

Student Satisfaction and Problems of School Education in Thrissur District: An Empirical Analysis

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7.1. Introduction

The satisfaction of students regarding school environment and teachers are helpful in analyzing how far they are involved with teaching learning process in schools. For a better satisfaction level from the part of students, the role played by teachers and school environment are crucial. The present study is an attempt to analyze the student satisfaction of high school and higher secondary students in the schools of Thrissur district in Kerala. Student satisfaction and feedback properly monitored can, no doubt, bring about educational quality improvement of the school. Students have, no doubt, more expectations regarding the schools in which they are

studying. It is a fact that school is regarded as the second home to every student and every teacher and school environment plays a very positive and important role in shaping and moulding students. Parents also play an important role in school education and their satisfaction levels about the schools are crucial factors in determining better educational outcome for their children. The problems from the part of parents related to the school education of their children were also important factors in determining the household characteristics of school education.

7.2. Student Satisfaction and School Quality

School students are regarded as the most responsive part of the young generation. They are, in fact, the social community capable of bringing educational innovations into the economy. Student responsiveness and good quality education lead to further social activity (Elena et.al, 2018).

Table 7.1
Student's Satisfaction in Thrissur District (2020)

SI No	Factors of student satisfaction	Mean	Standard Deviation	Mean difference	T value	P Value
1	Teaching style of teachers	2.81	1.57	-0.18	-2.92	0.004**
2	Subject competency of teachers	2.87	1.58	-0.12	-1.95	0.051 ^{NS}
3	Classroom and school environment	2.85	1.65	-0.15	-2.22	0.027*
4	Approach of teachers	2.90	1.61	-0.09	-1.41	0.159 ^{NS}
5	Infrastructure of school	2.74	1.57	-0.26	-4.03	0.000**
6	Present syllabus and curriculum	2.76	1.54	-0.23	-3.78	0.000**
7	Academic achievement	2.77	1.57	-0.22	-3.49	0.001**
8	Quality of teaching	2.87	1.63	-0.12	-1.87	0.061 ^{NS}

Source: Computed from Primary Data

Notes: Mean Score and one sample T Test

Test Value: 3; ** denotes significant at 1% level, NS denotes non-significant

Satisfaction monitoring is a good sign and inevitable process that every school has undergone to improve the integrity and quality of their institution. Student satisfaction feedback is defined as the opinions of students on the services they received as students. It may include the perceptions of students about the teaching learning process, school environment, educational process, learning support facilities

and learning environment in which they are studying. The student satisfaction about schools and teachers are analyzed with the help of mean score and one sample T test and the results are exhibited in the Table 7.1. The hypothesis is that there is no significant difference between the sample mean and the population mean. The P values are less than 0.01 for the student satisfaction factors like teaching style of teachers, infrastructure of school, present syllabus and curriculum and academic achievement. The P value is less than 0.05 for the factor of student satisfaction such as classroom and school environment. The P value is greater than 0.05 for the factors such as subject competency of teachers, approach of teachers and quality of teaching. Thus the factors of school student's satisfaction are not equal to average level. The mean values show that all the factors of student satisfaction like teaching style of teachers, subject competency of teachers, classroom and school environment, approach of teachers, infrastructure of school, present syllabus and curriculum, academic achievement and quality of teaching are below the average level (>3 , 3 is the test value). The result shows that there should be some policy intervention in schools in terms of student satisfaction for the betterment of educational outcome. On the basis of mean rank, it can be inferred that the area in which students are more satisfied is the approach of teachers. It is followed by quality of teaching, subject competency of teachers, classroom and school environment, teaching style of teachers, academic achievement, present syllabus and curriculum and the least satisfied are the school infrastructure.

