CHAPTER 3
RESEARCH METHODOLOGY

3. Research Methodology

In this chapter, the research methodology of the study is cover. Research methodology is the systematic process through which the whole research is conducted (Kothari, 2004). Before commencing the research, it is necessary for the researcher to find out the proper way to follow. It is the process, which involves several steps to follow by the researcher to find out the rationality behind research. A researcher must understand the requirement or necessity of the research, why the research need to carry out. At the same way after analyzing the need of the study, it is also important to know the significance of the study too. If it is worth full, then it should proceed. There are many more issues prevailing in the research, which includes scope of the study, research design, sample design, data collection, data analysis tools, and limitation of the study. So every researcher has to follow this way and they must ensure that they are following an ethical way. Before moving forward, it is important to understand the need and significance of the study.

3.1 Need and Significance of the study

In India, studies related to service quality in different sectors has already done by researchers (Ramakrishnan, 2013, Chadda, 2017, Raghunandan, 2016, Chahal, 2017). Various scholars (Chawla, 2014, Nair, 2011, Janardana, 2013), also done research related to higher education sector. However, very few researches are done related to service quality in higher management education (Karthikeyan, 2013, Jeyashree, 2013). No one has covered the three major stakeholders in one research. From the last five years students enrollment is management courses in Punjab is decreasing year by year. In 2012-13, there were 139 institutes having 11,370 students intake, whereas in 2013-14, the number of institutes reduced to 135 but their student intake was increased to 12,300. In the year 2014-15, two more institutes were shut down and students’ intake was reduced to 12,900. There were only 125 institutes were left with 11,370 students intake in 2015-16. Therefore, it was very clear from the fact that management education is getting less popular in the Punjab region. Because of this student’s enrollment in both sectors public and private is affected.
Now the question arises. Is there any difference between stakeholders’ expectation and perception of service quality in higher management education from public universities and from private universities in Punjab? Whether universities are not able to satisfy their stakeholders or stakeholders are expecting too much from the universities. Whether there is any difference between the perception of teachers regarding service quality in public and private universities? To answer these questions, this study is carrying out. The main objective of the study is to find out the difference between expectation and perception of stakeholders in the selected public and private universities of Punjab.

3.2 Objectives of the Study

The objectives of the study are divided according the stakeholders. The first three objectives are concern with students and parents. The fourth objective is concern with teacher only.

1. To explore the important service quality dimensions in higher management education.
2. To differentiate the expected and delivered quality factors of Private and Public Universities.
3. To study the extent of satisfaction level of students and parents with regard to institutional quality factors.
4. To analyze the perception of teachers regarding the service quality and the constraints and challenges in providing quality services.

The first objective is laid down to find out the difference between the expectation of stakeholders (students and parents) from public and private universities and also find out the difference between perception of stakeholders (student and parents) from public and private universities.
The second objective comprises of to find out the difference between the expected services and delivered services to parents and students from private and public universities.

The third objective comprises of to study the satisfaction level of students from public and private universities and to study the satisfaction level of parents from public and private universities. It also compares the satisfaction level of parents and students with each other.

The fourth objective of the study examine the perception of teachers regarding service quality of public and private universities and studies the constraints and challenges while providing the service to the stakeholders.

3.3 Hypothesis of the Study

Based on the objectives of the study hypothesis are made. This further on accepted and rejected with the help of statistical techniques.

The first two hypothesis (1-2) belongs to first objective of the study. The next twelve (3-14) hypotheses belong to second objective of the study. The next six (15-20) hypotheses belong to third objective of the study. The next four (21-24) hypotheses belong to the fourth objective of the study.

- $H_{01}$: There is a no significant difference in the dimensions of service quality in Higher Management Education in public and private universities with respect to students.
- $H_{02}$: There is a no significant difference in the dimensions of service quality in Higher Management Education in public and private universities with respect to parents.
- $H_{03}$: There is a no significant difference in the expectation and perception of students regarding service quality in Higher Management Education with respect to five quality dimensions, Tangibility, Reliability, Responsiveness, Assurance, and Empathy for Public Universities.
- $H_{04}$: There is a no significant difference in the expectation and perception of students regarding service quality in Higher Management Education with respect to five quality dimensions, Tangibility, Reliability, Responsiveness, Assurance, and Empathy for Private Universities.
Research Methodology

- H_{05}: There is no significant difference in the expectation and perception of students regarding service quality in Higher Management Education with respect to five quality dimensions, Tangibility, Reliability, Responsiveness, Assurance, and Empathy.

