study comprised of 15142 women students enrolled in Bachelors' and Masters' courses during the year 2013-2014. The authorities included "Deans of Faculties" and "Dean of Students", to whom the women students can approach at times of need and difficulties. The University had thirteen faculties. Each faculty had a "Dean of Faculty" and a "Dean of Students". Thus in thirteen faculties' twenty six deans constitute the population for this study. Thus population for the present study comprised of:

- 15142 Women students
- 13 Deans of Faculties
- 13 Students Deans

3.3 Sample

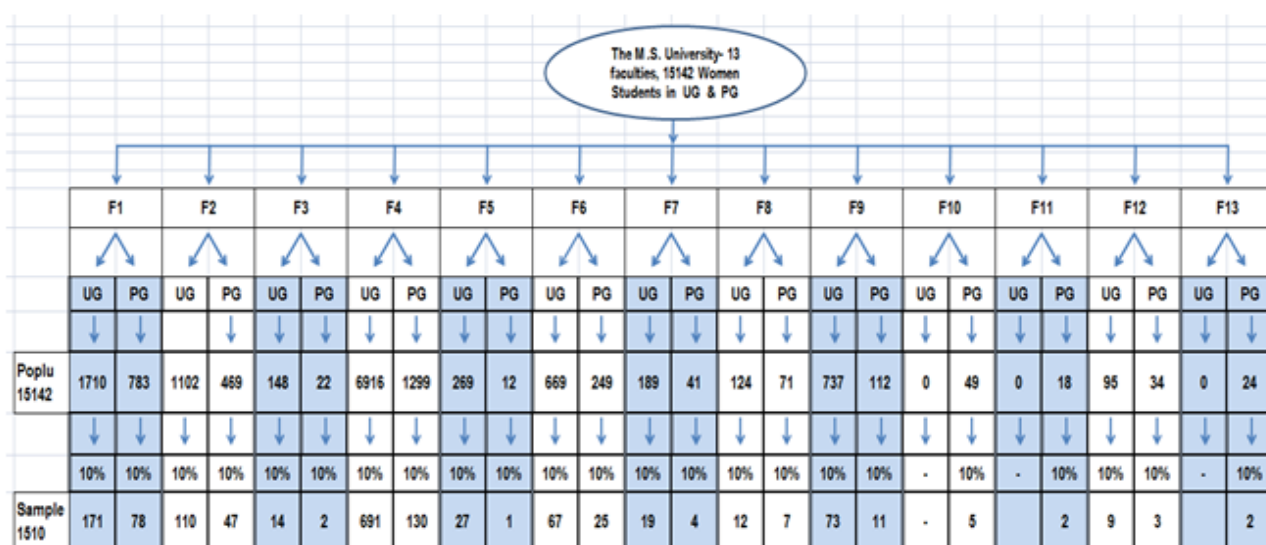
Studying the entire population was difficult, costly and time consuming and thus sampling was both necessary and advantageous. It helped the investigator to reduce expenses-in time, effort and money. The investigator took care that sample should be representative of the population. For the present study, to collect the data from Deans of Faculties and Deans of Students, the entire population was considered as sample. To collect the data from women students, sampling technique was employed and since the population was large, ten percent of the total population was selected as sample. Table 3.1 describes the population and the sample selected for the present study.

Table 3.1
Population and sample size of the study

Type	Population size	Sampling Technique	% of population selected	Sample size
Deans of Faculties	13	-	100	13
Dean of Students	13	-	100	13
Women students	15142	Stratified Random Sampling	10	1510

In order to meet the basic essential criteria of sampling, in the present study the investigator used stratified random sampling method. In the **first step**, stratification

Table 3.4: Stratified Sampling Method



The diagram illustrates the stratified sampling process. It starts with a central oval representing the total population: "The M.S. University- 13 faculties, 15142 Women Students in UG & PG". Arrows lead from this oval to 13 columns representing different faculties (F1 to F13). Each faculty column is further divided into two rows: "UG" (Undergraduate) and "PG" (Postgraduate). Arrows then lead from these rows to a table showing the population size for each category. Finally, arrows lead from the population size table to a table showing the sample size for each category, with a 10% selection rate indicated for each.

	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12	F13
UG	1710	1102	148	6916	269	669	189	124	737	0	0	95	0
PG	783	469	22	1299	12	249	41	71	112	49	18	34	24
Population (Poplu)	15142												
Sample	171	110	14	691	27	67	19	12	73	5	2	9	2

Where F-1=Faculty of Arts, F-2= Fac. of Science, F-3=Fac. of Education & psychology, F-4=Fac. of Commerce, F-5=Fac. of Medicine, F-6= Fac. of Technology & Engineering., F-7= Fac. of Law, F-8= Fac. of Fine Arts, F-9= Fac. of Family & Community Sciences, F-10= Fac. of Social Works, F-11= Fac. of Management Studies F-12= Fac. of Performing .Arts, F-13= Fac. of Journalism & Communication.