7.2.1 Gender and Student Satisfaction

By using independent T test, the significant difference between male and female student's satisfaction is analyzed and presented in the Table 7.2. Students' perception on student satisfaction is compared with respect to their gender. The hypothesis is that there is no significant difference between male and female students regarding the factors of student satisfaction. The p value is less than 0.05, with respect to the factor of student satisfaction like teaching style of teachers. It indicates that there is a significant difference between male and female students regarding this factor of student satisfaction. The value is greater than 0.05 for all the other factors such as subject competency of teachers, classroom and school environment, approach of teachers, infrastructure of school, present syllabus and curriculum, academic achievement and quality of teaching.

On the basis of mean score, it indicates that there are no significant differences in the case of male and female students regarding the factors of student satisfaction. It seems that female students are more satisfied regarding all aspects except academic achievement than male students. The mean scores are high in the case of both male and female students with respect to different aspects. In the case of females they are more satisfied in the approach of teachers(3.02), subject competency of teachers (2.98), quality of teaching (2.97), classroom and school environment (2.95), teaching style of teachers (2.93), academic achievement (2.86), infrastructure of schools (2.83) and present syllabus and curriculum(2.83) respectively. In the case of male students they are more satisfied in approach of teachers (2.77), quality of teaching(2.76), subject competency of teachers (2.75), classroom and school environment (2.72), present syllabus and curriculum (2.67), teaching style of teachers (2.66) and infrastructure of schools (2.63) respectively. So, from the mean values it is obvious that the satisfaction level of both genders is below the average value indicating the importance of improvement in the school and teacher related factors in schools. It is also evident that compared to male students, female students have high level of satisfaction.

Table 7.2
Male and Female Student’s Satisfaction in Thrissur District (2020)

Factors of students satisfaction	Gender of the students				T value	P value
	Male		Female			
	Mean	SD	Mean	SD		
Teaching style of teachers	2.66	1.51	2.93	1.61	-2.10	0.036*
Subject competency of teachers	2.75	1.53	2.98	1.62	-1.75	0.080 ^{NS}
Classroom and school environment	2.72	1.60	2.95	1.68	-1.70	0.089 ^{NS}
Approach of teachers	2.77	1.55	3.02	1.66	-1.84	0.065 ^{NS}
Infrastructure of school	2.63	1.52	2.83	1.62	-1.56	0.118 ^{NS}
Present syllabus and curriculum	2.67	1.51	2.83	1.56	-1.23	0.217 ^{NS}
Academic achievement	2.67	1.54	2.86	1.59	-1.40	0.160 ^{NS}
Quality of teaching	2.76	1.57	2.97	1.67	-1.58	0.114 ^{NS}

Source: Computed from Primary Data.

Notes: Mean Score and Independent T Test, * denotes significant at 5% level
NS denotes non-significant

7.2.2. Student Satisfaction and Age

With the help of T test, differences between age group of students and the factors of student satisfaction are analyzed and presented in the Table 7.3. Students' perception on student satisfaction is compared with respect to their age. The hypothesis is formulated that there is no significant difference between male and female students regarding the factors of student satisfaction.

It is estimated that the P values are higher than 0.05 for all the factors of student satisfaction and the hypothesis is accepted. The factors of student satisfaction are teaching style of teachers, subject competency of teachers, classroom and school environment, approach of teachers, infrastructure of school, present syllabus and curriculum, academic achievement and quality of teaching. It indicates that there are no significant differences between 14 to 15 and 16 to 18 age group of students regarding these factors of student satisfaction. It means both age groups of student satisfaction are almost same. On the basis of mean score, it seems that students of 14 to 15 age groups are more satisfied in listening classes properly and attention in class than the 16 to 18 age group.

Table 7.3
Age Group and Students' Satisfaction in Thrissur District (2020)

Factors of students satisfaction	Age of the students				T value	P value
	14 to 15 Years		16 to 18 Years			
	Mean	SD	Mean	SD		
Teaching style of teachers	2.82	1.62	2.79	1.51	0.24	0.810 ^{NS}
Subject competency of teachers	2.90	1.63	2.84	1.53	0.45	0.651 ^{NS}
Classroom and school environment	2.88	1.67	2.80	1.62	0.60	0.543 ^{NS}
Approach of teachers	2.91	1.65	2.89	1.58	0.20	0.838 ^{NS}
Infrastructure of school	2.79	1.61	2.67	1.53	0.86	0.386 ^{NS}
Present syllabus and curriculum	2.82	1.59	2.68	1.48	1.10	0.272 ^{NS}
Academic achievement	2.81	1.61	2.73	1.52	0.59	0.552 ^{NS}
Quality of teaching	2.89	1.65	2.85	1.59	0.31	0.754 ^{NS}

Source: Computed from Primary Data.

