



CHAPTER – 3

METHODOLOGY

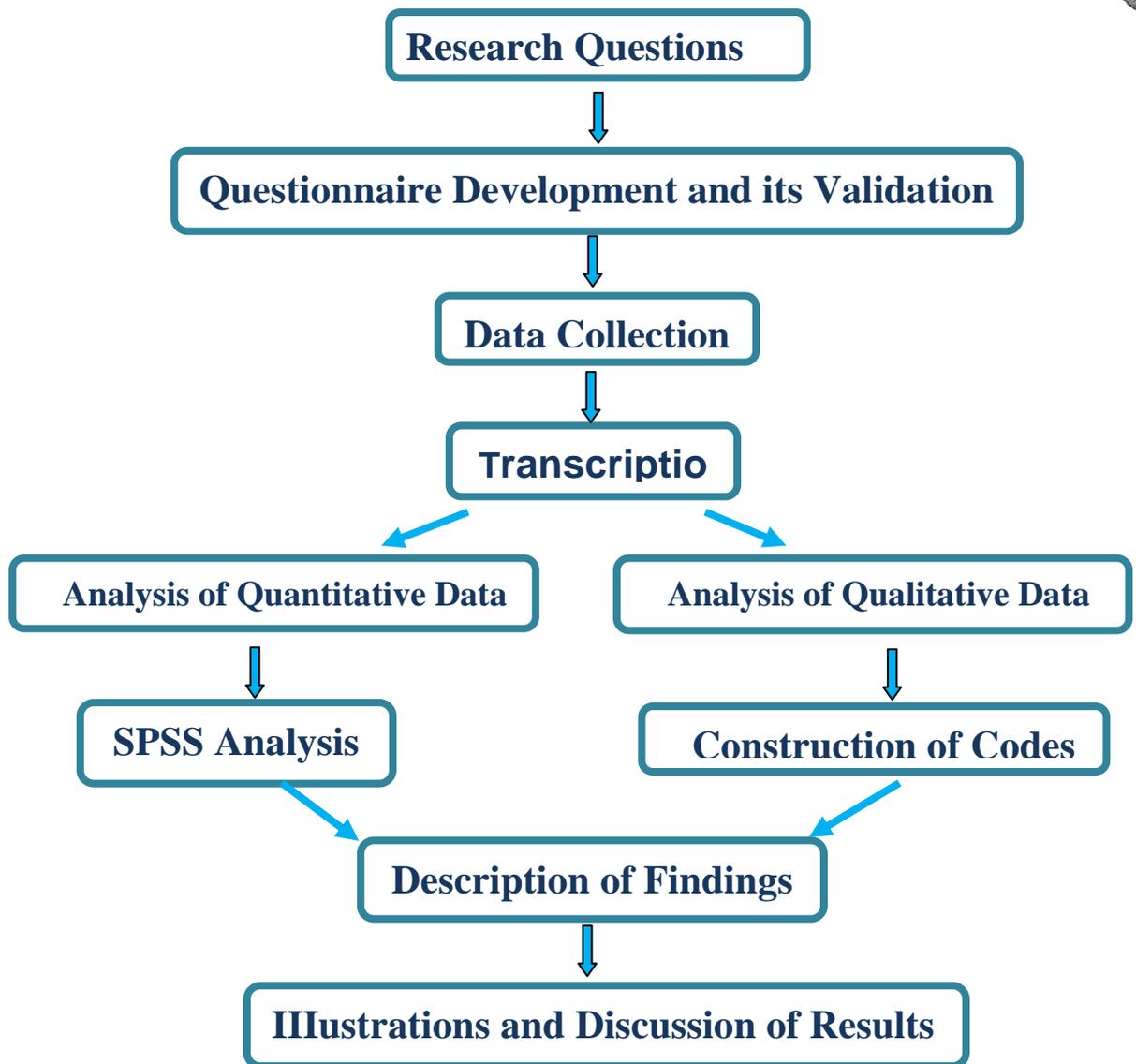
Given the study is exploratory research to first investigating the target group, for analysis, both quantitative and qualitative methods have been applied. This study aims at quantifying the qualitative data gained from open ended questions. This is not a pure qualitative analysis. Therefore in a first approximation, all given answers were listed and frequencies were counted. Then categories were created, numbers assigned and percentages were obtained. On the one hand, there are quantitative analyses of subjective ratings using percentage scale or numerically anchored scales. On other hand, there are open ended questions which demand free non supported statements from the respondents. These statements were coded and quantified in a subsequent step. This study considers appropriate analyses for these different approaches and quantitative data were imported into SPSS and Excel as shown in chapter 4.

As the qualitative part of this study generated a large amount of textual material certain systematic methodological conducive to its condensation were referred to interpretation of open ended questions. The following analysis explores the association between job search duration and types of factors such as reasons, problems, perceptions, satisfaction, their suggestions and factors that influence silver workers to work after retirement. It also included the employers who recruit retired silver workers for jobs/work.

Figure 4 gives an overview of the general procedure of this study. Research question was what are silver workers like? What do they do, how they think and what they have to say?