UG= Under Graduate (Bachelors') course, PG= Post Graduate (Masters') course.

was performed. The Maharaja Sayajirao University of Baroda, Vadodara had thirteen faculties. The faculties are considered as Strata one. The faculties conduct undergraduate (UG) and postgraduate (PG) courses. The PG and UG courses constitute strata two. Table 3.2 shows the details of thirteen faculties.

Table 3.2
List of Faculties of The MSU

Sr. No.	Strata one with its notation	Name of the faculty
1	F1	Faculty of Arts
2	F2	Faculty of Science
3	F3	Faculty of Education and Psychology
4	F4	Faculty of Commerce
5	F5	Faculty of Medicine
6	F6	Faculty of Technology and Engineering
7	F7	Faculty of Law
8	F8	Faculty of Fine Arts
9	F9	Faculty of Family and Community Sciences
10	F10	Faculty of Social Works
11	F11	Faculty of Management Sciences
12	F12	Faculty of Performing Arts
13	F13	Faculty of Journalism and Communication

(“F” indicates Faculty)

The **second step** was to make a record of the total number of women students enrolled in The MSU. It was recorded through the University’s official report of the year 2013-14, that there were 15142 women students enrolled in various UG and PG courses offered by The MSU. Further number of women students enrolled in UG and PG courses of each faculty was noted. A detailed table was thus framed and studied for further sampling and data collection. Each faculty was considered as a stratum one and its PG and UG courses were considered as strata two. The table 3.3 highlights the details of women students enrolled in The M.S. University during the year 2013-14. It shows the number of women students of strata one and strata two of all the thirteen faculties.

The **third step** was to select sample for the purpose of data collection. Ten percent of sample was selected from strata two. Stratified random sampling technique was

employed. Ten percent of the women students enrolled in UG course and ten percent of the women students enrolled in PG course, of faculty one (F1) were selected. Similarly from faculty two (F2), ten percent of the women students enrolled in UG

Table 3.3
Enrollment in different Faculties of The MSU

Strata	Stratum One Faculty	Stratum Two		Total Women students in PG and UG
		No. of women students in UG	No. of women students in PG	
F1	Faculty of Arts	1710	783	2493
F2	Faculty of Science	1102	469	1571
F3	Faculty of Education and Psychology	148	22	170
F4	Faculty of Commerce	6916	1299	8215
F5	Faculty of Medicine	269	12	281
F6	Faculty of Technology and Engineering	669	249	918
F7	Faculty of Law	189	41	230
F8	Faculty of Fine Arts	124	71	195
F9	Faculty of Family and Community Sciences	737	112	849
F10	Faculty of Social Works	00	49	49
F11	Faculty of Management Sciences	00	18	18
F12	Faculty of Performing Arts	95	34	129
F13	Faculty of Journalism and Communication	00	24	24
	TOTAL	11959	3183	15142

course and ten percent of the women students enrolled in PG course were selected. Likewise from the remaining each of the other faculties (F 3 to F 13) similar approach was used. A detailed table was prepared to describe the stratified sampling technique that was used. The procedure can be studied through table no.3.4

3.4 Tools

Based on the objectives of the study, the investigator constructed questionnaire and interview schedule to collect the data. These tools were validated by experts.

The present study involved the collection of primary data through the use of questionnaire and semi structured interviews. The primary data was collected afresh and for the first time and thus considered to be original in nature. Direct communication with respondents was sought by means of questionnaire and personal interviews were conducted. Questionnaire is a data collecting instrument through which the respondents answer questions or respond to statements in writing. According to Best and Kahn (2009), “A questionnaire is used when factual information is desired. When opinions rather than facts are desired, an opinionnaire or attitude scale is used. Of course, these two purposes can be combined into one form that is usually referred to as questionnaire”. For the present study the investigator constructed questionnaire and interview schedule that was used a research tool to collect the data.

The investigator gathered information about the students and their problems through the available literature, research works, reference books and university project reports. The tools were prepared with proper care and major aspect of the content area was adequately covered by the items in appropriate proportion. In the present study following research tools were selected for collecting the requisite data:

1. Questionnaire for women students
2. Semi structured Interview for “Deans of Faculties”.
3. Semi structured Interview for “Deans of Students”.

