7 Discussion, Recommendation and Conclusion

7.1 Prologue

This chapter presents the summary of the study, discusses the major findings, the implications drawn from the study, limitation, and direction for future research. The chapter starts by giving a brief summary, including research methodology and an insight into the findings of the research where, the main dimensions of TQM indicators and its adoption level by the principals and the teachers are talked about before tested hypothesis are looked at. Lastly, assesses the overall performance of the schools as perceived by teachers by before assessing the various perceptions of TQM indicators that are employed by the principals and teachers in the primary schools.

7.2 Summary of the Thesis

The objectives of the present research study are concerned with examining the perception of principals and teachers with regards to TQM implementation in primary schools. Further, studying TQM model linked with multidimensional factors of TQM and mediating relationships between TQM factors, job satisfaction and school performance is the main focus of the study.

The proposed model of this study is constructed with the help of widespread review of literature of TQM, job satisfaction and the performance of the organization. The root of proposed model is placed in second and third chapter. It relates to literature review for understanding the concepts, definition of quality, tools and practices adopted for the TQM study and the study of TQM theory in varied areas of business and service. Further, discusses various theoretical models that describe the indicators of TQM which are relevant to this study and lastly based on the understanding of the literature review, the definitions of TQM and the research gap, the research hypothesis are framed to employ in further analysis. Next, discusses the methodology to be adopted in this study. Followed by the descriptive analysis of the principals and teachers responses, further, examines the outcomes acquired from the preliminary analysis of descriptive statistics, Pearson’s correlation co-efficient, t-test, one-way ANOVA, Freidman test, variable examination by factor analysis using EFA and CFA. And lastly, the TQM model was
assessed using the SEM technique. After establishing the TQM model, the proposed performance model based on mediation effected is studied.

7.3 **Findings of the Study**

A brief summary of the findings is provided in this section. In the present study, data was collected through a cross-sectional survey of 26 schools of Ahmedabad district. Primary school principals and teachers teaching from 4th to 8th grade were selected for detailed investigation. A total of 26 principals and 374 teachers had filled the questionnaire.

To report the first study objective (see section 1.4), to examine the perception of principals and teachers on the use of TQM indicators in the schools, it is found that the perception of the principals towards customer focus, empowerment, involvement and relation is found to be statistically significant whereas except for involvement and top management support all other indicators had statistically significant perceptions towards the TQM indicators. Principals have more perception compared to teachers. It is also observed that both principals and teachers understand the importance of customer focus, empowerment, relation, and team work indicators for successful implementation of TQM and have ranked almost at the same position. Further, it concludes that in order to increase the maximum benefits and to improve school performance, emphasise on the focus of TQM indicators among the principals and teachers.

The correlation analysis outcome, indicated that both principals and teachers viewed more positively towards the identified variables. In case of principals responses the highest correlation was found between empowerment and top management support indicators (r=0.780), while the most noteworthy relationship among the teachers responses was found between empowerment and continuous improvement (r=0.550).

To report the second research objective (see section 1.4), to investigate the adoption of identified TQM indicators across primary schools various statistical tests were performed as discussed in section 5.2. The results regarding gender perception of principals indicated that customer focus, empowerment, involvement and relation
indicators had a significant difference. But involvement and top management indicators are found to have no difference in the perception of teachers based on gender.

Further, based on the results of one-way ANOVA: (1) Statistically no significant difference is seen in the views of principals with different years of total teaching experience towards the TQM, whereas it is inferred that out of 12 variables, customer focus, continuous improvement and teamwork are found to have significant effect in the perception of teachers with regard to total teaching experience. (2) There is no statistically significant difference in views of principals between the different group of current school teaching experience towards all variables except for involvement, while from the perception of teachers based on the current school teaching experience it is found that involvement, relation, continuous improvement, top management support and training had a significant value.

Based on the third research objective (see section 1.4) in this study, Friedman test is used to know the determining ranks of influencing factors like factors responsible for improvement in schools and also which of the determinants are more prioritized for the success and failure of the school as perceived by principals and teachers of the primary schools. The school performance is based on various factors which are responsible for its success. Based on the experience, comparison with other schools and problems faced by the principals and teachers in their schools by examining the hypothesis H3.1 to H3.3.