- H_{06}: There is no significant difference in the overall expectation and perception of students regarding service quality in Higher Management Education.

- H_{07}: There is no significant difference in the mean gap score of service quality in Higher Management Education for students of Public and Private Universities with respect to quality dimensions.

- H_{08}: There is no significant difference in the overall mean gap score of service quality in Higher Management Education for students of Public and Private Universities.

- H_{09}: There is no significant difference in the expectation and perception of parents regarding service quality in Higher Management Education with respect to five dimensions, Tangibility, Reliability, Responsiveness, Assurance, and Empathy for Public Universities.

- H_{010}: There is no significant difference in the expectation and perception of parents regarding service quality in Higher Management Education with respect to five dimensions, Tangibility, Reliability, Responsiveness, Assurance, and Empathy for Private Universities.

- H_{011}: There is no significant difference in the expectation and perception of parents regarding service quality in Higher Management Education with respect to five dimensions, Tangibility, Reliability, Responsiveness, Assurance, and Empathy.

- H_{012}: There is no significant difference in the overall expectation and perception of parents regarding service quality in Higher Management Education.

- H_{013}: There is no significant difference in the mean gap score of service quality in Higher Management Education for parents of Public and Private Universities with respect to quality dimensions.
• $H_{014}$: There is a no significant difference in the overall mean gap score of service quality in Higher Management Education for parents of Public and Private Universities.

• $H_{015}$: There is a no significant difference in the satisfaction level of students regarding service quality of Public and Private Universities with respect to quality factors.

• $H_{016}$: There is a no significant difference in the overall mean score of satisfaction of service quality for Higher Management Education’s students of Public and Private Universities.

• $H_{017}$: There is a no significant difference in the satisfaction level of parents regarding service quality of Public and Private Universities with respect to quality factors.

• $H_{018}$: There is a no significant difference in the overall mean score of satisfaction of parents in Public and Private Universities.

• $H_{019}$: There is a no significant variance in the mean score of satisfaction of parents and students of service quality for Higher Management Education of Public and Private Universities with respect to quality factors.

• $H_{020}$: There is a no significant difference in the overall satisfaction of parents and students of service quality for Higher Management Education of Public and Private Universities.

• $H_{021}$: There is a no significant difference in the perception of Faculty members of service quality for Higher Management Education in Public and Private Universities with respect to quality factors.

• $H_{022}$: There is a no significant difference in the overall perception of Faculty members of service quality for Higher Management Education in Public and Private Universities.

• $H_{023}$: There is a no significant difference in the constraint and Challenges of Faculty members of service quality for Higher Management Education in Public and Private Universities with respect to different factors.

• $H_{024}$: There is a no significant difference in the overall constraint and Challenges of Faculty members of service quality for Higher Management Education in Public and Private Universities.
3.4 Problem Statement
In today’s world good service quality is become the need of the hour. It is not mainly applicable to service sector but to the entire world too. Education was a noble cause in the past but now it is more competitive than ever, like other service sectors. Higher education in any nation is precious element for the intellectual growth of humankind, and economic growth of the nation etc. Therefore, it is compulsory for education sector, to identify the key changed in the environment and should work accord to that. The service quality in the higher education sector is also a key attribute. India education system is based on the value system.

The current education system is divided in two sectors, one is public sector, and other is private sector. In the basic elementary education, everybody is looking for private school where they can admit their child. However, when it’s about higher education people start looking for a pubic college or university. The Indian Higher Education structure is composite of three plus two years. First three years of education after the completion of 10+2 is for bachelor degree (Graduation Degree) and after that further two years for Master’s degree (Post Graduate Degree) for general courses. Some professional courses have five years for graduation and three years for masters. However, in Higher Management Education it needs three and two years to complete graduation and post-graduation respectively. The focus of this study is on higher management education in Punjab imparted by both sectors public and private. The popularity of management courses are decreasing so rapidly in Punjab, so the basic question is that, is there a difference in public sector and private sector of management education? Is there is any difference between expectation and perception of the stakeholders from service providers. Which sector outperforms the other sector? Whether, the satisfaction level is same in the both sectors. What is the perception of teachers regarding service quality provided by their universities? Whether, they are facing the same constraint and challenges. To find out the answers of the above mentioned questions research is carried out.

