Chapter 3

Research Methodology

3.1 A Brief Overview

This chapter basically describes the objectives of study. It also focuses on how study has been conducted, the research design used for the study, methods of selecting and approaching the samples, sources used for the collection of data. It also describes hypothesis used to identify the relationship between variables and tests applied with the help of statistical tools. Five research objectives were identified from the research gap obtained from literature review. They are as follow

3.2 Objectives of the Study

- To assess the financial literacy among residents of Gujarat.
- To study and to analyze the awareness of Personal Financial Planning among residents of Gujarat.
- To study and to analyze the attitude regarding Personal Financial Planning among residents of Gujarat.
- To identify the factors influencing personal financial planning behavior.
- To examine the need of Financial Planner by investors.

3.3 Research Questions

- What is the level of financial literacy of residents of Gujarat State?
- Is there any impact of demographic variables on financial literacy of the respondents?
• Are respondents aware about different Investment avenues available for Personal Financial Planning (PFP)?
• Do respondents have positive attitude towards PFP?
• Is there any impact of demographic variables on attitude towards PFP?
• Is there any association between financial literacy and attitude towards PFP?
• Which are the factors influencing PFP?

3.4 Research Hypotheses

H₀₁: There is no significant association between Age and financial literacy of the respondents.
H₀₂: There is no significant association between Gender and financial literacy of the respondents.
H₀₃: There is no significant association between Education and financial literacy of the respondents.
H₀₄: There is no significant association between Experience and financial literacy of the respondents.
H₀₅: There is no significant association between Job Type and financial literacy of the respondents.
H₀₆: There is no significant association between Income and financial literacy of the respondents.
H₀₇: There is no significant association between Marital Status and financial literacy of the respondents.
H₀₈: There is no significant association between Location and financial literacy of the respondents.
H₀₉: Awareness of different Investment avenues does not differ significantly with respect to gender of the respondents.
H₀₁₀: Awareness of different Investment avenues does not differ significantly with respect to Age of the respondents.
$H_{011}$: Awareness of different Investment avenues does not differ significantly with respect to Education of the respondents.

$H_{012}$: Awareness of different Investment avenues does not differ significantly with respect to Job Type of the respondents.

$H_{013}$: Awareness of different Investment avenues does not differ significantly with respect to Experience of the respondents.

$H_{014}$: Awareness of different Investment avenues does not differ significantly with respect to Income of the respondents.

$H_{015}$: Awareness of different Investment avenues does not differ significantly with respect to Marital Status of the respondents.

$H_{016}$: Awareness of different Investment avenues does not differ significantly with respect to Location of the respondents.

$H_{017}$: Attitude towards PFP does not differ significantly with respect to gender of the respondents.

$H_{018}$: Attitude towards PFP does not differ significantly with respect to Location of the respondents.

$H_{019}$: Attitude towards PFP does not differ significantly with respect to Age of the respondents.

$H_{020}$: Attitude towards PFP does not differ significantly with respect to Education of the respondents.

$H_{021}$: Attitude towards PFP does not differ significantly with respect to Job Type of the respondents.

$H_{022}$: Attitude towards PFP does not differ significantly with respect to Experience of the respondents.

$H_{023}$: Attitude towards PFP does not differ significantly with respect to Income of the respondents.
H$_{024}$: Attitude towards PFP does not differ significantly with respect to Marital Status of the respondents.

H$_{025}$: Awareness of different Investment Avenues does not differ significantly with respect to Financial Literacy of the respondents.

### 3.5 Scope of the Study

Study is designed to find awareness and attitude of investors for Personal Financial Planning. Study also tries to identify factors influencing Personal Financial Planning for investors. To conduct the study, a sample of 600 respondents has been chosen from four major cities from the State of Gujarat. These are: Ahmedabad, Baroda, Rajkot and Surat. Scope of the study was limited to Urban Salaried Employees of the State of Gujarat.

### 3.6 Research Design

(Parahoo, 2006) describes a research design as “a plan that describes how, when and where data are to be collected and analyzed”. It basically shows how study will be conducted to fulfill the defined objectives. Malhotra and Dash (2009) states that there are major two ways in which research design is identified, Exploratory Research and Descriptive Research. Exploratory research is useful when researcher doesn’t have enough idea about how to proceed with the research problem. If any formal research methods or protocol are not employed in particular area then researcher may use Exploratory Research Design. Descriptive Research helps to identify characteristics of groups or individuals. The major purpose of descriptive research is description of the state of affairs as it exists at present. (C R Kothari, 2004)

Descriptive research is gathering of information about prevailing conditions or situations for the purpose of description and interpretation. This type of research method is not simply amassing and tabulating facts but includes proper analyses, interpretation, comparisons, identification of trends and relationships. (Dr. Y.P. Aggarwal, 2008)

**Research Design Selected**
For purpose of fulfilling the objectives defined earlier Descriptive Research Design was most suitable. Hence it has been adopted for conducting study.
3.7 Sample Design

A sample design is the roadmap or framework which serves as the basis for selecting sample for survey. It will include Sampling Unit, Sampling Technique and Sample Size.