Figure 4: Overview of the Study



The present chapter describes the steps in methodology. This chapter is divided into the two sections:

- (A) Methodology for Quantitative Data, and
- (B) Methodology for Qualitative Data

(A) METHODOLOGY FOR QUANTITATIVE DATA

- 3.1 Pilot Study
- 3.2 Population of the Study
- 3.3 Sampling Unit



- 3.4 Sampling Frame
- 3.5 Sample Size and Selection Procedure of the sample (Silver workers and Employers)
- 3.6 Construction of the Research Tools
- 3.7 Validity of the Research Tools
- 3.8 Reliability of the Research Tools
- 3.9 Pre-testing of the Research Tools
- 3.10 Procedure of Data Collection
- 3.11 Scoring and Categorization of the Data of Silver Workers
- 3.12 Scoring and Categorization of the Data of Employers
- 3.13 Plan of Statistical Analysis of the Data

(B) METHODOLOGY FOR QUALITATIVE DATA

- 3.14 Sampling Unit
- 3.15 Sample Frame
- 3.16 Sample Size
- 3.17 Process of Conducting Interviews
- 3.18 Analysis of the Interviewed Data

3.1 Pilot Study

The present pilot study was undertaken with objective of identifying the silver workers working after retirement and their reasons for working after retirement. The reason for conducting the pilot study was to study the feasibility of conducting a study on working silver workers.

The sample comprised of 30 silver workers (58 years of age and above) residing in Vadodara city. Purposive sampling method was used to select the sample. The questionnaire was constructed to collect the data from the silver workers to find out their reasons and problems, factors that influence them to work after retirement. Their work satisfaction, suggestions of working after retirement



3.1.1 FINDINGS OF THE PILOT STUDY

The information was collected in terms of educational qualification, gender, and age, family income, type of job, reasons for working after retirement, problems and benefits of working after retirement, expected maximum age of silver workers to work after retirement.

- Major findings of the pilot study revealed that high majority of silver workers were male and only 2 percent were female .Regarding the level of education, silver workers with graduation degree were 52 percent whereas 44 percent had masters degree, technicians or similar and those with graduation were 4 percent.
- Further the findings of the study revealed that 64 percent silver workers were in 60-65 years old age group, 32 percent were in 66-70 years old group and 71 -75 years old group were 4 percent.
- Majority of the silver workers (60%) lived with their families whereas 35 percent were living with their spouses and 5 percent lived alone.
- Majority (70%) of silver workers reported that they were working part time, and 30 percent were working full time.
- Majority (65%) of silver workers were self employed. While 25 percent of them reported that they were working in private sector, businesses and 10 percent in other organizations.
- High majority (80%) of the silver workers had monthly family income between Rs.20,000 to Rs.50,000 whereas 20 percent had between Rs.50,000 and 70,000 per annum.
- To the question of what were the reasons of your working after retirement” majority (60%) of the silver workers reported that for staying active and engaged after retirement, whereas 30 percent revealed that they had not earned enough money during their earlier life, and now had to earn to pay their life expenses. Very few (10%) of them declared that their pensions was their income which was not enough to pay the life expense and hence now they worked.



- The distance from their residence to work place for a majority (65%) was between 5 and 10 kilometres, whereas 5 percent of them reported the distance as between 10 to 15 kilometres.
- When asked about the problems they faced while working after retirement a majority (60%) reported being mistreated because of age by younger colleagues, whereas 35 percent believed that they were paid less salary/income and very few (5%) felt neglected when their salary was determined or promotions were decided.
- Silver workers reported financial security, remaining active and updated, financial independence, social interactions and remaining healthy were the benefits of working after retirement.
- Majority (70%) of the silver workers reported that they will continue to work till the age 75 years, whereas 20 percent of silver workers reported that they work till they are physically capable enough to work, while a few (10%) reported that they were willing to work till 80 years of age.

3.1.2 CONCLUSION OF THE PILOT STUDY

It can be concluded that the motivations for work do not change for everyone in the same way. For some, the drive for economic gain never goes away, but for many others economic motives fall behind the need to accomplish something meaningful in their early sixties. One of the best ways to accommodate these changes is to look for more creative ways to structured work. Many factors today seem to be encouraging elderly workers to stay in the workforce, but, in practice, individuals still face major barriers to working longer than previous generations. It is not to develop effective theories about the employment of elderly until the dynamics that are currently driving elderly workers into retirement sooner than they had planned are truly understood.

The study was concluded with a remark that different needs of the silver workers should be studied to improve their living status by providing them with facilities. This subject can be implemented under social policy framework by compiling comprehensive plans for silver workers welfare through providing proper services that are adapted to their needs.



Based on these findings, policies can be formulated for the silver workers, in which will emphasize the importance of policies to implement a comprehensive social security scheme to cope with an expected aging population, as well as to create jobs for working-age people in the still relatively young country.

Hence, it is imperative to study about elderly working after their retirement such a study will help us understand their importance at workplace. The vast experience of theirs fetches respect for them or are they exploited by the employers. The seniors have the right to work, and the civil society and dignity in return. By undertaking such a research, the government and civil society will be able to provide a better work environment to a large work force of elderly.

Therefore, it can be concluded from the results of the pilot study that a research on **“A Study on Silver Workers Residing in Vadodara City”** can be undertaken

3.2 Population of the Study

The population of the present study comprised of silver workers those who are officially retired (58 and above) working for productive purpose/still working and earning after their retirement. The other group of sample consisted of employers from Vadodara city who have recruited those silver workers in their offices/institution/firms and business houses residing in Vadodara city of Gujarat State.

3.3 Sampling Unit

Sampling unit refers to the geographical area from where the samples are drawn. In the present study, samples of silver workers who were working after their retirement and the employers who recruit these retired silver workers were drawn from the Vadodara city of Gujarat state.