3.4.1 Questionnaire for women students

Once the population and the sample size were decided, the investigator constructed the questionnaire to be administered to the selected sample of women students of the university. Proper care was taken while construction of the questionnaire regarding its language, reliability, usability and validity. Review of related literature indicated that many of the studies of similar nature that have opted for qualitative method of research have successfully used questionnaire and interviews for the purpose of data

collection. For construction of the questionnaire, the steps followed were in accordance to as mentioned by Mouly (1970).

The **first step** in the preparation of questionnaire is to attain a thorough grasp of the field, of the objective of the study and of the nature of the data needed. The investigator studied various published papers and journal articles on The MSU, visited its library, reviewed the available literature and located some related studies that have used similar tools of data collection. Talesara (1983), Pradhan (1986), Sahasrabuddhe (1995), Santwani (1996) and Patel (2007) conducted survey type of research and used questionnaire for collecting the data. The above research studies proved useful to the investigator in the following ways:

- To know the areas that can be probed
- To divide the questionnaire into required sections aspect wise
- To frame questionnaire having open and closed ended items
- To develop simple and 'to the point' questions/items in the questionnaire
- To avoid extra items
- To frame a concise questionnaire

The **second step** in the preparation of questionnaire was meeting and interacting with the individuals who were familiar with the field. The advantage that the investigator possessed was of that being a student of this university and having studied in this university for seven years. Thus experiences and inputs of the investigator further strengthened the questionnaire items. To avoid any personal biasness, the investigator conducted unstructured interviews with teachers, former students, current male and female students, staff at Women Study Centre and individuals working with different NGOs (Non Governmental Organizations). The investigator discussed some important topics like scholarships and facilities provided to the students of The M.S.University and the special privilege given to the women students. From the university annual reports, it was known that the The M.S.University has half of its population of women students. The investigator thus inquired with the authorities about the teaching learning process, safety and infrastructure facilities provided to the

women students, the number of wash rooms, recreation rooms and number of women hostels available. The investigator also being a student is aware of these issues and also cross examined by personal observation and by noting the reactions of the interviewers. It helped the investigator to list the major problem areas faced by women students. Investigator then categorized the problems into two major areas i.e. academic and non academic matters.

In the **third step**, the investigator realized that there is a limit to which the respondent can be made to answer the questions in a questionnaire. The investigator could not expect too much out of the respondents and thus limited the questions to a reasonable number and yet made the respondents answer all the important items of the research problem. The investigator eliminated those questions pertaining to data which could be found readily and more accurately elsewhere from other reliable sources. In the present study, this point was taken care of by the investigator and some of the data was collected directly from the university diary and Annual reports of the university.

In the **fourth step**, length of the questionnaire was taken into consideration. The unnecessary length of the questionnaire was reduced to minimum but care was taken not to tarnish the basic purposes of asking the questions. If two or more questions tend to generate similar responses, one of them was sacrificed. It was kept in mind that every item must serve a definite purpose or face elimination.

In the **fifth step**, the investigator prepared the first draft of the questionnaire. (**Appendix I**). It had 146 questions with open and closed ended items. The questionnaire had fourteen different components and each component had different number of items. The components were: Library, Hostel, Home/family/parents, Medium of instruction, Class room/teachers/teaching, Women/self, Exams/evaluation, Practical /project, Scholarships, Home/hostel to college, Male v/s female, Extra activities/sports/health, Campus/university facilities, and Job/career. These different components had 146 questions. The 146 questions were classified category wise as shown below in table 3.5:

Table 3.5
Dimensions for questionnaire (first draft)

No.	Components	No. of Questions
1	Library	13
2	Hostel	05
3	Home/family/parents	17
4	Medium of instruction	05
5	Class room/teachers/teaching	20
6	Women/self	37
7	Exams/evaluation	08
8	Practical /project	02
9	Scholarships	04
10	Home/hostel to college	02
11	Male v/s female	03
12	Extra activities/sports	11
13	Campus/university facilities	13
14	Job/career	06
	TOTAL	146

In the **sixth step**, sequencing of the questions was taken into consideration and items that were general were placed in the beginning. The detailed and specific questions followed the general questions and were kept towards the end of the questionnaire.

In the **seventh step**, the questionnaire was discussed with the guide and changes were made in the following manner:

- Questions inquiring into the ‘problems’ of women students’ were maintained.
- Questions pertaining to personal habits, needs and demands were deleted.
- Questions that were having similar meanings were deleted.
- Four Sections that were deleted are: Exams, Practical, scholarships and home/hostel to college

- Sections were numbered.
- Forwarding letter was added.
- A separate section of personal profile was added.

