CHAPTER 3
RESEARCH METHODOLOGY

Introduction:
In chapter 1, while explaining the introduction to Shariah index and Shariah investment, an emphasis have been given therein on the conceptual framework and in chapter 2 an endeavour is made to review the literature related to awareness and perception in respect of Shariah index and Shariah investment to find out the gap in the study. In this chapter 3, an endeavour is made to portray the various aspects of the research methodology of this study. The chapter is organized as under:

Introduction
Problems to be investigated
Objectives of the study
Hypotheses of the study
Significance of the study
Research design of the study
Scope of the study
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Sample and sample size selection process
Tools and techniques used
Data analysis and interpretation
Model employed in the present study
Working definition of terms used in the present study

A detailed research methodology adopted in the present study is described in this chapter.
Problems to be investigated:

An attempt is made by the researcher in the present study to address the following basic problems:

1. To what extent investors are aware about Shariah principles for investment?
2. To what extent investors are aware about Shariah based screening?
3. To what extent investors are aware about Shariah filters?
4. What are the sources of awareness of investors on Shariah principles for investment?
5. What is the awareness of investors on Shariah principles for investment as per gender, religion, age, qualification, occupation, income and city?
6. To what extent investors are aware about World Shariah indices?
7. To what extent investors are aware about Indian Shariah indices?
8. What are the sources of awareness of investors on Indian Shariah indices?
9. To what extent investors are aware on the concept of socially responsible investing?
10. What is the awareness of investors on Shariah index as per gender, religion, age, qualification, occupation, income and city?
11. What is the general investment pattern of investors?
12. What is the Shariah investment pattern of investors?
13. What is the investment pattern of investors based on social and ethical value?
14. To what extent Shariah index is suitable and importance for Shariah investment?
15. Does Shariah index act as a SWOT of Shariah investors?
16. Is Shariah index useful in understanding the trading trends, growth pattern, price changing pattern, return and risk pattern of Shariah investment/ stock?
17. Is Shariah index useful in understanding the investment based on Shariah issues concerns, Shariah industry norms, Shariah screening and Shariah filters?
18. To what extent Shariah index is useful in understanding the Shariah investment as per gender, religion, age, qualification, occupation, income and city?
19. What is the perception of investors on using Shariah index for ethical investment?
20. What is the perception of investors on using Shariah index for investment based on Shariah issues concerns, Shariah industry norms, Shariah screening and Shariah filters?
21. What is the perception of investors towards using Shariah index for Shariah principles based investment?
22. What is the perception of investors towards using Shariah index for Shariah investment as per gender, religion, age, education, occupation, income and city?
23. What is the relationship / difference between awareness, usefulness of understanding and perception of Shariah index?
24. What is the difference between awareness, understanding and perception about the Shariah investment based on Shariah issues concerns, Shariah industry norms, Shariah screening and Shariah filters?

25. What is the difference between awareness, understanding and perception on Shariah investment and Shariah index as per gender, religion, age, education, occupation, income and city?

26. What is the overall difference between awareness, understanding and perception about the Shariah investment and Shariah index?

The above questions are addressed in the present study by the researcher. Therefore the title of the study is as under:

“Perception and awareness of Shariah index among Indian investors”.

Objectives of the study:

The specific objectives of the present study are as under:

1. To study and assess the extent of awareness of the investors on Shariah principles for investment, Shariah index and concept of social responsible investing.

2. To study and assess the Shariah investment pattern of investors and suitability of Shariah index for Shariah investment.

3. To study and assess the investors views on usefulness of Shariah index in understanding the Shariah investment.

4. To study and assess the perception of investors towards using Shariah index for ethical investment.

5. To study and assess the perception of investors towards using Shariah index in investment based on Shariah issues concerns, Shariah industry norms, Shariah screens and Shariah filters.

6. To study and assess the perception of investors towards using Shariah index for Shariah investment in respect of gender, religion, age, education, occupation, income and city.

7. To study and assess the difference between awareness, understanding and perception of investors towards Shariah investment based on Shariah issues concerns, Shariah industry norms, Shariah screens and Shariah filters.
8. To study and assess the perception and awareness of Shariah index among Indian investors.
9. To study and assess the difference between awareness, understanding and perception as per gender, religion, age, education, occupation, income and city.

Hypotheses of the study:
In the light of the above cited objectives the following hypotheses have been formulated for testing by the researcher for the present study purpose. The null hypothesis $H_0$ and alternate hypothesis $H_1$ is formulated as under:

$H_{10}$: There is no significant difference between awareness of investors on Shariah issues for investment and perception of investors towards using Shariah index in Shariah issues concerns based investment.