Notes: Mean Score and T Test

NS denotes non -significant

The 14 to 15 age group of students are more satisfied in the approach of teachers (2.91), subject competency of teachers (2.90), quality of teaching (2.89), classroom and school environment (2.88), present syllabus and curriculum (2.82), teaching style of teachers (2.82), academic achievement (2.81) and infrastructure of school (2.79). In the case of 16 to 18 age group, they are more satisfied with respect to the factors like approach of teachers (2.89), quality of teaching (2.85), subject competency of teachers (2.84), classroom and school environment (2.80), teaching style of teachers (2.79), academic achievement (2.73), present syllabus and curriculum (2.68) and infrastructure of school (2.67). But there are no significant differences with respect to all the factors of student satisfaction of all the age groups. It seems that the least satisfied with respect to all age groups and all gender are infrastructure of school.

Student satisfaction are also analysed with the help of Level test based on the hypothesis that Proportions of the level of students satisfaction in school education in Thrissur is equally distributed (Table 7.4). The level of students' satisfaction about schools and teachers in school education in Thrissur is analyzed with the help of Level test. As the P value is greater than 0.05, the proportions of level of students satisfaction in learning in school education in Thrissur is equally distributed. It indicates that there is no significant difference with respect to the level of students' satisfaction in learning in school education.

Table 7.4

Level of Student's Satisfaction in School Education in Thrissur (2020)

Attribute	Low level (Q1)	Moderate level (Q2)	High level (Q3)	Total	Chi-Square value	P value
level of students satisfaction	209 (34.8%)	183 (30.5%)	208 (34.7)	600 (100%)	2.170	0.338 ^{NS}

Source: Computed from Primary Data

Notes: Level Test, NS Denotes non- significant.

From the Table 7.4, it is observed that 34.8 per cent of students have low level of student satisfaction (Teaching style of teachers, subject competency of teachers, classroom and school environment, approach of teachers, infrastructure of school, present syllabus and curriculum, academic achievement and quality of teaching). It is

seen that 30.5% percent of students are moderately satisfied in learning and 34.7 percent of students are highly satisfied in their learning.

Table 7.5

Gender and Level of Students' Satisfaction in Thrissur (2020)

Gender	Level of satisfaction			Total	Chi-square Value	P value
	Low level	Moderate level	High level			
Boy	99 (34.9%)	96 (33.8%)	89 (31.3%)	284 (100%)	3.652	0.161 ^{NS}
Girl	110 (34.8%)	87 (27.5%)	119 (37.7%)	316 (100%)		
Total	209 (34.8%)	183 (30.5%)	208 (34.7%)	600 (100%)		

Source: Compiled from Primary Data

Notes: Chi Square Test, The values in parenthesis refer to row percentage

NS denotes Non-Significance

So, it is obvious that students are not fully satisfied by their learning indicated by the comparative low level of differences between low level and high level of student satisfaction. The level of students' perception on student satisfaction with respect to gender of students is compared and analysed with the help of Chi Square test. The hypothesis is formed that there is no significant association between gender and level of students' satisfaction in learning. It is inferred from the Table 7.5 that the Since P value is greater than 0.05, the null hypothesis is accepted at 5 per cent level. So, it seems that there is no significant association between gender of students and their satisfaction in learning. On the basis of row percentage, 34.9 per cent of male students have low level of satisfaction in learning, 33.8 per cent of them are at moderate level and 31.3 per cent of them are at high level. In the case of female students, 34.8 per cent of them are under low level, 27.5 per cent of them are at moderate level and 37.7 per cent of them are at high level (Table 7.5).