Section wise suggestions are described in the table 3.6 below:

Table 3.6
Section wise suggestions incorporated in the first draft of questionnaire

No.	Components	Changes made
1	Library	Sequence changed for Q.2,6,11,12,13 Sub questions added in Q.11 Q.1,3,4,5,7,8,9,10 deleted
2	Hostel	Title head modified Q.1 , 2 reframed Q.3 new question added Q.4 & 5 deleted
3	Home/family/parents	Title head modified Q.1, 10,11, 12 made into one question Q.3 deleted Q.2& Q.4 modified and made into one question. Q. 5,6,7,8,9, deleted
4	Medium of instruction	Q.3,4 & 5 deleted
5	Class room/teachers/teaching	New question added as Q.4 Q.1 modified Q 2-9,13,14,17,18,19,20 deleted Q.10 reframed, divided into two Q.11 shifted as Q.3 Q.12 shifted as Q.5
6	Women/self	Section head changed into “Higher Education” Q.7 modified and kept as Q.1 Q.8 deleted Q.9 modified and kept as Q.3 Q.10 modified

		Q.1-6,11, 12,13,14,16,17,19,20,21,24 -37: deleted Q.15 modified and placed as Q.7 Q.18 modified and placed as Q.6 Q.22 modified and placed as Q.8 Q.23 modified and placed as Q.9
7	Exams/evaluation	Section deleted Q.7 shifted to section 6 with modification
8	Practical /project	Section deleted Q.1 shifted to Q.9 of section 6
9	Scholarships	Section deleted
10	Home/hostel to college	Section deleted
11	Male v/s female	Title changed to “Male/ Female issues” Q.2 and Q.3 merged and modified Q.3 added new
12	Extra activities/sports	Q.1 option deleted Q.3 modified Q.4 deleted Q.5 & Q.7 merged and modified Q.6, 8,9,11 deleted One new question added as Q.5
13	Campus/university facilities	Q.1,2,4,7,9,10 deleted Q.3 shifted to Q.1 Q.5 modified and shifted to Q.2 Q.6 shifted to Q.3 Q.8 modified and shifted to Q.4, converted into open-ended Q.11 modified and shifted to Q.5, converted into open-ended Q.12 modified and shifted to Q.6, converted into open-ended Q.13 shifted to Q.7
14	Job/career	Q.1,2 & 3 modified and converted into open-ended Q. 4,5 & 6 deleted

After making the necessary changes, the second draft of questionnaire was ready. It had ten components, named and numbered as ten different sections. It included fifty one questions of the types-open, closed and mixed. The following table 3.7 shows the ten components in the second draft.

Table 3.7
Dimensions for questionnaire (Second draft)

No.	Components	No. of Questions
1	Library	05
2	Hostel	03
3	Home	03
4	Medium of instruction	02
5	Teachers/teaching	08
6	Higher Education	10
7	Male/Female issues	03
8	Extra activities	06
9	Campus/university facilities	07
10	Job/career	03
	TOTAL	51

In the **eighth step**, the questionnaire was given to various experts since it should be scholarly constructed and appropriate for pilot study. The experts were individuals working in teacher educational institutes, resources persons of different faculties, knowledgeable people working in women education & related fields, executives of NGOs and research scholars. It was meant to check for content validity, language and grammar corrections, concept clarity, clarity of questions and expected mode of responses.

Table 3.8 shows the category of experts to whom the proposed questionnaire was sent.

Table 3.8
Category of personnel

Sr.No.	Category of experts	No. of experts
1	Professors/readers/lecturers of University	05
2	Professionals in the fields of “women study”	04
3	Member of NGO	01
4	Research Scholars	11
	Total	21

Table 3.8 shows that there were four categories of experts to whom the questionnaire was sent for content validity check and language aspect. The total number of experts was twenty one and details of the experts can be seen in **Appendix II**.

Based on the objectives of the study, the experts gave their suggestions and responses about various items in the questionnaire. After going through their constructive feedback, following changes were made in the tool:

- List of ‘instructions’ were placed immediately after the forwarding letter. It was made precise with minor corrections.
- To know about the socio-cultural background of the respondent, items were added in the ‘personal details’ section.
- Change in the sequence and arrangement of components were made as per the suggestions received by the experts.
- Sub numbering the options in the questions were deleted and symbols or signs were used. (a, b, c, d were replaced by bullets)
- First year students are usually influenced by the college atmosphere, by their friends and the admission procedure. These questions were suggested to be incorporated and thus a new section was added as “College and friends”. It had four new questions.
- Section 2 and 3, were merged as one under the title “Place of Stay”.

- The questionnaire was divided into two broad categories - Academic and Non academic.