$H_{11}$: There is a significant difference between awareness of investors on Shariah issues for investment and perception of investors towards using Shariah index in Shariah issues concerns based investment.

$H_{20}$: There is no significant difference between awareness of investors on Shariah industry norms for investment and perception of investors towards using Shariah index in Shariah industry norms based investment.

$H_{21}$: There is a significant difference between awareness of investors on Shariah industry norms for investment and perception of investors towards using Shariah index in Shariah industry norms based investment.
H3₀: There is no significant difference between awareness of investors on Shariah investment and perception of investors towards using Shariah index for Shariah investment.

H3₁: There is a significant difference between awareness of investors on Shariah investment and perception of investors towards using Shariah index for Shariah investment.

H₄₀: There is no significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of male and female.

H₄₁: There is a significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of male and female.
H5₀: There is no significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of Muslim and non-Muslim.

H5₁: There is a significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of Muslim and non-Muslim.

H6₀: There is no significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of age.

H6₁: There is a significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of age.

H7₀: There is no significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of education.

H7₁: There is a significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of education.

H8₀: There is no significant difference between awareness about Shariah index among investors and perception
of investors towards using Shariah index for Shariah investment in respect of occupation.

H8₁: There is a significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of occupation.

H9₀: There is no significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of income.

H9₁: There is a significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of income.

H10₀: There is no significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of city.
H10: There is a significant difference between awareness about Shariah index among investors and perception of investors towards using Shariah index for Shariah investment in respect of city.

Significance of the study:
The present study is motivated by the impressive growth of the Islamic fund industry worldwide. Over the last few years, the demand for Shariah compliant financial products has increased globally in countries like London, Malaysia, Indonesia, Saudi Arabia, Bahrain and other countries in the Gulf region. In the global scenario there has been a considerable success in the creation and development of Islamic fund products to cater to the increasing needs of the general investing public, thus making Islamic funds a viable investment alternative to conventional funds. However in India though the Muslim population is more, their inclusion and participation in the financial sector is minimal. Therefore addressing perception and awareness of Shariah Index among the investors is interesting. Hence it is needed to study it.

The study shows the experiences of non-Muslim countries, like the USA, UK, Singapore, France, Hong Kong, etc. which have achieved prominence as Islamic finance hubs. In addition, the experiences of Muslim majority countries like Malaysia, Bahrain, Saudi Arabia and UAE is well studied,
but very few studies are available on Indian investors in this context. Hence it is valuable to study it. The following is the significance of the study.

The study will be useful to the government agencies, stock exchanges, companies, portfolio managers, investment advisors, brokers and investors in India and other countries.

1. The study will help government and regulatory bodies in formulating strategies and policies for mobilizing funds in the capital market.
2. The study will help in validating corporate social responsibility among companies and creating shareholder value.
3. The study will encourage companies to comply with ethical principles so that they can raise funds.
4. The study will help in financial inclusion of minorities who are excluded from the financial growth of capital market and help them achieve economic development and financial independence.

5. The study will help National Stock Exchange and Bombay Stock Exchange understand the awareness and perception of the Shariah Index and improve measures to make it popular.

6. The study will help the Index to be licensed for the construction of Shariah compliant financial products, mutual funds, Exchange Traded Funds (ETFs), and other structured products.

7. The study will help in understanding the need, importance, awareness and understanding the Shariah index and differences from them.

8. The study will help Portfolio managers, investment consultants and brokers understand the investors’ objective and preference so that they can advise and suggest investment products according to the investors’ objective regarding ethical or faith based investments.

9. The study will help investors who are interested in ethical investing to track listed Shariah complaint companies and their performance before making investment decisions in the stock market.

10. The study will help to know the awareness and perception of Shariah index and differences between them as well as Shariah investment and differences in it.

Research design employed in the present study:

The chart 3.1 shows the research design employed in the present study.
Scope of the study:

The present study has selected Mumbai, Chennai, Hyderabad and Lucknow as study area. 110 investors are selected from 4 cities of India. To represent India, 4 major cities are selected. These 4 cities are key investment
destinations and have stock
exchanges. The scope includes Shariah indices, World Shariah indices and Shariah principles based investment.

Study area is purposefully selected. Mumbai, Hyderabad, Chennai and Lucknow are selected. Investors from these 4 cities are selected as universe and samples. Every city has its unique features and contributing in national development in a large extent. Muslim and non-Muslim investors equally selected (i.e. 220 each). Awareness, understanding and perception is covered in the study. Shariah investment and Shariah index are included in scope. Thus chart 3.2 shows overall scope of the study.

