CHAPTER 5
CONCLUSION

Based on the various analysis made in the earlier chapters, a significant conclusion can be drawn. In this chapter, the problem is reiterated in brief, followed by the summary of findings. The implications of the study are also detailed, covering the applications of this research. Further, the limitations and recommendations for future research pursuits are also dealt with.

5.1 Restatement of the Problem

The Indian Education Sector is in a flux of rapid growth. On the one side there is a great demand for skilled work force, and on the other end there is a huge shortfall of quality faculty for the mushroom growth of higher educational institutions. This is the “two front” challenge facing higher educational institutions of India. Patil (2003) avers that, there is a mismatch between the technical skills of the Indian graduates and the requirement of the industries. The quality of the output from the higher educational institutions is fragmented. Therefore, on one face the objective of the higher educational institutions to deliver skilled work force to the ravenous requirements of the industry is remaining an unfulfilled dream. The other face of the institutions’ challenge to attract quality faculties is also receiving severe blows. This is reflected through scenarios like unemployable graduates and poor quality of higher education institutions. The growth of higher education institutions of the
country is considered very important, as it supplies the basic and essential input skilled work force for national development and for strengthening industry, economy and the quality of life of the people (Patil, A.S. and Pudlowski, Z.J., 2002).

The existing higher education institutions experience a dearth of good faculty and infrastructure (Bhattacharya, 2004). This is considered as one of the main reasons for the failure of the higher educational institutions in India. To produce quality students to meet the requirement of industries and to promote the retention of good faculty, the need to study the quality assessment in higher educational institutions, particularly the private engineering colleges in the state of Tamilnadu carries prominence. Tamilnadu state alone is a haven for more than 20% of the private engineering colleges in India, which necessitates the need for the study to be carried out in the state.

As the literature in quality assessment emphasises, the perceptions of students on the quality of higher education, the perceptions of a major stakeholder namely students, needs to be investigated. Even though industry is another major stakeholder who demands quality outputs from the higher education portals, their perceptions are not adequately incorporated in the quality assessment programs. Hitherto, only the perception of academic leaders played the major role in framing the criteria for quality assessment of different agencies. Hence, the perceptions of stakeholders students, faculty,
alumni and industries are to be investigated and their perceptual differences on the criteria for quality of education need to be analysed.

5.2 Summary of Procedures

Initially, a questionnaire with 33 items to measure the quality of Students and 20 items to measure the quality of faculty is designed based on the related research literatures to examine the perception of criteria for the quality of students and faculty (Janet G. Donald and D. Brian Denison, 2001). The questionnaire named Student - Faculty Quality profile (SFQP) is subjected to a pilot study with a sample size of 200 students and 100 faculty members [As per Guadognoli et al., (1988) a minimum of 100-200 cases are required to run factor analysis on the data]. The response rate is 50% with the students. The main objectives of the pilot study are to identify the relevant culture variables which are highly correlated to each other and to remove the distant items which are not closely correlated to other items. Also, it will help to figure out the initial factor structure of the variables so that the identified factors will show Convergent and Discriminant validity through their factor loadings.

After conducting the validity test and the factor analysis, the questionnaire had been redesigned with 23 items to measure the quality perceptions of students and 18 items to measure the quality perceptions of faculty. In the first phase, 6 different Engineering Institutions affiliated to Anna University, Chennai Zone X were randomly selected and each randomly
selected college’s Principal / Director was approached officially for permission to meet and collect data from their faculty and students. In the second phase, the validated and redesigned questionnaire was administered to 300 faculty and 600 students from 6 different Engineering Institutions through enumerators (based on the permission given by the respective heads of the 6 colleges thus randomly selected). 487 responses from students and 201 responses from faculties were received by this researcher. The Questionnaire was also mailed to 300 alumni and 200 Industrial persons and 160 responses from alumni and 100 responses from both IT and Non-IT Industries are obtained. Faculty, Students, Alumni and Industry people were informed that their participation was being solicited to achieve a better understanding of the perceptions of the Faculty, Students, Alumni and Industry on Quality of Students and Faculty and to improve the Quality of Higher Education Institutions.