3.4 Sampling Frame

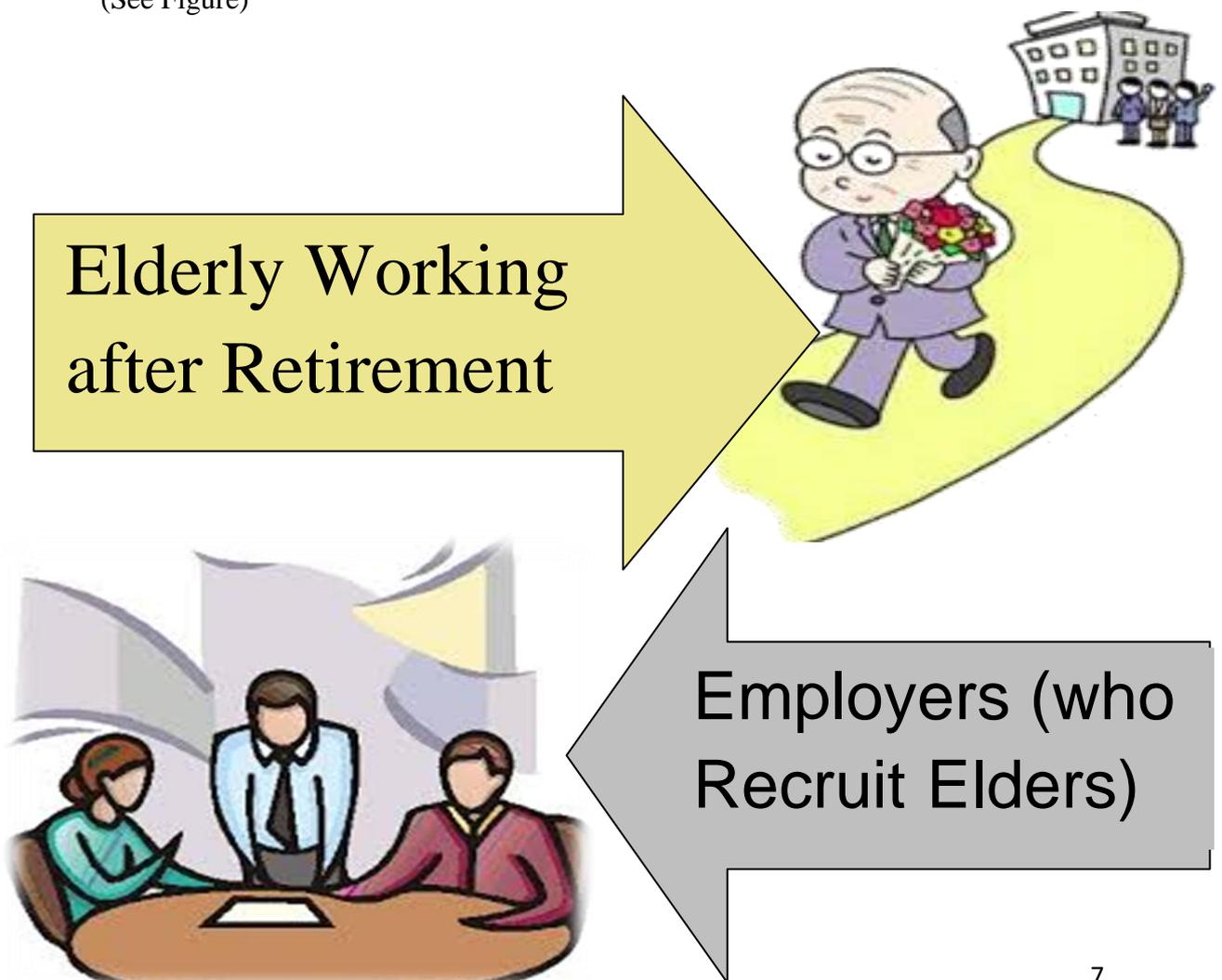
The elderly working post retirement, who is termed as silver workers in the present study and that comprised the sampling frame for the present study. The selected samples were working in the various organizations companies, private banks, firms, and corporate of Vadodara city of Gujarat State.



At the same time, the sampling frame also included the employers who recruit these retired silver workers on jobs post retirement in the different organizations of Vadodara city of Gujarat State. With regards to the acquisition of sample, large organizations were systematically contacted who supposedly maintained contact with their retirees. Some silver workers were identified with the help of these organizations. However most silver workers were acquired using personal contacts known to the researcher or from interviewees in a snow ball process. While the employers were identified with the help of silver workers or through the personal contacts of the researcher.

3.5 Sample Size and Selection Procedure of the Sample (Silver Workers and Employers)

The sample of the present study comprised of two types of respondents one were the silver workers and other were the employers who employed silver workers. (See Figure)





In total there were three hundred and fifty respondents from which three hundred were silver workers who were working post retirement and fifty were the employers who recruit those retired silver workers in their organizations, corporate, banks, companies, firms and colleges from Vadodara city of Gujarat State.

In order to indentify an employer which is the second sample of the study, the researcher approached the same organization where the silver workers were found working during their retirement. The size of the organisation (i.e number of employees) was one important factor in shaping the experience, ethos and practice of employers.

A purposive sampling method was used to draw the sample. Researcher identified banks/corporate/organizations/companies/firms functioning actively and recruiting silver workers and the organization recruiting those silver workers after retirement in Vadodara city. Researcher visited those banks/corporate/organizations/companies/firms and asked about silver workers who were recruited there after retirement. Almost fifty silver workers were identified initially those who were working after their retirement.

Those silver workers provided the names and addresses of the other silver workers whom they knew. The names and addresses of silver workers were also collected from colleagues, friends, relatives, neighbours, who knew silver workers those who were working after retirement. Same organizations were approached by the researcher in order to identify the employers .The snowball sampling technique was used to identify the sample.