Chart 3.2
Area and scope of the study

Area: 4 Metro Cities of India

- Mumbai
- Chennai
- Hyderabad
- Lucknow

220 Muslim investors and 220 non-Muslim investors

440 Male and Female respondents i.e. investors from 4 metro cities of India – Mumbai, Chennai, Hyderabad and
Lucknow, 110 each investors from each city.

Investors’ awareness, understanding and perception on Shariah investment and Shariah Index
Sources of data collection:

In the present study, both, primary as well as secondary sources of data are used.

Secondary sources of data:
The secondary data was collected from published and unpublished sources. The data was collected from books, journals, periodicals, magazines, reports, libraries, institutes, organizations, firms and websites.

Published Reports of Government and Non-Government sources such as:
National Stock Exchange (NSE), Bombay Stock Exchange (BSE), Securities and Exchange Board of India (SEBI), Finance and Commerce Ministry’s Report, Reserve Bank of India (RBI), Centre for Monitoring Indian Economy (CMIE), World Investment Reports, World Bank, Islamic Development Bank, S&P Dow Jones Reports, Bloomberg, Thomson Reuters, KPMG Shariah, Occasional papers, Annual Reports and Financial Reports of Companies, Trade and Financial Journals, Books, Magazines and Newspapers, Reports by institutions, departments, financial analysts, etc. Accounting and Financial records, register of members/brokers, minutes of meetings, PhD thesis and M.Phil. dissertations, Research papers, Conference proceedings, were also adopted.

Primary sources of data:
The Primary data was collected by using questionnaires, surveys, emails and interview schedule, discussion, observation, etc. from Stock Exchanges officials, investment bankers, portfolio managers, brokers, Shariah advisory boards and investors, actively participating in investment from Mumbai, Chennai, Hyderabad and Lucknow.

The researcher adopted an innovative method of primary data collection by creating Google forms and sending by emails and posting in groups to record the responses, which could be interpreted on real time basis and graphically represented by pie and graphs. Even social networking sites were used to create groups and upload the questionnaire for conducting the survey to encourage maximum participation and wider coverage along with physical distribution of questionnaire by personal and with the help of friends circle. The survey and email survey was conducted in Mumbai, Chennai, Hyderabad and Lucknow after pilot survey. Email and physical questionnaire were distributed to investors in these 4 cities. Thus Chart 3.3 summarizes primary and secondary sources of data.

Chart 3.3
Sources of Data collection

Two types of sources used
Primary data sources

1. Questionnaires
2. Personal interviews
3. Observations
4. Discussions
5. Mobile talks
6. Internet
7. Website
8. Facebook talk
9. E-mail
10. Pilot

Secondary data sources

1. Reports
2. Magazines
3. Journals / Research articles
4. Books
5. M.Phil./ Ph.D. Thesis / MMS reports
6. Newspapers
7. Website, Internet, E-mails
8. Stock exchanges
9. Securities and Exchange Board of India (SEBI)
10. Shariah index
Sample and sample size selection:
Sample selection:
Investors from government and private sector, businessmen, professionals, self-employed, like doctors, engineers, teachers, etc. are selected as sample of the study and required information data was collected from them. Male and female investors from these respondents are the samples of study. Muslim and non-Muslim investors are selected by taking special care. Mumbai, Chennai, Hyderabad and Lucknow city are selected to represent India as samples. For developing sample and for selecting samples, a list of members from Bombay Stock Exchange, National Stock Exchange, Taqwa Advisory and Shariah Investment Solutions (TASIS) Board, Parsoli advisory board, portfolio managers, investment bankers, consultants, brokers, investors association members, group forums, well-wishers of Shariah Index and Shariah constituents, etc. are collected by researchers. From these, actual sample size is finalized after distributing questionnaire as well as after emailing questionnaire.