3.7.1 Sampling unit

Main objective of the research is to assess level of financial literacy, awareness related to PFP in Gujarat. Sampling Unit of the research is salaried employees of Government, Public Sector and Private Sector.

3.7.2 Sampling Technique

Sampling technique can be broadly classified as Non Probability and Probability Sampling. Non Probability technique of selecting sample has been used for the study. Samples were divided in quota according to their job types: Public sector employees, private sector employees and Government employees. Hence, Quota sampling technique has been used under non probability method.

3.7.3 The Sample size

Sample size determination in empirical research is very important. Sample size should be carefully selected so inference for entire population can be done from it. Aim of the study is to find financial literacy, attitude and awareness of PFP of the respondents in Gujarat State. Therefore, for the purpose of study, samples were selected from four Major cities of Gujarat: Ahmedabad, Vadodara, Rajkot & Surat. From each City 150 salaried employees were selected. Again they were divided into: 50 Government Employees, 50 Public Sector Employees and 50 Private Sector Employees. So Sample size for the present study is 600 Employees of Gujarat state. Profile of the samples are tabulated in Table 3.1.
TABLE 3.1 – Sample Profile

<table>
<thead>
<tr>
<th>City</th>
<th>Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmedabad City</td>
<td>150 Residents + 50 Govt. Employees + 50 Public Sector Employees + 50 Private Sector Employees</td>
</tr>
<tr>
<td>Baroda City</td>
<td>150 Residents + 50 Govt. Employees + 50 Public Sector Employees + 50 Private Sector Employees</td>
</tr>
<tr>
<td>Rajkot City</td>
<td>150 Residents + 50 Govt. Employees + 50 Public Sector Employees + 50 Private Sector Employees</td>
</tr>
<tr>
<td>Surat City</td>
<td>150 Residents + 50 Govt. Employees + 50 Public Sector Employees + 50 Private Sector Employees</td>
</tr>
</tbody>
</table>

Source: Primary Data

3.8 Data Sources

3.8.1 Secondary Data

Secondary Data are the data already collected and published. For the study, secondary data were collected from various Books, journals, thesis, periodicals, magazines, newspapers and Websites.

3.8.2 Primary Data

Primary data are the data originated by researcher to meet certain objectives. For the study primary data has been collected through structured questionnaire. Questionnaires were filled by respondents through one to one approach.

3.9 Planning of Data Collection

For the purpose of Primary Data collection, survey technique has been adopted, in which close ended questions are asked with the help of structured questionnaire. In this study, data were collected from 600 salaried employees of Gujarat State by using Survey Method. Any salaried
employee can be a sampling unit for the survey. Planning was done to select employees from diversified industries, so that the result may not get skewed. For the purpose of collecting data, employees of different government bodies, Public Sector Units and Private Sector were contacted with convenience sampling and with referrals methods. Government employees selected for the study were employees of different municipal corporations, GIDC Class I & II officers, Custom & Excise officers, Public School teachers. Public Sector employees were selected from various PSUs like ONGC, Public Sector Banks etc. Data of Private Sector employees were collected from different industries like Banking, IT, Heavy Engineering, Education, FMCG etc.

3.10 Overview of Variables, Scaling Technique and Data collection

Instrument – Structured Questionnaire

A questionnaire is a written list of questions, the answers to which are recorded by respondents. The respondents read the questions from the questionnaire, interpret what is expected and then write down the answers. (Ranjit Kumar, 2011). Questionnaire may have questions which are classified as Open ended and Closed ended questions. Open ended questions gives respondents’ liberty to think and narrate answers in their own language of understanding. It may get difficult to code and analyze the response given in open ended questionnaire. Closed ended questions, because they provide “ready-made” categories within which respondents reply to the questions asked by researcher, help to ensure that the information needed by the researcher is collected. In this study, close ended questions were used to record the responses from the respondents. Data collected through closed ended questions include Nominal Data, Categorical Data and data on Likert Scale. For some sections, Three Point and Five Point Likert scale has been used by the researcher. Five Point Likert scale is easy to construct and administer and respondents easily understand how to use the particular scale. (Malhotra N., 2009)

3.10.1 Variables Identified for the study

**Dependent Variables:** Financial Literacy, Financial Attitude & Personal Financial Planning are the dependent variables identified for the present research.
Independent Variables: From the literature review, demographic variables like; Age, Gender, Education, Job Type, Work Experience, Income, Marital Status, Location have been identified as independent variables, and these variables may have impact on financial literacy and financial attitude. So the different demographic variables are independent variables of the study.