In one section of the questionnaire, Faculty, Students, Alumni and Industry were presented with a set of 23 items for measuring the quality perceptions of students and in another section with the set of 18 items for measuring the quality perceptions of faculty. Faculty, Students, Alumni and Industries were asked to use a 5-point response scale (1 = not at all important, 2 = somewhat important, 3 = important, 4 = quite important, 5 = extremely important) to indicate how important they felt each criterion was in evaluating the quality of a student and faculty. Factor analysis and the reliability test were conducted on the collected data. Simple percentage analysis and t-test have been carried out to determine the deviation between
the perceptions of different stakeholders. The relationships between all the stakeholders were found using the Correlation measure. Regression analysis is applied to determine the relationship between the demographic data of the stakeholders and their perceptions on the quality of higher education.

5.3 Summary of Findings

The overall findings are summarised in this section.

- **There is a significant difference between the Perceptions of Industries and Faculty on the Quality of Students and Faculty**

  The perception gap between the Industries and Faculty is found to be very high on factors such as Generic Skills and Academic Preparedness pertaining to quality of students. There is a vast difference between the perceptions of both the stakeholders on the factor named Presentation skills and interpersonal skills relevant to the quality of faculty. There is a significant perception gap between the Industry and faculty on the quality of students and faculty.

- **There is a significant difference between the Perceptions of Industries and Students on the Quality of Students and Faculty**
The deviation between the perception of industries and students is found to be very high on Learning Skills, Employment Competence and Academic Preparedness concerning the quality of students. There is a huge difference between the perceptions of both the stakeholders on the factor named Presentation skills, Interpersonal skills and social responsibility relevant to the quality of faculty. There is a significant perception gap between the Industries and students on the quality of students and faculty.

- **There is a significant difference between the Perceptions of Industries and Alumni on the Quality of Faculty**

  The perceptual deviation between the industry and alumni is found to be significantly high on factors such as generic skills and communication skills for quality of students. There is a vast difference between the perceptions of both the stakeholders on the factor named academic competence relevant to the quality of faculty. There is a significant perception gap between the industry and alumni on the quality of students and faculty.

- **There is a significant difference between the Perceptions of Faculty and Students on the Quality of Faculty**
The deviation between the perception of faculty and students is found to be significant on factors such as generic skills, academic performance, learning skills and academic preparedness pertaining to the quality of students. There is a vast difference between the perceptions of both the stakeholders on the factor named presentation skills and academic competence relevant to the quality of faculty. There is a significant perception gap between the faculty and students on the quality of students and faculty.

- **There is a significant difference between the Perceptions of Faculty and Alumni on the Quality of Students and Faculty**

  The deviation between the faculty and alumni is found to be significantly high on factors such as academic preparedness, employment competence and social responsibility for quality of students. There is a vast difference between the perceptions of both the stakeholders on the factor named presentation skills, academic competence and interpersonal skills relevant to the quality of faculty. There is a significant perception gap between the faculty and alumni on the quality of students and faculty.
• There is a significant difference between the Perceptions of Alumni and Students on the Quality of Students and Faculty

The perceptual deviation between the alumni and students is found to be significantly high on factors such as academic preparedness, employment competence, learning skills, generic skills and academic performance for quality of students. There is a huge difference between the perceptions of both the stakeholders on the factors named academic competence, presentation skills, interpersonal skills and social responsibility relevant to the quality of faculty. There is a significant perception gap between the alumni and the students on the quality of students and faculty.

• There is a significant relationship between age, educational qualification and industrial experience of the Industry personnel and their perceptions on the quality (academic performance) of Higher Education in India

• There is a significant relationship between age, gender and industrial experience of the Industry personnel and their perceptions on the quality (academic performance) of Higher Education in India.
• There is a significant relationship between age, year of passing and industrial experience of the Industry personnel and their perceptions on the quality (Intelligence) of Higher Education in India.

• There is a significant relationship between Educational Qualifications of the industry personnel and their perceptions on the quality (Learning Skills) of Higher Education in India.