Thus it is obvious that low level of student satisfaction in learning is higher among male students and high level of student satisfaction in learning is among female students and moderate level of the same is higher among male students. The study also statistically proves that high level of student satisfaction is among female students. These differences are not significant and there are no differences with respect to gender and student satisfaction in learning.

Table 7.6

Age and Level of Students' Satisfaction in Thrissur (2020)

Age	Level of satisfaction			Total	Chi-square Value	P value
	Low level	Moderate level	High level			
14 to 15 years	120 (37.3%)	78 (24.2%)	124 (38.5%)	322 (100%)	13.118	0.001**
16 to 20 years	89 (32%)	105 (37.8%)	84 (30.2%)	278 (100%)		
Total	209 (34.8%)	183 (30.5%)	208 (34.7%)	600 (100%)		

Source: Computed from Primary Data

Notes: .Chi square Test

The figure within parentheses refers row percentage

NS denotes Non-Significance

Students' perception on student satisfaction with respect to their age is compared and the hypothesis is formulated that there is no significant association between age and level of students' satisfaction. The association between age and level of students' satisfaction is analyzed with the help of Chi Square test. It is analyzed from the Table 7.6 that the P value is less than 0.01 and the null hypothesis is rejected at 1 per cent level. So there are significant association between age and level of students' satisfaction in schools in Thrissur. It is evident from the Table 7.6 that the P value is less than 0.01; the null hypothesis is rejected at 1 per cent level. Hence, it is inferred that there are significant association between age and level of students' satisfaction in schools. On the basis of row percentage, 37.3 per cent of students under the age group 14 to 15 years are satisfied by their learning at low level, 24.2 per cent of them are at moderate level and 38.5 per cent of them are at high level.

In the case of 16-18 years of age group students, 32 per cent of them are under low level, 37.8 per cent of them are at moderate level and 30.2 % of them are high level. So, it is obvious that low level (37.3%) and high level (38.5%) of students' satisfaction in learning is higher among 14 to 15 age group students. At the same time, moderate level (37.8%) of student's satisfaction in learning is higher among 16 to 18 age groups of students. It reveals that students' satisfaction in learning is more among 14-15 age group students.

7.3. Parental Satisfaction and School Quality

Parent's role in the school environment also plays an important and inevitable role in the educational attainment of their child. They have high expectations regarding their child's education (Kumar, et.al, 2014).

Table 7.7
Quality of Education from the Perspective of Parents in Thrissur District (2020)

SI No	Factors of Quality of Education (Parents' perspective)	Mean	Standard Deviation	Mean difference	T value	P Value
1	Strong students teacher relationship	2.82	1.40	-0.17	-2.17	0.030*
2	Better feedback system	3.07	1.29	0.07	0.97	0.329 ^{NS}
3	Regular Updating of syllabus and curriculum	2.77	1.20	-0.22	-3.20	0.002**
4	Extra-Curricular activities	2.93	1.34	-0.06	-0.81	0.417 ^{NS}
5	Good IT infrastructure	2.98	1.30	-0.01	-0.22	0.825 ^{NS}
6	Parents involvement in school activities	2.98	1.30	-0.01	-0.17	0.860 ^{NS}
7	PTA Meeting	2.66	1.43	-0.33	-4.02	<0.001**

Source: Computed from Primary Data

Notes: Mean Score and One Sample T Test

Test Value: 3; ** denotes significant at 1% level

The study analysed the satisfaction of parents about the quality of the schools in which their children attend by using mean score and one sample T test. The hypothesis is formulated that there is no significant difference between the sample mean and the population mean. The quality of education from the perspective of parents is analyzed with the help of mean score and one sample T Test in the Table 7.7. The P values are less than 0.01 for the factors of quality of education provided by schools from the perspective of parents such as regular updating of syllabus and curriculum and PTA Meeting held at schools. The P value is less than 0.05 for the factor like strong student teacher relationship. The P value is greater than 0.05 for the other factors of quality of education such as better feedback system, extra-curricular activities, good IT infrastructure and parents involvement in school activities.