Selection of sample size:
The questionnaires were administered in 4 cities. Total 500 questionnaires were distributed through physical and email in equal number i.e. 125 each city. The following table 3.1 shows the distribution of questionnaire as per selected sample.
Table 3.1
Distribution of questionnaire among sample

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Selected area: City</th>
<th>Muslim</th>
<th>Non-Muslim</th>
<th>Total number of questionnaires distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mumbai</td>
<td>60</td>
<td>65</td>
<td>125</td>
</tr>
<tr>
<td>2</td>
<td>Chennai</td>
<td>60</td>
<td>65</td>
<td>125</td>
</tr>
<tr>
<td>3</td>
<td>Hyderabad</td>
<td>60</td>
<td>65</td>
<td>125</td>
</tr>
<tr>
<td>4</td>
<td>Lucknow</td>
<td>60</td>
<td>65</td>
<td>125</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>240</td>
<td>260</td>
<td>500</td>
</tr>
<tr>
<td>Sample in the ratio</td>
<td></td>
<td>48</td>
<td>52</td>
<td>100</td>
</tr>
</tbody>
</table>
500 questionnaires were distributed (i.e. physical as well as email) actually by the researcher across the 4 cities; 125 each. 440 investor respondents from Mumbai, Chennai, Hyderabad and Lucknow were selected. For this purpose, researcher has used simple random sampling method. A pilot survey was undertaken in all 4 cities and questionnaire was finalized. 465 questionnaire were actually received. Out of the received questionnaire from respondents, 440 respondents were selected as sample for this study by taking care that from each city equal number to be selected. i.e. 110 each. Thus table 3.2 shows the final selected sample size.

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Selected area: City</th>
<th>Muslim</th>
<th>Non-Muslim</th>
<th>Selected final sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mumbai</td>
<td>55</td>
<td>55</td>
<td>110</td>
</tr>
<tr>
<td>2</td>
<td>Chennai</td>
<td>55</td>
<td>55</td>
<td>110</td>
</tr>
<tr>
<td>3</td>
<td>Hyderabad</td>
<td>55</td>
<td>55</td>
<td>110</td>
</tr>
<tr>
<td>4</td>
<td>Lucknow</td>
<td>55</td>
<td>55</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>220</td>
<td>220</td>
<td>440</td>
</tr>
<tr>
<td></td>
<td>Ratio</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 3.2 reveals that sample size is selected in the ratio of 50:50 from Muslim investors and non-Muslim investors. Out of 500 questionnaires distributed 440 are finalized. Thus sample size is 440, consisting of 220 Muslim and 220 non-Muslim investors respectively.
Sample size selection process:

In all, 440 investor respondents, consisting of 220 Muslim and 220 non-Muslim from Mumbai, Chennai, Hyderabad and Lucknow were selected. Out of 500 questionnaires administered, 465 were received and after proper scrutiny, 440 respondents were finally selected as sample size. The final selection of sample size process is presented in Table 3.3.
Table 3.3 shows that in all 500 questionnaires were administered. Out of 500, 465 filled questionnaires were received from respondents belonging from Mumbai, Chennai, Hyderabad and Lucknow respectively. However, 25 questionnaire were rejected due to incomplete in the process of scrutiny and 440 respondents as final sample size were selected. Thus 4 cities namely, Mumbai, Chennai, Hyderabad and Lucknow were selected as study area to represent India. Investors, Muslim and non-Muslim from these cities in the ratio of 50:50 i.e. 220 each were selected. 440 investors is the sample size selected by way of survey, discussion, personal interview, observation, email.

Tools and techniques used:

After completion of data collection, questionnaires were edited properly to make them ready for data entry. It was coded in a systematic manner to use SPSS package. The
master tables, graphs were prepared to incorporate all the information available in the questionnaire after data entry. The frequency and frequency converted into percentage tables and graphs were prepared for data interpretation. For the analysis of the data, the statistical packages for social sciences SPSS, was used. The research objectives and each question from the questionnaire were analyzed separately to understand and know the perception and awareness of investors on Shariah investment and Shariah index. Frequency and frequency converted into percentage, average and chi-square value etc. were developed and used. All statistical data is also represented by suitable
charts, tables, percentage, ratio, in presentable manner for better understanding. Further all the variables were tested by using chi-square test to test the hypotheses that were made on adequate and satisfactory determination.

SPSS provides comprehensive package for data analysis. It is time saving as most of computer programming are built in. It is used by market researchers, health researchers, survey companies, government, educational research, marketing organization and others.

The chi-square is an important test amongst the several test of significance developed by statisticians. It helps us to estimate whether the number of frequencies observed are same as the number of frequencies expected. If there is discrepancy between the two, it states whether this discrepancy is sufficiently large or not. In this way in the present study, SPSS and chi-square is used. Survey method was used to collect information and to fill up questionnaire. Sample was selected on the basis of simple random method. Thus average, percentage (i.e. ratio), chi-square test, etc. are used as statistical tools and techniques in the present study.