3.5 Scope of the study
This research work is concentrate on stakeholders’ expectation and perception regarding service quality in higher management education in public and private universities of Punjab. The scope of the study is restricted to the higher management education of north India’s premier state Punjab only. The stakeholder includes
students, parents, and faculty members. The two public universities (Guru Nanak Dev University, Amritsar and Punjabi University, Patiala) and two private universities (Lovely Professional University, Phagwara and Chandigarh University, Gharooan) of Punjab are taken for the study. The universities are selected based on the intake of management students and the year of its commencement.

3.6 Research Design
In this research study new facts are explored about expectation and perception of stakeholders and also measure the satisfaction level of stakeholders. Mere exploration of the facts is not enough for the research if it is not describe. So exploratory leads to descriptive research design is used for this study.

3.7 Sample Design
A sample design is consist of the steps through which the researcher collects the data. A sample design can be probabilistic or non-probabilistic.

- **Sample Technique**: For the study probability, sampling technique is used that is simple stratified random sampling techniques. The whole population divided in into two strata in public and private sector. Then with the help of simple random sampling technique, sample is drawn from the population.

- **Sampling Unit**: The unit for the sample is students, parents, and teachers of the selected universities. The students who are doing MBA or research scholar are the main respondents. The other respondents are parents of the students. At last teachers of the concerned department (only Management Department) are selected for the study.

- **Sample size**: The sample size of the respondents for the study is 700. The total sample size in comprises of 400 students, 200 parents, and 100 teachers. Out of 400 students, 200 students are selected from public universities (100 from GNDU and 100 from P.U.), and 200 students are selected from private universities (100 from LPU and 100 from Chd. Uni.). Out of 200 parents, 100 parents are selected from public universities (50 from GNDU and 50 from P.U.) and 100 parents are selected from private universities (50 from LPU and 50 from Chd Uni.). Out of 100 teachers, 50 teachers are selected from public universities (25 from GNDU and 25 from
P.U.) and 50 parents are selected from private universities (25 from LPU and 25 from Chd Uni.). The sample is selected by using SRS sampling technique.

Before the main survey, a pilot survey is conducted. The pilot survey includes 140 respondents (20 students, 10 parents, 5 teachers from each university). The corrections are made suggested by the respondents. Later on, the questionnaire/schedule sent to 860 respondents, which includes (125 students, 60 parents, and 30 teachers from each university). The questionnaire/schedule is distributed through personal approach, and via online mode. Among all of them only 756 gave feedback. After careful data screening 73 responses found incomplete. That is why they discarded. To complete the sample size to 700, 17 more questionnaires (8 parents and 9 students) send to respondents. The researcher strict to sample size, that’s why those respondents were approach again.

3.8 Data Collection
The both primary and secondary methods of data collection are used for the study.

- The secondary data is comprises of various books, magazines, research papers, articles, theses and annual reports of UGC and AICTE.
- The modified questionnaire/schedule is used to collect primary data from the respondents. A modified standardized questionnaire is developed partially from previously researches conducted by (Parasuraman, et al., 1988, Ravindran et al., 2012, Jager et al., 2013, Singh et al., 2011, Guha et al., 2013, Farahmandian et al., 2013) and partially by researcher. A questionnaire/schedule is consist of four parts, part- I is for demographic information and part II is for expectation section and part III is for perception section and last part IV is for satisfaction. The questionnaire/schedule format is same for students and parents. For teachers is has two parts, one for demographic information and second for perception and constraints and challenges.

3.9 Tools and Techniques used
Once the data is collected, the next step is to analyze the data. For this whole data is processed through various steps including data coding, tabulation and analysis. The data coding is done in excel and after that sheets are imported in the SPSS (Statistical
Package for Social sciences) software 20 version for further process. According to the objectives of the study, the independent t-test and one way ANOVA is used to come at the findings.

3.10 Limitations of the study
Every research work has its merits and demerits. The few limitations of the present study are:

- It only covers management education from the entire higher education; other streams are not cover under this study. The expectation and perception of these students and parents and faculty is analyzed. The expectation and perception of other stakeholders in not analyzed.
- In the geographical area of the study, as it only covers one state of North India that is Punjab. The rest of other states are not cover.
- The study has limited sample size and number of stakeholders. The sample size can be increased and more stakeholders apart from (students, parents, and faculty) can be added.
- It only covers state pubic and state private universities; it does not include central university and deemed to be universities and other colleges of the states.