3.10.2 Overview of Questionnaire

Questionnaire was divided mainly in four sections. First section was designed to assess Financial Literacy; Second section was designed to assess awareness of respondents regarding various Investment Avenues. Third section was designed to analyze attitude of respondents regarding Personal Financial Planning and Factors influencing the same. Fourth section of questionnaire was pertaining to collection of Demographic profile of respondents.

To check the content validity of questionnaire, views of academicians and industry experts were sought to check the validity of the content of the questionnaire. Their opinions & suggestions were incorporated in the questionnaire.

To assess the financial literacy of the respondents, questions to assess knowledge for basic financial terms were asked. Respondents had to choose one correct answers from four options given to them. The first three questions were asked to assess basic financial literacy and the remaining five questions were asked to assess advanced financial literacy. Questions asked were adopted from the scale developed by Lusardi & Mitschell (2011).

Different study has shown that awareness related to different investment avenues are very low among the Indian Investors. So present study aims at finding out awareness of different investment avenues in Investors of Gujarat. To identify the awareness for some thirteen different investment avenues, respondents were asked to assess their awareness on three point Likert scale. Where ‘1 is unaware, 2 is moderately aware and 3 is completely aware’. Next Section of the questionnaire is for analyzing attitude towards Personal Financial Planning and Factors influencing the same. Lai M. & Tan W. (2009) performed similar study in Malaysia to analyze attitude and identify factors influencing PFP. Five point Scale developed by them was referred and modified according to present Indian context. Attitude related to all the components of Personal Financial Planning i.e. Money Management, Investments, Risk (Insurance) Management, Tax Management, Retirement Planning, Estate Planning & Overall PFP was
assessed. For the purpose, statements related to all the components and Overall PFP were asked and their agreeableness on Five Point Likert scale has been checked. Where ‘1 being strongly disagree to 5 being Strongly Agree’. Some negatively worded questions were also asked and then inverted coding had been done for them. From various literature, factors which may influence Personal Financial Planning were identified. Responses were taken on five point Likert scale for respondents agreeableness of the factors influencing their financial planning decisions.

3.10.3 Details of the Pilot Study

Pilot survey is in fact the replica and rehearsal of the main survey. Such a survey, being conducted by experts, brings to the light the weaknesses (if any) of the questionnaires and also of the survey techniques. From the experience gained in this way, improvement can be effected. (C R Kothari, 2004)

Pilot study was conducted on 100 respondents of Ahmedabad City to check appropriateness of the questions, content & sequence of the questions. Pilot Study was done using one to one approach, so researcher can gauge the problems faced by respondents while filling it up. There were some items in the questionnaire which were difficult to understand for a layman. Those items were modified in a simple language so that respondents can easily understand the same. After data collected for Pilot Study, data were analyzed to check whether questionnaire is designed according to objectives and researcher is getting proper response or not. Analysis on Pilot Data suggested that proper responses have been obtained. There after the data was collected for the entire sample using the questionnaire.

3.10.4 Reliability Test

Reliability is consistency of measurement (Bollen, 1989), or stability of measurement over a variety of conditions in which basically the same results should be obtained (Nunnally, 1975). Cronbach Alpha is the measure to check reliability of the instrument. According to some previous researches done in the area Alpha value above 0.7 is acceptable. With the help of SPSS 20, Reliability test has been performed on Likert Scale items. For attitudinal scale used in questionnaire, the Cronbach Alpha value obtained was 0.7. Therefore, the research instrument used was considered as reliable.
3.11 Various Statistical Tests and Tools Used

Microsoft – Excel was used for data entry stage. Later that data was exported to SPSS. Microsoft Excel was also used to find some descriptive analysis. Data collected on Likert Scale is an ordinal data. Normality of ordinal data can’t be checked, so for the present study only non-parametric test have been used. SPSS 20 has been used to perform various tests like Chi-Square, Mann Whitney U Test, Kruskal Wallis Test, Factor Analysis etc. AMOS is normally used for building, validating and presenting a hypothesized model. For this study, AMOS 18 software was used for Confirmatory Factor Analysis and Structural Equation Modeling.