The tool was ready for administering into pilot study. For the pilot study fifteen women students studying in The M.S.University of Baroda were randomly selected. Out of the fifteen women students selected for pilot study, ten women students were from Bachelor courses of The M.S.University of Baroda and five were from Masters' course of The M.S.University of Baroda. The purpose of conducting a pilot study was to assess the time required by the women students to respond to all the items of the questionnaire and to review the extent of language clarity. The pilot study would also enable the investigator to get a first hand field experience prior to the actual data collection. The investigator administered the tool and noted the time taken by each respondent to complete the questionnaire. The investigator also observed the facial expressions of the women students while they were responding. After the students submitted the questionnaire, the investigator interacted with them orally. They appreciated the items included in the questionnaire and shared some more information which was not a part of the questionnaire.

Women students who participated in pilot study, provided following suggestions for improvement of the tool:

- Font size should be increased
- In Q.7 of section 4, more options be added, for example-Self defense
- Questions related to Ladies rooms should be incorporated
- More clarity be provided in sub question nos.6 & 7 of section 2
- More space should be provided at the end of open ended items.

Section wise suggestions that were incorporated are described in the table 3.9 below.

Table 3.9
Section wise changes made in the questionnaire (second draft)

No.	Components	Changes made
1	Medium of instruction	No change
2	Teachers/Teaching	Q.6 sub question-modified Q.7 sub question-modified
3	College and friends	No change
4	Higher Education	Q.7 option of “self defense” added
5	Library	No change
6	Job/career	No change
7	Male v/s female issues	Q.3 modified, options added
8	Extra activities/sports/Health	No change
9	Campus facilities	New question on “ladies room” added
10	Place of stay	No change

After studying the filled up questionnaires obtained from pilot study, investigator discussed with the guide and prepared the final draft, as seen in **Appendix III**.

The entire questionnaire was divided into two broad categories: Part-I: Academic issues and Part II: Non academic issues. Part I had six components and part II had four components, as shown in the table 3.10

Table 3.10
Dimensions for questionnaire in the final draft

Section No.	Part 1 Academic components	No. of Questions	Section No.	Part 2 Non Academic components	No. of Questions
1	Medium of instruction	02	7	i) Male/female issues.	03
2	Teachers/Teaching	07	8	ii) Extra activities /Sports /Health	06
3	College and friends	04	9	iii) Campus facilities	07
4	Higher education	09	10	iv) Place of stay	03
5	Library	06			
6	Job/career.	04			
	Total number of questions in part 1	32		Total number of questions in part 2	19
TOTAL 51					

Finally the tool to be administered was ready for use. It had fifty one questions of open ended, closed ended and mixed type. Final editing was done and attempt was made so that the tool looked attractive and decent. Required copies were kept ready for administration.

3.4.2 Semi structured interview

Based on the objective 2, the investigator prepared semi structured interview to probe into problems those women students brought to the notice of the authorities and the types of measures taken by the authorities to solve the problems. It appears at first thought that interviewing is just similar to a conversation and more or less like a question answering procedure, but in reality it is a special technique that can be learned and cultivated. Though interview and conversation superficially look similar but actually they are not. Interviews are something more than a conversation, it has a purpose, it has to meet the demands of the objective and aim of the research. It involves a set of assumptions and understandings about the situation. It needs prior preparations about the questions to be asked, the way it had to be put up and the particular sequence in which they can be asked. The investigator should possess the necessary skills and readiness to record the proceedings either in writing or by use of electronic media. Interview is usually preferred by the respondents (over questionnaire or other tools), since no writing on the part of respondent is needed here. Respondents are more willing to talk than to write.

3.4.2.1 Semi structured interview for “Deans of faculties”

In the present study the investigator prepared semi structured interview for the Deans of Faculties of thirteen faculties of The M.S. University of Baroda. ‘Deans of Faculties’ are the top most post of a faculty where a senior professor is appointed for a term of 3 years. It is an administrative post, where apart from teaching work, the dean has to look into administration of the entire faculty and attend to student’s needs and issues.

The investigator thus considered it apt to interact with this important post of each faculty. The investigator thus would get an insight into the types of problems that are brought to the notice of authorities. The investigator would also learn about the measures taken by the authorities to solve the problems of women students.

This interview schedule was prepared with the help of the step of steps given by Turney and Robb (1971).

The **first step** was to develop a frame work about what the investigator wanted to yield after asking the set of questions. It was meant to understand what kind of data the interview should produce. This was done after the tool of questionnaire was administered to the women students and the investigator got an idea about several existing issues by verifying the collected data.