Prior to testing the TQM model and performance model, exploratory factor analysis was performed to find out how many and what factors underlie school performance and job satisfaction among teachers based on the fourth objective (see section 1.4) of this study. EFA results identified 11 factors as continuous improvement, process management, customer focus, empowerment, relation, feedback, team work, involvement, top management support, job satisfaction and school performance based on their factor loadings. Then confirmatory factor analysis (CFA) was performed in the present study to test the dimensionality structure of the construct. The prerequisite of reliability and validity were fulfilled showing a strong evidence of convergent and discriminant validity. The final measurement model outcomes using CFA showed a satisfactory model fit indices as $\chi^2 = 247.727$, $\chi^2/df = 1.041$, GFI = 0.954, TLI = 0.996, CFI = 0.998, RMSEA = 0.010. Further these factors are used testing the SEM models.
The fifth research objective (see section 1.4), of this research, is to study the influence of different TQM factors implemented by teachers of primary schools of Ahmedabad for the further study, on the impact of factors of TQM on job satisfaction of teachers and also on the school performance. The second-order TQM model is assessed to find out exactly which TQM factors represent the TQM model. 6 indicators of TQM such as continuous improvement (CI), empowerment (EM), feedback (FB), top management support (TMS), involvement (IV), and relation (RE), were identified as the first-order factor to the second-order latent variable TQM as a TQM model. The overall fit of the final modified TQM model yields ($\chi^2 = 98.188$, df = 86, p = 0.174); GFI = 0.968; CFI = 0.995; TLI = 0.993 and RMSEA = 0.019.

Further, the main purpose of this study based on the sixth research objective is to develop a structural equation model in order to study the implementation of TQM indicators on job satisfaction of teachers and performance of schools either directly or through mediating effect of job satisfaction. The estimated results from the structural model gave the following fit indices as: ($\chi^2 / df = 1.236$, CFI = 0.999, GFI = 0.995, TLI = 0.994, RMSEA = 0.025. Thus, the structural model is accepted based on the fit indices, further supporting the theoretical model of the research study. It was seen from the results that all the four hypotheses of the performance model were supported. Findings show that there was significant and positive impact on the relationship between TQM and school performance, TQM and job satisfaction and also for job satisfaction and school performance. Additionally, it was found that job satisfaction mediates the relationship between TQM and school performance. Thus, the contributions of this study are for the development of the education in school and to enrich the quality dimensions of TQM among the teachers, so as increase their job satisfaction which results for the better performance of the school.

### 7.4 Implication of the Thesis

Further, the present study progresses in the field of TQM. The study has significant implication for the development, in the context of implementation of TQM in the educational field. This section brings together the implications of both theoretical and managerial perspectives as follows.
7.4.1 Theoretical Implication

The outcomes from the study of the opinion of principals and teachers in light of the demographical elements such as gender, teaching experience has given a strong hint for the academicians for improving the quality status of primary school education.

A major implication of this study is applicable to the education organization in Ahmedabad, which is the construction of theoretically based proposed model which combines the dimensions of TQM indicators, job satisfaction and school performance. Specifically, this study allows the formation of practical links between the indicators in the proposed structural model of TQM indicators, job satisfaction and school performance.

Though TQM indicators have been the subject of majority of the research work, and are found to have a significant effect on the indicators, very little knowledge of the implementation of TQM indicators with the job satisfaction and school performance is seen. Till this date, this domain study and its application has been neglected among the educational institutions. Thus, this study contributes by testing the proposed research model that explains the importance of the TQM indicators and further, shows the relationships with job satisfaction and school performance.

Further, the use of SEM which provides the simultaneous study of models using direct, indirect and mediating effect of job satisfaction on TQM indicators and school performance. The contribution of studying SEM is important as TQM indicators (continuous improvement, empowerment, top management support, involvement, feedback and relation), job satisfaction and school performance offers a complete understanding and helps in understanding the interrelationship among these six indicators job satisfaction and school performance. Moreover, this study sheds light to the facts that there is a positive linkage between TQM indictors, job satisfaction along with school performance.

From the hypothetical perspective point, the study would give more prominent understanding to the top management, principals, and teachers of schools towards the TQM indicators that contribute to high academic school performance of Ahmedabad district. Through this study, top management team, principals and teachers would be able to identify gaps for job satisfaction and further improvement and adds to the
improvement of quality of education. Lastly, it provides the background for the principals and the top management team to aid them in identifying the indicators that are important for the performance evaluation of the teachers.

7.4.2 Practical Implication

On the practical value, the findings would serve as reference focuses for principal and teachers of schools in Ahmedabad district, on administration abilities that would prompt change of students' learning skills and schools execution. Further, the study can be reached out to number of educational foundations having primary grade schools, secondary schools and universities in different orders, which would have the capacity to make a note on the significance of implementation of TQM indicators so as to increase the satisfaction of the teachers and students and improve the performance of the educational hub.