Data analysis and interpretation:

The collected data from various sources were processed, codified, edited and tabulated. Systematic and scientific
manner data is analyzed and interpreted. Percentage, frequency distribution, tables, charts, graphs, average, chi-square value etc. were prepared and used in analyzing and interpreting data. Corporative approach was used as analytical and interpreting tools. After the data was interpreted and analyzed, properly presented as per Chapter, logical conclusions were drawn and these were presented in respective chapters. It also covers computation of certain measures along with searching of patterns of relationship with hypotheses. For testing hypotheses, chi-square test is employed. The data is analyzed and interpreted on the basis of frequency, frequency converted into percentage, average, chi-square, charts, tables, graphs observations, interviews, discussions, questionnaire survey, comparison, etc.
Model employed in the present study

This study is based on Amin (2007) Model. It is modified by incorporating city variable. The following model is developed based on Amin (2007) and employed in the present study. We named as Difference location Model (DL Model).

Chart 3.4
Difference location Model (DL Model)

Working definition of terms used in the present study

Shariah investment:

It means investment made by Muslim and non-Muslim investors based on

i. Shariah principles or Shariah issues concerns,
ii. Shariah industry norms,
iii. Shariah screenings (i.e. sector and accounting screenings) and
iv. Shariah filters.

Shariah principles require the investments to be based on certain norms and filters related to the public need, fairness in business and ethical source of income, when investors act according to this, then it is referred as the Shariah investment or Shariah principles based investment.

Shariah index:
It is a point of reference for investors for evaluating a fund’s or portfolio’s performance in respect of Shariah principles based investment or Islamic finance. It is a measurement of Shariah based script or Shariah investment and its movements or status in current years over base or previous year.

Shariah investor:
Any persons, Muslim or non-Muslim, who invested as per Shariah principles or issues concerns or Shariah industry norms or Shariah screens or Shariah filters can be
referred as Shariah investors or Shariah based investors or Shariah follower investors. In simple Shariah principles based investors is called Shariah investors.

Shariah:
It means the moral code and religious law of Islam – deals with many topic addressed by secular law including politics, economics, trade and commerce, banking, law, investment and culture, as well as personal matters such as hygiene, diet, prayer and fasting. In the present study, investment concerns matters are only considered.

Awareness:
Awareness is the state or ability to perceive, to feel, or to be conscious of events, objects, or sensory patterns. It is the state or quality of being aware of something.

Shariah index awareness:
It means having knowledge of Shariah indices and its related aspects. Shariah index awareness implies vigilance in observing or alertness in drawing inferences from what are experiences about Shariah index. It also means the state or ability to perceive, to feel, or to be conscious of Shariah index events, objects, analysis, inclusion or sensory patterns. It is the quality of being aware of something on Shariah index and its related aspects. Consciousness of Shariah index is referred as Shariah index awareness.
Shariah investment awareness:
The extent of knowing the Shariah investment in terms of principles based or Shariah issues concern, Shariah norms, screenings and filters by the investors can be referred as Shariah investment awareness. Knowing to what extent investors are aware about Shariah investment is called Shariah investment awareness. Consciousness of investors on Shariah investment is called Shariah investment awareness.

Shariah index and Shariah investment awareness:
Knowing extent of Shariah index and Shariah principles based investment by the Muslim and non-Muslim investors is referred here as awareness. It also means having knowledge of Shariah index and its related aspects as well as Shariah principles based investment. It implies vigilance in observing or alertness in drawing inferences from
what investors i.e. Muslim and non-Muslim, experiences regarding Shariah index and Shariah investment. Consciousness of investors on Shariah index and Shariah principle based investment is referred as having awareness of Shariah index and Shariah investment.

Perception:
It means the process of receiving, selecting, organizing, interpreting, checking and reacting to sensory stimuli or data, here Shariah index and Shariah principles based investment. Investors view on investing in Islamic instruments based on Shariah principles and Shariah filters is called Shariah perception or simply perception.

Shariah index and Shariah investment perception:
Perception in the context of Shariah index and Shariah investment means giving meaning to the pattern of Shariah investment, Shariah usage and Shariah principles based investment awareness and understanding. It is the process of receiving, selecting, organizing, interpreting, checking and reacting to Shariah based investment and Shariah indexes. It is a process by which individuals (i.e. investors) organize and interpret their sensory impressions on Shariah based investment and Shariah index application. The opinions or views of the investors on Shariah based investment by using Shariah index after selecting, organizing and interpreting and reacting is referred here as perception of
investors.

Investment perception:

Using Shariah index for Shariah based investment is called investment perception.