In the **second step** investigator discussed with the guide whether structured, unstructured or semi structured interview would be beneficial. The investigator then decided to go for semi structured interview schedule so that the respondent can be probed into, more clarity can be obtained, questions can be framed and added 'on spot' whenever needed.

In the **third step** the investigator had to decide how to record the results of the interview. There were two main options available-either to write down simultaneously when the responses are being given or to use some electronic recording device. The latter was simple and reliable but it needed permission of the respondent, which might not be easy to obtain. The former was complex since investigator's writing speed and biasness may creep in, but the investigator was confident about using it without missing out any information. The investigator decided to note down the information given during the interview without being bias. So the investigator opted for the former (to note down the responses manually in a notebook). For using this technique successfully, investigator practiced it through mock interviews.

In the **fourth step** the items in the semi structured interview schedule were drafted and a rough outline was prepared. Questions were drafted according to the aim of the research and finally the schedule was ready. It had thirty questions. Questions were sequentially arranged. General questions were kept towards the beginning. Detailed & specific question were kept towards the end. Length of the interview was also considered, it was made precise and concise. It was discussed with the guide and sequence was re done and some questions were deleted and some were reframed. Thus the first draft of semi structured interview schedule (**Appendix IV**) was ready. It was then sent to experts for content clarity, language and validity check. The experts were individuals working in educational institutes, resources persons of different

faculties, knowledgeable people working in women education & related fields, and research scholars. Table 3.8 shows that there were four categories of experts to whom the questionnaire was sent for content validity check and language aspect. The total numbers of experts were nine and details of the experts can be seen in **Appendix V**.

The experts appreciated the content and said that it was clear and easy to follow. However the experts gave suggestions for improving the tools. Constructive feedback as follows, was given by experts to modify the tool.

- The experts noticed that the interview schedule had four main aspects i.e.
 - i. Motivation given by the authorities to women students on their special achievements.
 - ii. Types of problems brought to notice of authorities by the women students
 - iii. Measures taken by authorities to solve problems
 - iv. Specific problems of women students reported to the authorities.

Thus the experts suggested that interview schedule should be divided into four main units (For example: A, B, C and D)

- Question 3 related to ‘some issues’ was ambiguous and not specific. Thus it should be modified and made clearer. It could be modified as main question with some sub items.
- Question 4 to Question 27 was a list of types of problems that women students might be reporting to the authorities. Thus Question 4 to Question 27 can be made as sub items.
- Question 10 contains multiple areas. It should be framed into simple and clearer statement with specific question in each sub items.
- Question 19 is one of the important areas for women students. It contained multiple items. Thus it should be split into sub questions with specific points.
- Date of visit and name of the faculty visited should be added in the interview schedule.

Based on suggestions given by experts and after discussing with the guide, the tool was modified. The second draft of the interview schedule contained four units A, B, C & D.

- ‘Unit A’ was pertaining to the types of problems brought to notice of authorities by the women students. It had three main questions and twenty five sub questions.
- ‘Unit B’ was pertaining to the motivation given by the authorities to women students on their special achievements. It had one question with further probing, if required.
- ‘Unit C’ was meant to explore the measures taken by authorities to solve problems brought to their notice. It had one question.
- ‘Unit D’ was to get an insight into specific cases known to the authorities related to women problems. It had one question.

Question 4-27 were re numbered and considered as sub questions in ‘Unit A’. Question 10 and question 19 were split into simpler and more specific ones. For the convenience of the investigator and for proper reporting, a column of personal profile was added which contained details like: date of visit, name of faculty visited, name of the respective Deans of Faculties and Deans of students. The semi structured interview schedule was thus finalized. A pilot study was conducted with a former Dean. No major suggestions were received and thus the final draft of semi structured interview was ready for use.(**Appendix VI**). It consisted of six main questions, twenty five sub questions and a column of profile of faculty authorities

3.4.2.2 Semi structured interview for “Dean of students”

In the present study the investigator prepared semi structured interview for the “Deans of Students” of thirteen faculties of The M.S. University of Baroda. ‘Dean of Students’ is a special post where a lecturer or senior teaching staff member is appointed for three years to look into the matters of students and their problems. He/she is supposed to be friendly with the students so that the students feel free to share their issues with him/her. He/she orients the students towards the facilities, scholarship, computer, library books, placements, extracurricular activities, state and

national level participation of students, and also deals with any problems or inconvenience that students face. Such problems may be academic, social, sports, library, exam related, teaching related, facilities related, students elections, parking, harassment etc.

The investigator thus considered it apt to inquire with one of the important posts of each faculty to get an insight into the problems brought to notice of authorities. The investigator would also get information about measures taken by the authorities after women students report about the problems they are facing in The MSU.