It indicates that the factors of quality of education provided by schools from the perspective of parents are not equal to average level. The mean values show that all the factors are below average level except better feedback system (>3 , 3 is the test value). The analysis shows that the factors such as strong student teacher relationship, regular updating of syllabus and curriculum, extra-curricular activities, good IT

infrastructure, parents involvement in school activities and PTA meeting provided by schools are not satisfactory. The most preferred factor is better feedback system followed by good IT infrastructure, parent’s involvement in school activities, strong student teacher relationship, regular updating of syllabus and curriculum and PTA meeting respectively. So it is obvious that from the point of view of parent’s quality of education provided by schools are not satisfactory.

7.3.1. Quality of Education and Age of Parents

The perception of parents on quality of education with respect to their age is analyzed using ANOVA test is presented in the Table 7.8 (a).

Table 7.8 (a)
Quality of Education from Parents’ Perspective on the Basis of Age in Thrissur District (2020)

Factors of Quality of Education (Parents perspective)	Age groups of parents			F value	P value
	31 to 40 years	41 to 50 years	Above 51 years		
	Mean and SD	Mean and SD	Mean and SD		
Strong students teacher relationship	2.54 (1.44)	2.97 (1.36)	2.82 (1.41)	2.850	0.059 ^{NS}
Better feedback system	2.78 (1.39)	3.30 (1.17)	2.58 (1.37)	7.462	<0.001**
Regular Updating of syllabus and curriculum	2.61 (1.25)	2.86 (1.15)	2.75 (1.35)	1.424	0.242 ^{NS}
Extra-Curricular activities	2.63 (1.42)	3.07 (1.28)	3.10 (1.34)	3.626	0.028*
Good IT infrastructure	3.00 (1.34)	3.01 (1.28)	2.75 (1.32)	0.475	0.622 ^{NS}
Parents involvement in school activities	2.73 (1.40)	3.11 (1.23)	3.00 (1.33)	2.667	0.071 ^{NS}
PTA Meeting	2.37 (1.45)	2.89 (1.38)	2.20 (1.42)	5.875	0.003**

Source: Computed from Primary Data.

** denotes significant at 1% level, *denotes significant at 5% level
NS denotes non-significant, Figures in parentheses show SD.

The hypothesis is formulated that there is no significant difference among different age group of parents with respect to dimensions of quality of education. Since P value is less than 0.01, null hypothesis is rejected at 1% level with respect to the dimensions of quality of education such as better feedback system and PTA meeting. As a result, there are significant differences among different age group of parents about these factors of quality of education provided by the schools. Since the P value is less than 0.05, the null hypothesis is rejected at 5% level with respect to the factor extracurricular activities. Therefore, it seems that there is significant difference among various age groups of parents with respect to this factor of quality of education.

Since P value is greater than 0.05, the null hypothesis is accepted with regard to the factors of parents perception of quality of education in schools about the factors of quality of school education such as, strong students teacher relationship, regular updating of syllabus and curriculum, good IT infrastructure and parents involvement in school activities. It shows that all age groups of parents under study have same opinion about these factors of quality of school education.

Table 7.8(b)

Factors of Quality of Education from Parents' Perspective Based on Age in Thrissur 2020 (Post Hoc Test)

Factors	Age (I)	Age (J)	Mean difference (I-J)	Std. error	P value
Better feedback system	31 to 40	41 to 50	-0.517	0.161	0.004**
		51 and above	0.203	0.269	0.732 ^{NS}
	41 to 50	51 and above	0.720	0.254	0.014*
Extra-Curricular activities	31 to 40	41 to 50	-0.442	0.170	0.027*
		51 and above	-0.471	0.283	0.221 ^{NS}
	41 to 50	51 and above	-0.029	0.267	0.993 ^{NS}
PTA Meeting	31 to 40	41 to 50	-0.518	0.179	0.012*
		51 and above	0.172	0.299	0.834 ^{NS}
	41 to 50	51 and above	0.690	0.282	0.040*

Source: Computed from Primary Data

Notes: ** denotes significant at 1% level.