3.5.1 SAMPLE SIZE FOR QUALITATIVE DATA



It was decided to use in-depth interviewing as the main method to collect data for the study since an interpretative approach (qualitative in nature) was adopted for



the investigation. The central concern of the interpretative research understands human experiences at a holistic level. Because of the nature of this type of research, investigations are often connected with methods such as interviewing, participant observation and the collection of relevant documents. Maykut and Morehouse 1994 state that the data of qualitative inquiry is most often people's words and actions, and thus requires methods that allow the researcher to capture language and behaviour. The most useful ways of gathering these forms of data are participant observation, in interviews and the collection of relevant documents. Observation and interview data is collected by the researcher in the form of field notes which are later transcribed for use in data analysis. Same procedure and method was adopted to gather the sample for qualitative data. The sample for qualitative analysis total fifteen interviews were individually conducted with the silver workers.

3.6 Construction of Research Tools

The present study was an exploratory research. Therefore, survey method was preferred for studying the reasons of silver workers and for the employers who recruit them. The questionnaire, perception scale and rating scales were the tools used for data collection. In addition to obtain a picture of ideal working situation during retirement open ended question were incorporated. The main aim to incorporate open ended questions was to attract unfiltered impressions of the silver workers descriptions of their circumstances and experiences. The tools were constructed keeping in mind various purposes after reviewing related literature desired from books, journals and other literatures. As a first step, main topics for survey were defined such as former professional career, motivation for working during retirement, changing profession when entering retirement, and type of work in retirement. The pilot study helped the researcher to frame the questionnaire. The tools were prepared in English and then translated into Gujarati for better comprehension of the silver workers and to ensure ease in communication.



1.6.1 DESCRIPTION OF RESEARCH TOOL USED FOR SILVER WORKERS

A questionnaire consisting of six sections was prepared to study the reasons, perceptions, problems, their work related satisfaction and factors that influence silver workers, to work after retirement. The sections, content and response system used in the research tool of silver workers are detailed in the table below:

Table1: Description of Research Tools of the Silver Workers

(Refer Appendix-1)

Sections		Content	Response System
Section-1	Part-A	Background Information of the Silver Workers	Check list cum Questionnaire
	Part-B	Details About the Family	Check list cum Questionnaire
	Part –C	Present Occupational Status	Check list cum Questionnaire
	Part-D	Work History	Check list cum Questionnaire
	Part –E	Health Status	Checklist
Section-2	Part-A	Reasons of Working after Retirement	4-Point Rating Scale
	Part-B	Perceptions about Retirement	3-Point Rating Scale
Section -3		Influence of Work on Silver Workers	3-Point Rating Scale
Section -4		Problems Faced by Silver Workers at Workplace	4-Point Rating Scale
Section -5		Satisfaction at Workplace	3-Point Rating Scale
Section -6		Suggestions	Open Ended Questions and checklist

The research tools used for data collection of silver workers are as follows:



3.6.1.1. Section-1: Profile of the Silver Workers

In this research tools used for silver workers has been spilt in five parts namely, Part –A, Part-B, Part –C, Part-D and Part-E.

Part -A of Section-1 Background Information: It consisted of questions related to the background information of the silver workers such as:

- Age
- Sex
- Educational qualification
- Marital status
- Type of house
- Leisure time activities

Part -B of Section-1 Details about Family: This section comprised items related to the details related to the families of silver workers like:

- Type of family
- Number of family members

Details about family members like:

- Silver workers relationship with them
- Their occupational status
- Income
- Marital status
- Physical or mental disabilities
- Sources of families income

Part -C of Section-1 Present Occupational Status: This section included questions related to the:

- Organizations/firm/company/corporate/bank/college/institute in which silver workers were presently working,
- Their employment status
- Designation
- Type of work



- Income/salary
- Type of duties
- Working hours
- Distance of workplace
- Problems they faced while searching present job
- Reasons of doing present job/work etcetera

Part -D of Section-1 Work History: This section consisted the question related to first job of the silver workers that is the job they were doing before retirement such as:

- Designation
- Type of organization they were working in before retirement
- Employment status
- Designation
- Income
- Type of work

Part -E of Section-1 Health Status: To find out the health status of silver workers, a checklist consisting nine items was prepared including the possible health problems which could occur in the old age. Silver workers had to tick mark against the health problems they were facing. The tool developed by Kikani (1993), Department of Foods and Nutrition, The M.S University, Vadodara was adopted by the researcher. The nutritionist and experts from Geriatrics were also consulted for preparation of the proforma.

3.6.1.2. Section-2 Reasons of Working after Retirement and Perception about Retirement

Part -A of Section-2 Reasons of Working after Retirement: This section included the items which can be possible reason for silver workers to work after retirement:

- Financial reasons
- Familial reasons
- Work related reasons



- Personal reasons

The statements were prepared after reading and reviewing of books and previous researches conducted in the same area and also research articles, on the subject etcetera. Some of the statements are modified from another similar study for preparing this tool for present study. It is four point rating scale .Silver workers were required to mark against the statements, wherein they had to indicate the extent of reasons for working after retirement as perceived by them. The content and number of statements under each aspect are as follows:

Table 2: Content and Number of Statements under each Aspect.

Aspects	No. of Statements
Financial	10
Familial	11
Work	7
Personal	8
Total	36

Part -B of Section-2 Perceptions about Retirement: This section consisted of 46 statements representing positive and negative perceptions about retirement namely:

- Decreasing physical and mental strength
- Retirement and reduced income
- Retirement and society
- Worries of being retired
- Adapting social role in flexible way
- Fear of growing age and isolation

The statements were prepared after reading and reviewing of books and previous researches conducted in the same area and also research articles, on the subject etcetera. Some of the statements are modified from other similar studies. It is three point rating scale .Silver workers were required to mark against the statements, wherein they had to indicate the extent of perceptions about retirement as perceived by them.