The purpose of obtaining the data from the Dean of students was same as that of Deans of Faculties and thus the same tool was used in both the cases. The interview was meant to probe further, after collecting data from women students, whether the women students approach the authorities regarding their issues and what measures are then taken to solve the problems faced by women students. The tool given in **appendix VI** was used when the investigator conducted semi structured interview with the Dean of Students.

3.5 Source of data

For the present study, the investigator relied on primary sources for data collection. All the data gathered were from primary sources. In terms of the objective no.1, where it was required to study the academic and non academic problems faced by the women students of The M.S. University of Baroda, the investigator collected the necessary data from the women students themselves, with the help of questionnaire. Regarding objective no.2 (studying the kinds of problems brought to the notice of authorities and measures taken by them), the investigator collected data from the concerned authorities themselves. The investigator obtained data from the ‘Deans of Faculties’ and ‘Deans of Students’ with the help of semi structured interview. The following table 3.11 indicates the sources of data collection as per the objectives.

Table 3.11
Source of data

Number	Nature of the objective	Tools	Source of data
Objective 1.	To study the problems of women students	Questionnaire	Women students
Objective 2.	To study the kinds of problem brought to the notice of authorities	Semi structure interview	‘Deans of Faculties’ & ‘Dean of Students’

3.6 Collection of data

Data were to be collected from women students studying in different courses of different faculties of The M.S.University of Baroda. The data were also to be collected from the Deans of Faculties and Deans of Students of different faculties. Being a descriptive survey, the sample size was huge and spread over thirteen faculties. The investigator approached the Deans of each faculty with a request letter to grant permission (**Appendix VII**) to administer the tools. Once the permission was granted the investigator personally went to different faculties to collect the data. One of the permission letters, which indicates that the investigator was allowed to collect data, can be observed in **Appendix VIII**. The data were collected in two phases: first from the women students and secondly from the Deans of Faculties and Deans of Students. Phase wise data collection is described below:

3.6.1 Phase one- data collected from women students

The required data were collected during the non vacation period from October 2013 to March 2014, and care was taken that the students’ study schedule was not disturbed. Once the permission from the respective Deans was granted, the investigator approached the teachers of that faculty. Some of the teachers helped by giving his/her period to the investigator to collect data , while some teacher asked the women students to gather at a particular time at a particular place. Some of the teachers took the help of other teachers, combined two classes and supported the investigator. The investigator collected data in the classrooms, in canteens, in corridor, during youth festival practice, also in hostel, university gardens, during recess hours and also during seminars held at certain faculties.

Once the women students were ready for administering the tools, the investigator greeted them, introduced herself stated the purpose of her visit, informed them about the procedure, told about the expected time it would consume and assured them that the information they would provide would be used purely for research purpose. The investigator also asked them to share as much information as possible basically because it was ‘their’ research and the women students would be, by and large benefitted by such research works. Thirty minutes were given to them to fill up the questionnaire and the investigator was all the time standing by their side. If the respondents had any difficulty in understanding the meaning of the questions, the investigator would assist them. At the end of each session, the investigator thanked and appreciated the efforts put by the respondents. In some of the filled up questionnaire, if the investigator found some ambiguity, she did not hesitate to call the respondent on phone and got the clarification. Few of the women students came up to the investigator and appreciated the work she is carrying on. They were curious to know the findings and also inquired if this research would give them some direct benefits. Most of the Deans of the faculties also appreciated the attempt of the researcher and asked her to forward the research findings to them after the analysis is done. Such appreciation motivated the investigator and boosted her morale. The period of visit made in each faculty for purpose of data collection is shown in the table 3.12.

Table 3.12
Faculty wise data collection

Period of visit	Faculty visited for data collection
Oct 2013	Faculty of Family & Community Science Faculty of Social Works
Nov 2013	Faculty of Arts Faculty of Science
Dec 2013	Faculty of Technology & Engineering Faculty of Performing Arts Faculty of Commerce
Jan 2014	Faculty of Education & Psychology Faculty of Management Studies Faculty of Law
Feb 2014	Faculty of Fine Arts
Mar 2014	Faculty of Medicine Faculty of Journalism & Communication

During the six months time from October 2013 to March 2014, the investigator visited thirteen faculties personally and collected the data. The collected data were larger than the required size. It was done so that if there are any incompletely filled forms, they can be discarded without disturbing the actual sample size. Table 3.13 indicates the sample size of which the data was collected.