* denotes significant at 5% level.

NS denotes non-significant.

Based on Turkey HSD post hoc test, the following significant difference found among the perception of various age groups of parents regarding the factors of quality of education (Table 7.8 (b)). Parents in the age group of 31 to 40 are significantly differed from 41 to 50 age of group of parents with respect to the factor better feedback system and 41 to 50 aged parents are significantly differed from 51 and above age group regarding the same factor. Parents in the age group of 31 to 40 are significantly differed from 41 to 50 age of group of parents about the factor extra-curricular activities. The perception of 31 to 40 age group of parents are significantly differed from 41 to 50 age group of parents regarding the factor like PTA Meeting and 41 to 50 age group is significantly differed from 51 and above age group about the same.

On the basis of mean score, it is observed that, 41 to 50 age group of parents have better opinion regarding students' feedback system existing in the school than 31 to 40 age of parents and above 51 age group of parents. As per the opinion of 31 to 40 and above 51 age group of parents, schools do not have better students' feedback

system. 41 to 50 age group of parents have better opinion regarding extracurricular activities of the schools than 31 to 40 age group of parents. In the case of PTA meeting of the schools, no parents have better opinion. Their opinion regarding PTA meeting is below average. Comparatively, 41 to 50 age groups of parents have better opinion regarding PTA meeting conducted by the schools than 31 to 40 age groups of parents and above 51 age groups of parents. Thus it is obvious that quality of education provided by schools is not satisfactory indicating the importance of structural reforms.

Table 7.9
Age of Parents and Level of Quality of Education in Thrissur District in 2020

Age	Level of Quality of Education			Total	Chi-square Value	P value
	Low	Moderate	High			
31 to 40	32 (33.7%)	36 (37.9%)	27 (28.4%)	95 (100%)	7.634	0.106 ^{NS}
41 to 50	34 (19.3%)	76 (43.2%)	66 (37.5%)	176 (100%)		
51 and above	9 (31%)	11 (37.9%)	9 (31%)	29 (100%)		
Total	75 (25%)	123 (41%)	102 (34%)	300 (100%)		

Source: Computed from Primary Data.

Notes: Chi Square Test

The figures within parentheses refers to Row Percentage

NS denotes non-significant.

The perception of parents on quality of education with respect to their age is compared and analyzed using Chi square test is presented in Table 7.9. The hypothesis is formulated that there is no significant association between age of parents and level of quality of education. The P value is greater than 0.05, the null hypothesis is accepted at 5 per cent level. Hence, it indicates that there is no significant association between age of parents and quality of education provided by schools in Kerala.

On the basis of row percentage, 33.7 per cent of parents under the age group 31 to 40 years have low level of favourable opinion towards quality of education, 37.9 per cent of them are at moderate level and 28.4 per cent of them are at high level. In the case of 41 to 50 age group parents, 19.3 per cent of them are under low level, 43.2 per cent of them are at moderate level and 37.5 per cent of them are at high level. Considering the age group of more than 51, 31 per cent have low level, 37.9 per cent

have moderate level and 31 per cent have high level of favourable attitude towards quality of education. So, it hints that low level of quality of education is higher among 31 to 40 age group parents and high level of quality of education is among 41 to 50 age group parents and moderate level and it is higher among 41 to 50 age groups.

7.3.2. Religion of Parents and Quality of Education

The perception of parents on quality of education with respect to their religion is analyzed using ANOVA test is presented in the Table 7.10(a).