Provide feedback to teachers about the truth of their performance and distinguish the qualities and the shortcomings on one hand, and then again, rouse them to advance towards accomplishment in their insight into the qualities and shortcomings in their performance and job satisfaction.

Besides these, it is predicted that through the conclusions and recommendations from the study would also enlighten school management team and principals in order to address the problem of how to improve teachers’ job satisfaction.

The distinctive troupes in the education training division would likewise have the capacity to reinforce their observing and assessment approaches by enhancing the indicators of TQM and the awareness to obtain quality school in terms of performance and job satisfaction.

The results of this research will not only enhance the data in the education area but it may also kindle further research studies in institutions located in Ahmedabad, Gujarat and India on the various challenges to observed performance.

The result from this study will assist primary school principals and teachers to detect the proficiency of the school performance, by using the tools and techniques of TQM to attain total quality school. Further, the analysis of this study will also serve the
educational administrations to make decisions to identify the efficiency of the primary school performance and the job satisfaction among the teachers, by using the concept of quality schools.

7.5 Recommendation

The schools, which is the hub of the grass root of education should provide quality education to the students. Quality ought to be the heart of the educational framework so that different fields will enable, progress and get each kind of help from the educational organizations. Thus, TQM ought to be connected in different associations for better execution. Following recommendations are based on the outcomes of the present study.

- Schools should invest in training programmes on quality management for the principals, teachers and even at the management level.
- Teachers are the representatives of education associations and the quality of the education is dependent on teachers. The findings suggests that the teachers should be motivated for further studies, to update them with new methodology and techniques of teaching.
- Organizations performance is increased by the satisfaction of the employees. Thus, special reward and recognition should be given to the teachers and principals for their achievement.
- To compete with the global standards of quality in education, the government should provide additional support and fund to improve educational facilities, renewal of curriculum, infrastructure, and an adequate number of trained teachers.

Thus, special training programmes should be arranged in the state and nation to attain quality in education. Along these lines, there is an urgent need to execute these changes to be brought in every phase of Indian education framework.
## 7.6 Limitations of the Study

Although the present study enlightens academician concerning most research of this nature, the findings of this study ought to be inferred with thought of various constraints.

- The data collection has been restricted to one geographical area in India, i.e. Ahmedabad only, in perspective of operational limitations.
- The study is limited to primary schools in Ahmedabad locale.
- The current study utilized a cross-sectional configuration, and likewise conclusions with respect to level of generalization are restricted.
- The information was collected from primary schools of Ahmedabad district, in Gujarat state, and a convenience sample was utilized. In this way, the findings of the existing study can’t be summed up to the Indian setting as a whole and are constrained to the studied sample.
- The study was restricted only for identifying the teachers’ perception for the job satisfaction and school performance.
- There is no clear idea upon which set of TQM indicators, as a second-order construct should be used when testing the relationship between job satisfaction and school performance. Accordingly, the six factors selected for the current study may not be part of the overall school performance. However, the factors included in the current study are among the most widely used factors in the studies based on performance.

## 7.7 Scope for Future Research

- Based on the limitation of the cross-sectional study the study can be extended to other schools situated in other parts of the states and also to establish interconnection, longitudinal research is needed. Only then, a comprehensive importance of the various dimension of the TQM would emerge.
- This model can be tailored to suit the prerequisites of the schools, assuming any, by including managerial staff and students in the investigation of employment satisfaction furthermore for better execution of the school.
• Future research can focus on the importance of issues related to teaching learning methodology, and training to increase the total quality management implementation in the educational institution.

• The study can further develop and advances the current performance model and test its validity within the context of secondary school, universities within Ahmedabad or other states.

7.8 Epilogue

This study has shown that schools can achieve excellent level of TQM by ensuring that their teachers are highly satisfied with the way they are managed mostly in the quality aspects related to continuous improvement, top management support, relation, involvement, feedback, and empowerment. Once the quality measures of TQM are seen by principals furthermore by teachers, which are over the suitable level, the teachers will respond by having work satisfaction, in this way enhances the school performance.

Concluding, to improve the school performance, increase the job satisfaction of teachers and provide better educational services, some quality changes should be made. To implement quality changes in the schools, proper TQM training should be given to the top management team, principals and teachers, to excel in the profession of education.