5.4 Implication

This study makes a vital contribution in the form of a research tool, further additions to the existing literature and valuable suggestions to the administrators of the higher education in India.

• A Standardised Measurement Tool

There is no published work citing the existence of an instrument to measure the quality of students and faculty in the higher education institutions in India. A context-specific instrument is very much required and this study has contributed a normative instrument Student - Faculty Quality Profile as developed by Janet G. Donald and D. Brian Denison (2001). This instrument, as it is not using the ipsative techniques of measurement (Q-sort and paired comparison methods),
is convenient for administration (Tepeci, 2001). Such an instrument will
give a direction for other contextual academic researchers (India
based) to further work on the instrument and make it valid by testing it
in different parts of India.

• **Addition to Quality Literature**

This research attempts to study the perception gap between various
stakeholders of higher education on the quality of students and faculty.
Until now the literature addresses the perceptions of Academic
Leaders on Quality of Higher Education. This research will give further
additions to the literature on the perceptions of Students, Alumni,
Faculty and Industries on Quality of Higher Education.

• **Benefits to College Administrators**

The management of Higher Education Institutions can think in a new
perspective and can face the challenge of deterioration of quality
beyond the perceptions of academic leaders. The management of
Higher Education Institutions will be given the choice of looking at the
perceptions of teaching faculty, students, alumni and industries to
understand the methods to enhance the Quality of Higher Education
Institutions.
• **Benefits for Faculty**

The teaching faculty shall understand the perception gap between them, the students, alumni and industries and improve their competence in delivery and content.

• **Benefits for Industries**

Industries shall understand the perceptions of the academic community on quality of faculty and students of higher educational institutions and realise the intensity of the perceptual divide between them. Industries shall identify the critical area of the divide to bridge the gap between industry and academia. This study may help them device adequate measures to attract quality talent pool.

• **Benefits for students**

Students may understand the perceptions of industries on the quality of students of higher education. They shall realise the demands and expectations of industries and the employability of students may be enhanced drastically.
• The Indian higher educational system

To further the cause of Indian higher educational system, this research throws light on the relationship between the stakeholders namely Faculty, Students, Alumni and Industries and the important criteria for the quality of faculty and students. Various accreditation bodies of higher education may benefit to reform the accreditation processes. The highest bodies of assessment of higher education institutions can redefine the criteria for accreditation process on the light of the revelation of the study. Examinations like Indian Educational Service (IES) on par with UPSC may be formulated to attract the quality faculty to the higher education institutions. At least, IES qualified faculty may be appointed as institutional leaders to enhance the quality higher education.

5.5 Limitations of the study

The samples are taken mostly from Engineering Institutions offering Engineering and Management Courses and IT Industries. Extending the samples to Arts and Science Colleges, Leading Research Institutions and other professional colleges and industries may yield better insight.
5.6 Recommendations for Future Studies

The results of this study suggest several avenues for further research. The contribution of a context-specific instrument Student - Faculty Quality Profile from this study is in normative form and there is a lot of scope for improving the instrument by further research. The validation of the Student-Faculty Quality Profile may be still robust, if it is tested further in the arts and science colleges, medical colleges, other professional colleges and industries. The sampling area can be extended to states other than the State of Tamilnadu where this study is concentrated, which will give more reliability for the questionnaire and more meaningful studies will emerge. Differences in the perceptions of industries, faculty, alumni and students on criteria for quality of faculty and students signify a need for further exploration as they are the input and output for higher education. Further investigations on perceptions gap between faculty and industry, faculty and students, faculty and alumni, industry and students, alumni and students would be a great boon to improve the quality of the higher education. Additional research is required to bridge the gap between the perceptions of all stakeholders of higher education.

Conclusion

Thus, from this research it can be concluded that there is a significant perception gap between the stakeholders of higher education such as Industries, Faculty, Alumni and Students on the quality of students and faculty. The results of this study suggest several avenues for further research.
Differences in the perceptions of stakeholders signify a need for further exploration as faculty and students are the input and output for higher education. In-depth investigations may be carried out to bridge the perception gap so as to attain synergised effort to improve the quality of higher education.