Table 7.10(a)
Quality of Education from Parents Perspective Based on Religion in Thrissur in 2020

Quality of education	Caste group			F value	P value
	Hindu	Christian	Muslim		
	Mean and SD	Mean and SD	Mean and SD		
Strong students teacher relationship	2.45 (1.44)	3.45 (1.11)	2.98 (1.34)	11.768	<0.001**
Better feedback system	2.87 (1.39)	3.43 (1.11)	3.14 (1.21)	3.949	0.020*
Regular Updating of syllabus and curriculum	2.79 (1.30)	2.65 (1.07)	2.81 (1.14)	0.357	0.700 ^{NS}
Extra-Curricular activities	2.70 (1.41)	3.32 (1.15)	3.04 (1.29)	4.945	0.008**
Good IT infrastructure	2.70 (1.37)	3.34 (1.10)	3.16 (1.24)	6.441	0.002**
Parents involvement in school activities	2.74 (1.41)	3.49 (0.95)	3.04 (1.25)	6.889	0.001**
PTA Meeting	2.24 (1.42)	3.29 (1.21)	2.90 (1.39)	13.877	<0.001**

Source: Computed from primary Data.

Notes: ANOVA Test, the figures within parentheses refers to SD,

** denotes significant at 1% level,

*denotes significant at 5% level,

NS denotes non-significant.

The hypothesis is formulated that there is no significant difference among different parents on the basis of their religion with respect to different dimensions of quality of education. The P value is less than 0.01, null hypothesis is rejected at 1% level with respect to dimensions of quality of education like strong student-teacher relationship, extra-curricular activities, good IT infrastructure, parents involvement in school activities and PTA meetings held at schools. As a result, there are significant differences among different category group of parents regarding these aspects of quality of education. The P value is less than 0.05 for the factor such as better feedback system and the null hypothesis is rejected. There are significant differences among parents with respect to this factor. Since P value is greater than 0.05, the null hypothesis is accepted with regard to the factor of quality of education like regular

updating of syllabus and curriculum. Thus different category group of parents have shown different opinions regarding the five dimensions of quality of education and not different with respect to the one dimension of quality of education. By using Turkey HSD post hoc test, the following significant difference found among the perception of various caste groups of parents about the factors of quality of education is presented in the Table 7.10 (b).

Table 7.10(b)

Factors of Quality of Education from Parents Perspective Based on Religion in Thrissur 2020

Quality of Education	Religion(I)	Religion (J)	Mean difference (I-J)	Std. error	P value
Strong students teacher relationship	Hindu	Christian	-0.557	0.204	0.019*
		Muslim	-0.264	0.166	0.251 ^{NS}
	Christian	Muslim	0.293	0.214	0.357 ^{NS}
Better feedback system	Hindu	Christian	0.138	0.192	0.753 ^{NS}
		Muslim	-0.026	0.156	0.985 ^{NS}
	Christian	Muslim	-0.164	0.201	0.693 ^{NS}
Extra-Curricular activities	Hindu	Christian	-0.627	0.211	0.009**
		Muslim	-0.347	0.171	0.109 ^{NS}
	Christian	Muslim	0.279	0.221	0.418 ^{NS}
Good IT infrastructure	Hindu	Christian	-0.638	0.204	0.006**
		Muslim	-0.454	0.165	0.018*
	Christian	Muslim	0.183	0.213	0.667 ^{NS}
Parents involvement in school activities	Hindu	Christian	-0.748	0.204	0.001**
		Muslim	-0.304	0.165	0.159 ^{NS}
	Christian	Muslim	0.443	0.213	0.097 ^{NS}
PTA meeting	Hindu	Christian	-1.048	0.218	0.000**
		Muslim	-0.661	0.177	0.001**
	Christian	Muslim	0.386	0.229	0.212 ^{NS}

Source: Computed from Primary Data

Notes: ** denotes significant at 1% level

* denotes significant at 5% level

Hindu parents are significantly different from Christian parents about the factor strong student teacher relationship and not different with Muslims and Christian parents and not showed a significant difference with Muslim parents regarding the same factor. Considering the factor, better feedback system, Hindu parents are not significantly different from Christian and Muslim parents and no difference between Christians and Muslims. Regarding the factor extra-curricular activities in schools, Hindu parents have significantly differed from Christian parents and not different with Muslims and Christian parents did not show a significant difference with Muslim parents.