Table 3: Content and Number of Statements under each Aspect.

Aspects	No. of Statements
Favourable	17
Unfavourable	29
Total	46

3.6.1.3. Section -3 Influence of Work on Silver Workers

This section included the items on influence of work on silver workers .The main aim to design this section was to know the influence positive or negative influence of “Work” on silver workers due to their working life after retirement. Twenty four statements were prepared after reading and reviewing of books and previous researches conducted in the same or related areas and also research articles on the subject etcetera. It is a three- point rating scale. The content covered under this section included statement related to the influence of work on silver worker’s like:

- Physical and mental well being
- Family
- Income
- Leisure time
- Silver workers job related goals
- Silver workers equation with family and society

The silver workers were asked to tick mark against the statements which indicated the influence of work on them.

3.6.1.4. Section -4 Problems Faced by Silver Workers at Workplace

A list of possible problems which could be faced by silver workers while working after retirement and problems they face due to workplace were listed in the tool. The problems were related to physical, social, financial or familial problems, problems related to:

- Work given to them
- Designation



- Equation with authorities
- Working with younger generation
- Working/Adapting new technologies
- Reduced income
- Infrastructure of workplace
- Distance of workplace
- Working hours

Above mentioned could be the problems that can be faced by silver workers due to work or because of workplace. A four point rating scale was designed to study the extent of problems faced by silver workers. It included twenty five statements. The silver workers were asked to tick mark against the statements which indicated certain problems which might affect their working life

3.6.1.5. Section -5 Satisfaction at Workplace

This section consisted of 12 statements related to satisfaction of silver workers related to:

- Opportunity to work
- Welfare facilities in the organization they work
- Advancement of their work skills
- Work value system
- Nature of their work and salary/income
- Readdressal of grievances

A three point rating scale was designed to study the extent of satisfaction by silver workers related to their work and workplace. The silver workers were asked to tick mark against the statements which indicated their extent of satisfaction.

3.6.1.6. Section -6 Suggestions

This section included checklist and open ended questionnaire to seek suggestion of silver workers about:

- Specific personnel policies that can be framed for silver workers
- Their suggestion about preparation for retirement



- Services which they think important for silver workers
- Services that employers can provide to silver workers that can make their working in later life attractive

3.6.2 DESCRIPTION OF RESEARCH TOOLS USED FOR EMPLOYERS

A questionnaire consisting two sections was prepared to study reasons, advantages and disadvantages, qualities, factors that influence the employers towards recruiting silver workers. The sections, contents and response system used in the research tools of employers are detailed below:

Table 4: Description of Research Tools of the Employers

(Refer Appendix-2)

Sections	Content	Response System
Section -1	Background Information of the Organization/companies/institution/firms/corporate/business house	Check list cum questionnaire
Section-2	Information related to silver workers working in their Organization/companies/institution/firms/corporate/business house	3 point rating scale and intensity Indices

3.6.2.1 Research tool used for data collection of Employers

Section 1 consisted of questions related to the background information of the Employers to include:

- Age
- Sex
- Designation
- Experience
- Organization's details like type of organization
- Objectives/mission
- Financial resources of the organization
- Number of silver workers working in their organization



Section 2 Consisted of questions related to the employees such as:

- Qualities of silver workers
- Advantages of recruiting silver workers
- Disadvantages of recruiting silver workers
- Factors that influence employees to work after their retirement
- Formal policies to retain retired employees into work sector

3.7 Validity of the Research Tools

To check the validity of the research tools, the questionnaires were sent for review by experts from the following institutions:

- Dean, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda , Vadodara
- Head, Faculty of Family and Community Sciences, The Maharaja Sayajirao University of Baroda , Vadodara
- Associate Professor, Department of Extension and Communication, Faculty of Faculty of Family and Community Sciences , The Maharaja Sayajirao University of Baroda, Vadodara
- Associate Professor, Department of Psychology, Faculty of Education and Psychology, The Maharaja Sayajirao University of Baroda, Vadodara
- Associate Professor, Department of English, Faculty of Arts, The Maharaja Sayajirao University of Baroda, Vadodara
- Associate Professor, Department of Statistics, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara
- Associate Professor, Faculty of Social Work, The Maharaja Sayajirao University of Baroda, Vadodara

The experts were requested to check the questionnaire for:

- Content validity
- Nature of the statements
- Clarity of language and ideas
- Appropriateness of the response system

The suggestions given by experts were incorporated in the tool



3.8 Reliability of the Research Tools

The test- retest method was used for measuring the reliability of the questionnaire. The tool was administered on five silver workers and five employers in Vadodara city. To measure the reliability of the tool, it was administered again on the same persons after a gap of fifteen days. The coefficient of correlation between the two sets of scores was calculated to find out the reliability of the tool by using the following formula:

$$r = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

Where, r = Coefficient of correlation

X = Score of First test

Y = Score of Second test

The tool reliability was found 0.92

3.9 Pre-testing of the Research Tools

The prepared questionnaires were pre-tested on ten silver workers and ten employers in the Vadodara city. The researcher simplified some terms that respondents could not follow. Silver workers and employers selected for pre-testing of the tool took about thirty to thirty five minutes to fill the questionnaire.