Table 3.13
Sample for objective 1

Strata	Faculty	Sample size
F1	Faculty of Arts	249
F2	Faculty of Science	157
F3	Faculty of Education and Psychology	16
F4	Faculty of Commerce	821
F5	Faculty of Medicine	28
F6	Faculty of Technology and Engineering	92
F7	Faculty of Law	23
F8	Faculty of Fine Arts	19
F9	Faculty of Family and Community Sciences	84
F10	Faculty of Social Works	5
F11	Faculty of Management Sciences	2
F12	Faculty of Performing Arts	12
F13	Faculty of Journalism and Communication	2
	TOTAL	1510

3.6.2 Phase two- data collected from Deans of faculties and Deans of students

In this phase, the investigator conducted semi structured interviews with the Deans of Faculties and Deans of Students of thirteen faculties. It was conducted in the month of July 2014. By this time the investigator had already approached the Deans of Faculties to secure permission for her first phase of data collection. Thus most of the Deans were aware about the investigator's research work and when she called them for an appointment they readily gave an appointment. For the purpose of convenience

in data collection, the investigator tried to get appointment of both the Deans (Dean of Faculty and Dean of Students) of a faculty on the same day. The sample for the present study was thirteen “Deans of Faculties” and thirteen “Dean of Students”. Table 3.14 shows the sample size faculty wise.

Table 3.14
Sample for objective 2

No.	Faculty	Dean of Faculty	Dean of Students
1	Faculty of Arts	1	1
2	Faculty of Science	1	1
3	Faculty of Education and Psychology	1	1
4	Faculty of Commerce	1	1
5	Faculty of Medicine	1	1
6	Faculty of Technology and Engineering	1	1
7	Faculty of Law	1	1
8	Faculty of Fine Arts	1	1
9	Faculty of Family and Community Sciences	1	1
10	Faculty of Social Works	1	1
11	Faculty of Management Sciences	1	1
12	Faculty of Performing Arts	1	1
13	Faculty of Journalism and Communication	1	1
	TOTAL	13	13
		TOTAL 26	

To begin with interview, the investigator greeted the Deans, introduced herself and the stated the purpose of visit. The investigator presented to them a copy of research proposal, narrated the objectives of the study, described the population and sample for the research, and informed them about the tools used. The investigator told them that the interview would last for 20-30 minutes and assured them the information they will provide would be used purely for research purpose and will be kept strictly

confidential. The investigator collected the data with the help of semi structured interview. Deans of Faculties and Dean of Students were very cooperative and patiently answered all questions. The Table 3.15 shows faculty wise date of data collection which was done personally by the investigator.

Table 3.15
Schedule of data collection (For objective 2)

1No.	Faculty	Interview Date	
		Deans of Faculties	Dean of Students
F1	Faculty of Arts	08-07-2014	09-07-2014
F2	Faculty of Science	05-07-2014	05-07-2014
F3	Faculty of Education and Psychology	04-07-2014	05-07-2014
F4	Faculty of Commerce	16-07-2014	10-07-2014
F5	Faculty of Medicine	15-07-2014	15-07-2014
F6	Faculty of Technology & Engineering	11-07-2014	11-07-2014
F7	Faculty of Law	12-07-2014	14-07-2014
F8	Faculty of Fine Arts	11-07-2014	11-07-2014
F9	Faculty of Family and Community Sciences	12-07-2014	10-07-2014
F10	Faculty of Social Works	04-07-2014	04-07-2014
F11	Faculty of Management Sciences	12-07-2014	15-07-2014
F12	Faculty of Performing Arts	10-07-2014	10-07-2014
F13	Faculty of Journalism and Communication	16-07-2014	16-07-2014

3.7 Analysis of data

The data collected by the investigator with the help of different tools were analyzed using appropriate methods. The data collected through questionnaires were manually fed into the computer through 'Google forms', specially designed for the present study. The responses were analyzed using frequency, percentages and content analysis. The data collected by semi structured interview was analyzed using frequency, percentages and content analysis.

Content analysis represents a more sophisticated level of investigation, concerned with the identification of the more subtle and more significant dimensions into which a given phenomenon can be analyzed from the standpoint of a clear-cut research problem. It is particularly useful to study the present status of a specific aspect and orients the concerned authorities towards the improvement of future practice. The following table 3.16 shows the statistical tools and techniques used for data analysis.

Table 3.16
Objective wise tools & techniques for data analysis

Number	Nature of the objective	Tools	Techniques for data analysis
Objective 1.	To study the problems of women students	Questionnaire	Frequency, Percentage & Content analysis
Objective 2.	To study the kinds of problem brought to the notice of authorities	Semi structure interview	Frequency, Percentage & Content analysis

The data analysis and interpretations done by the investigator are discussed in detail in the following chapter.