3.10 Procedure of Data Collection

The data were collected from 300 silver workers and 50 employers who recruit those retired silver workers in their organizations, firms, corporate, business houses, from different areas of Vadodara city during December 2012 to May 2013. With regards to acquisition of respondents, large organisations were systematically contacted who supposedly maintained contacts with their retirees. Some respondents were acquired using personal contacts known to the researcher or from respondents in a snow ball process. Thus making the study's sample a cumulative sample. A large number of silver workers were identified through companies/organizations/corporate/institutes/firms/colleges who were recruiting



retired silver workers. A permission to collect data from silver workers as well as employers was sought from the various authorities of the concerned organizations. The silver workers and employers were contacted and the data was collected by meeting them according to their convenience of time and place. The questionnaires were distributed to silver workers. They were collected back after a week or fifteen days.

Many a times, silver workers took more than 30 to 35 minutes to fill the questionnaire as it required them to do some thinking on the items and relating it to their working practise and experiences. Interview method was used to collect data from those silver workers, who faced difficulty in reading or were not used to filling questionnaire. Six to seven hundred questionnaires were distributed amongst the silver workers as well as employers out of which 378 in total were returned.

- Various reasons were found for not returning the questionnaire such as:
- Losing the questionnaire
- Unwilling or uninterested in the study/in filling questionnaire
- Not filling the questionnaire after many reminders
- Few silver workers found the questionnaire too lengthy and some question about which they were hesitant to answer

Interview schedule was prepared as tool for the employers and interview method was used to collect the data. Tools were prepared in English language. Employers took around fifteen to twenty minutes to answer the questions.

No major difficulties were faced during the data collection and it was completed peacefully. Majority of the silver workers and employers were interested in the study as it was related to them.



3.11 Scoring and Categorization of the Data of Silver Workers

Different types of scoring procedures were used for giving weightage to various items of all the parts of the tools used to collect information regarding the variables of the study. The scoring pattern and categorization of the silver workers and employer are discussed separately in the following lines:

3.11.1 CATEGORIZATION OF VARIABLES

The tool contains questions regarding profile of the silver workers. The categorization of the Independent and Dependent variables for a silver worker was done as follows

Table 5: Categorization of Independent Variables for Silver Workers

Variables	Basis	Categories
1. Age	58-66 years	Young-Old
	67-74 years	Old
2. Educational Qualification	Graduate to Doctorate	Higher Level of Education
	Higher Secondary to Diploma	Moderate Level of Education
	Primary to Secondary	Low Level of Education
3. Designation	Class I	Higher order Designation
	Class II	
	Class III	Middle order Designation
	Class IV	Low order Designation
4. Present Salary	Less than 17,000 Rupees	Low Income Group
	17,000 Rupees	Middle Income Group
	More than 17,000 Rupees	High Income Group
5. Health Status	0-1 Health Problems	Healthy
	2-4 Health Problems	Somewhat Healthy
	More than 4 Health Problems	Less Healthy
6. Type of Family	Living Alone	Living Alone
	Living with Partner	Living with Spouse
	Living with Children	Living with Family
7. Type of Work	8 hours	Full Time
	Less than 8 hours	Part Time
8. Perceptions about Retirement	Above Mean	Most Favourable
	Mean and Below Mean	Favourable and Less favourable



Table 6: Categorization of Dependent Variables for Silver Workers

Variables	Basis	Categories
1. Reasons of Working	Above Mean	More Number of Reasons
	Mean	Moderate Number of Reasons
	Below Mean	Less Number of Reasons
2. Influence of Work	Above Mean	High Level of Influence
	Mean	Moderate Level of Influence
	Below Mean	Low Level of Influence
3. Problems at Workplace	Above Mean	More number of problems
	Mean	Moderate number of Problems
	Below Mean	Less number of Problems
4. Satisfaction at Workplace	Above Mean	High satisfaction
	Mean	Moderate Satisfaction
	Below Mean	Less Satisfaction

3.11.2 REASONS TO WORK AFTER RETIREMENT

To measure the reasons of silver workers to work after retirement, the scores were given to the silver workers as shown in the (Appendix 1, Section 2-A). The minimum and maximum possible ranged from 1 to 36. However, the scores achieved by the respondents ranged from 1 to 36 and they were categorized as follows:

Aspect Wise total Obtainable Scores:

Aspects	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Financial	10	30	10
Familial	11	33	11
Work	7	21	7
Personal	8	24	8
Total	36	108	36



The range of intensity indices were calculated overall and aspect wise to measure the extent of reasons of the silver workers to work after retirement. To describe the extents of reasons, the range of intensity indices were decided as follows:

The range of intensity indices were decided as follows:

Extent of Reasons	Scores	Range of Intensity Indices
Great Extent	3	2.51-3.00
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50

Range of the scores for describing the reasons of silver workers to work after retirement was decided as follows:

Type of Reasons	Score
Less Number of Reasons	36-60
Moderate Number of Reasons	61-85
More Number of Reasons	86-108

Range of mean scores for describing the reasons of silver workers to work after retirement were decided as follows:

Range of Mean Scores	Categories
Less Number of Reasons	Below Mean
Moderate Number of Reasons	Mean
More Number of Reasons	Above Mean

3.11.3 PERCEPTIONS ABOUT RETIREMENT

The perception scale was developed to measure the intensity of the perceptions of silver workers about retirement. It was a 3 point scale. The scoring of the responses on a scale was done as follows:



Scoring pattern according to the nature of statements in the perception scale regarding silver worker's perception about retirement

Nature of Statement	Agree to Great Extent	Agree to Some Extent	Agree to Less Extent
Positive	3	2	1
Negative	1	2	3

The total numbers of statements were 46. The minimum and maximum obtainable scores ranged from 46-138. Range of scores describing the perceptions of silver workers regarding retirement was decided as follows:

Type of Perceptions	Score
Less Favourable	46-76
Favourable	77-107
Most Favourable	108-138

Aspect Wise Obtainable Scores were as follows

Perceptions about Retirement	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Favourable	17	51	17
Less favourable	29	87	29

The range of intensity indices were calculated overall and aspect wise to measure the extent of perceptions about retirement of the silver workers. To describe the extents of perceptions, the range of intensity indices were decided as follows:

Range of Intensity Indices:

Extent of Perceptions	Scores	Range of Intensity Indices
Great Extent	3	2.51-3.50
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50



Categories for describing the perceptions of silver workers regarding retirement was decided as follows:

Range of Mean Scores	Categories
Favourable and Less Favourable	Mean and Below Mean
Most Favourable	Above Mean

3.11.4 INFLUENCE OF WORK ON SILVER WORKERS

To measure the influence of work on silver workers, a three point scale was developed. The overall intensity indices were calculated to measure the extent of influence of work on silver workers. The total number of statements in the scale was 24 and the possible obtainable score ranged from 24-72.

Obtainable Scores were as follows

Content	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Influence of work	24	72	24

To describe the extent of work, the obtainable scores and range of intensity indices were decided as follows:

Range of Intensity Indices:

Extent of Influence	Scores	Range of Intensity Indices
Great Extent	3	2.51-3.00
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50



Range of the scores for describing the intensity of influence of work was decided as follows:

Extent of Influence	Score
Low Level of Influence	24-40
Moderate Level of Influence	41-57
High Level of Influence	58-72

To find out overall and item wise influence of work intensity indices were calculated. Range of mean scores for describing the intensity of influence of work was decided as follows:

Categories	Basis
Low Level of Influence	Below Mean
Moderate Level of Influence	Mean
High Level of Influence	Above Mean

3.11.5 PROBLEMS FACED BY SILVER WORKERS AT WORKPLACE

To measure the extent of problems faced by silver workers at workplace a four point rating scale was prepared which included twenty five statements. The maximum obtainable score was hundred and minimum obtainable score was twenty five. The scoring of the statements in the scale was done as follows:

Obtainable Scores were as follows:

Content	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Problems faced by silver workers at their workplace	25	75	25



The intensity indices were found out overall and item wise to measure the extent of problems faced by silver workers at workplace. The categorization of intensity indices was as follows:

The range of intensity indices were decided as follows:

Extent of Problems	Score	Range of Intensity Indices
Great Extent	3	2.51-3.00
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50

Range of the scores for describing the intensity of problems at workplace was decided as follows:

Type of Problems	Score
Less Problems	25- 41
Moderate Problems	42-58
More Problems	59-75

Categories for describing the intensity of problems at workplace were decided as follows:

Categories	Basis
Less Problems	Below Mean
Moderate Problems	Mean
More Problems	Above Mean

3.11.6 SATISFACTION AT WORKPLACE

To measure the extent of satisfaction of silver workers at workplace a three point rating scale was prepared which included twelve statements. The maximum obtainable score was thirty six and minimum obtainable score was twelve. The scoring of the statements in the scale was done as follows:



Obtainable Scores were as follows:

Content	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Satisfaction of Work	12	36	12

The intensity indices were found out overall and item wise to measure the extent of satisfaction of silver workers at workplace. The range of intensity indices was as follows:

The range of intensity indices were decided as follows:

Extent of Influence	Scores	Range of Intensity Indices
Great Extent	3	2.51-3.00
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50

Range of the scores for describing the intensity of satisfaction of silver workers at workplace was decided as follows:

Type of Satisfaction	Score
Less Satisfaction	12-20
Moderate Satisfaction	21-29
High Satisfaction	30- 36

To find out overall and item wise satisfaction of silver workers at workplace intensity indices were calculated. Range of the mean scores for describing the intensity of satisfaction of silver workers at workplace was decided as follows:

Categories	Basis
Less Satisfaction	Below Mean
Moderate Satisfaction	Mean
High Satisfaction	Above Mean



3.12 Scoring and Categorization of Data of Employers

3.12.1 QUALITIES OF RECRUITING SILVER WORKERS

To measure qualities that employers considered while recruiting silver worker, a three point scale was developed. The overall intensity indices were calculated to measure the extent. To describe the qualities, the obtainable scores and range of intensity indices were decided as follows:

Obtainable Scores were as follows

Content	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Qualities of the Employees	22	66	22

The intensity indices were found out overall and item wise to measure the extent of qualities of an employee. The categorization of intensity indices was as follows:

Range of Intensity Indices:

Extent	Scores	Range of Intensity Indices
Great Extent	3	2.51-3.00
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50

Range of scores for describing the qualities of the employees was decided as follows:

Extent	Scores
Great Extent	22-36
Some Extent	37-51
Less Extent	52-66



3.12.2 ADVANTAGES OF RECRUITING SILVER WORKERS

To measure advantages that employers take into consideration while recruiting silver workers, a three point scale was developed. The overall intensity indices were calculated to measure the extent. To describe the advantages, the obtainable scores and range of intensity indices were decided as follows:

Obtainable Scores were as follows

Content	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Advantages	18	54	18

Range of Intensity Indices:

Extent	Scores	Range of Intensity Indices
Great Extent	3	2.51-3.00
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50

Range of scores for describing the advantages of employing silver workers was decided as follows:

Extent	Scores
Great Extent	18-30
Some Extent	31-43
Less Extent	44-56



3.12.3 DISADVANTAGES OF RECRUITING SILVER WORKERS

To measure disadvantages that employers takes into consideration while recruiting silver workers, a three point scale was developed. The overall intensity indices were calculated to measure the extent. To describe the disadvantages, the obtainable scores and range of intensity indices were decided as follows:

Obtainable Scores were as follows

Content	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Disadvantages	17	51	17

Range of Intensity Indices:

Extent	Scores	Range of Intensity Indices
Great Extent	3	2.51-3.00
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50

Range of scores for describing the disadvantages of employing silver workers was decided as follows:

Extent	Scores
Great Extent	17-28
Some Extent	29-40
Less Extent	41-52



3.12.4 INFLUENTIAL FACTORS IN RECRUITING SILVER WORKERS

To measure the factors that influence the employers takes while recruiting silver worker, a three point scale was developed. The overall intensity indices were calculated to measure the extent. To describe the influential factors, the obtainable scores and range of intensity indices were decided as follows:

Obtainable Scores were as follows

Content	Number of Statements	Maximum Obtainable Scores	Minimum Obtainable Scores
Influential Factors	10	30	10

Range of Intensity Indices:

Extent	Scores	Range of Intensity Indices
Great Extent	3	2.51-3.00
Some Extent	2	1.51-2.50
Less Extent	1	1.00-1.50

Range of scores for describing the influential factors in employing silver workers was decided as follows:

Extent	Scores
Great Extent	10-16
Some Extent	17-23
Less Extent	24-30



3.13 Statistical Analysis of the Data

A statistical package for social sciences (SPSS) was used to analyze the data. Different statistical measures for various purposes used were as follows:

Table 7: Plan for Statistical Analysis of the Data of Silver Workers

No.	Purpose	Statistical Measure
1	Background Information of the Silver Workers	Frequencies, Percentage and Intensity Indices
2	Reasons and Perceptions of Silver Workers to work After Retirement	T-Test, ANOVA (F-test) Intensity Indices
3	Influence of work on Silver Workers	T-Test, ANOVA (F-test) Intensity Indices
4	Problems faced by Silver workers at work place	T-Test, ANOVA (F-test) Intensity Indices
5	Satisfaction at Workplace	T-Test, ANOVA (F-test) Intensity Indices
6	Suggestions	Intensity Indices

Formula used for t-test:

$$t = \frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\frac{s_p^2}{n_1} + \frac{s_p^2}{n_2}}}$$

$$s_p = \sqrt{\frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}}$$



Where,

\bar{x}_1 = mean of Group 1

\bar{x}_2 = mean of group 2

n_1 = number of group 1

n_2 = number of group 2

df = $n_1 + n_2 - 2$

S1 = SD Group 1

S2 = SD Group 2

Sp = Pooled Variance

Formula used for ANOVA (F-test)

F = $\frac{\text{Large Variance}}{\text{Small Variance}}$

Or = $\frac{\text{Between Group Variance}}{\text{Within Group Variance}}$

Between group variance = Variance in the mean of each group from the total mean of all variance groups

Within group variance = Average variance of scores within groups

Formula used for Calculating Item Wise Intensity Indices:

Item Wise Intensity Indies = Total Score for an Item

Total Number of Respondents



Table 8: Plan for Statistical Analysis of the Data of Employers

No.	Purpose	Statistical Measure
1	Background Information related to silver workers working in their organization/companies/institution/firms/corporate/business house	Frequencies and Percentages
2	Information related to silver workers working in their organization/companies/institution/firms/corporate/business house	3 point rating Scale and intensity Indices

(B) METHODOLOGY FOR QUALITATIVE DATA

An in-depth interview method was used to collect qualitative data only from selected silver workers of Vadodara city:

The purpose of conducting in-depth interview was:

- To study the reasons of the silver workers to work after retirement.
- To study their perceptions about old age and retirement
- To obtain suggestions for the policies they wish should be framed for silver workers as well the kinds of jobs/work opportunities that should be created for them

3.14 Sampling Unit

The silver workers working in different organizations, firms, institutions, private banks, corporate based in Vadodara city were contacted for conducting in-depth interviews.

3.15 Sampling Frame

The selection of the samples was done using purposive sampling method. While distributing and collecting the questionnaires the silver workers were identified and selected on the basis of their willingness to share their experiences and perspectives. However, the prior permission from the respondents were oriented about the nature and



objectives of the study. Then, according to the pre-decided time the researcher approached the silver workers to conduct the interview.

3.16 Sample Size

The fifteen silver workers selected from different organizations, firms, private banks, institutions, were interviewed for all relevant details through personal visits. The prior appointments were sought from these silver workers for the interviews.

3.17 Process of Conducting In-depth Interview

In the beginning, the interviewees were given a handout describing the nature of the study. They were assured of all confidentiality. The interviews were mainly conducted in English or Gujarati as per the preference and comfort of the participants. They were held at the respective organizations or at the residence keeping in mind the convenience of the silver workers. The interviewer introduced the topic to the silver workers and then they were asked to express and share their own experiences related to the topic of discussion. They were asked to share their views and perceptions without any hesitations. All the 15 in-depth interviews were conducted personally by the investigator. Each in-depth interview conducted focused on selected key issues of the study. The selected silver workers were able to discuss at length key issues of the study. It took almost 1 to 1 ½ hour during which almost all the key points were discussed by the silver workers and the interview was conducted with a note of gratitude. The notes were taken about discussed to record the response of the participants.

3.18 Analysis of the Interviewed Data

The notes maintained at the time of the interviews were transcribed and the data was finally recorded. The respondents were classified and coded under a particular questions or issues. Then under each question, the coded data obtained from the 15 interviews were clubbed on a comparative analysis table. It helped the researcher to categorize the qualitative findings under major sections. These sections are discussed in the following chapter.