On account of the factor good infrastructure in schools, Hindu parents are significantly differed from Christian parents and not different with Muslims and

Christian parents have not shown a significant difference with Muslim parents. Considering the factor, parent’s involvement in school activities also the same trend is seen among parents like the factor good IT infrastructure. In the case of PTA meeting held at schools, Hindu parents are significantly differed from Christian and Muslim parents and no difference between Christians and Muslims in this regard.

Table 7.11

Religion of Parents and Level of Quality of Education in Thrissur District (2020)

Religion	Level of Quality of Education			Total	Chi-square Value	P value
	Low	Moderate	High			
Hindu	51 (36.4%)	54 (38.6%)	35 (25%)	140 (100%)	13.474	0.009**
Christian	8 (14.5%)	32 (58.2%)	15 (27.3%)	55 (100%)		
Muslim	22 (21%)	51 (48.6%)	32 (30.5%)	105 (100%)		
Total	81 (27%)	137 (45.7%)	82 (27.3%)	300 (100%)		

Source: Computed from Primary Data.

Notes: Chi Square Test, The figures within parentheses refer to Row Percentage

NS denotes non-significant.

On the basis of mean scores, it seems that Christian parents are more satisfied by the quality of education provided by schools followed by Muslim and Hindu parents. Hindu parents are more satisfied by the better feedback system of schools, Christians are more satisfied by the parent’s involvement in school activities and Muslim parents are more satisfied by the good IT infrastructure in schools. It is also inferred that parents are not much satisfied by the quality of education provided by schools. The perception of parents on quality of education with respect to their religion is compared and analyzed using Chi square test and the hypothesis is formulated that there is no significant association between religion of parents and level of Quality of Education. With the help of Chi square test, the significant association between religion of parents and level of quality of education and results are presented in Table 7.11. It is statistically proved that the P value is less than 0.01; the null hypothesis is rejected at 1 per cent level. So, it seems that that there is significant association between religion and level of quality of education. On the basis of row percentage, 36.4 per cent of Hindu parents are not satisfied by the quality of education provided by schools. 38.6 per cent of them are at moderate level and 25 per cent of them are at high level. In the case of Christian parents, 14.5 per cent of them are under low level, 58.2 per cent of them are at moderate level and 27.3 per cent of them are at high level. In the case of Muslim parents, it is 21 per cent, 48.6 per cent

and 30.5 per cent respectively. Therefore, it is identified that low level of satisfaction towards quality of education is higher among Hindus and high level of satisfaction towards quality of education is higher among Muslim parents and, moderate level of the same is higher among Christians. Thus it is statistically proved that religion wise there are differences among parents regarding quality of education provided by schools.

7.3.3. Quality of Education and Caste of Parents

The perception of parents concerning quality of education provided by schools on the basis of different caste groups is presented in the Table 7.12(a).

Table 7.12(a)

Quality of Education from Parents Perspective Based on Caste in Thrissur in 2020

Quality of Education	Category				F value	P value
	OEC	OBC	SC/ST	Others		
	Mean and SD	Mean and SD	Mean and SD	Mean and SD		
Strong students teacher relationship	3.51 (1.03)	2.64 (1.43)	2.92 (1.32)	2.67 (1.49)	5.685	0.001**
Better feedback system	3.65 (0.90)	2.98 (1.32)	2.76 (1.33)	2.90 (1.44)	4.584	0.004**
Regular Updating of syllabus and curriculum	2.67 (1.07)	2.81 (1.22)	2.88 (1.12)	2.61 (1.40)	0.450	0.717 ^{NS}
Extra-Curricular activities	3.57 (0.91)	2.88 (1.38)	2.72 (1.24)	2.38 (1.49)	6.264	<0.001**
Good IT infrastructure	3.51 (0.93)	2.91 (1.34)	2.60 (1.29)	2.83 (1.43)	4.071	0.007**
Parents involvement in school activities	3.32 (1.09)	2.92 (1.34)	2.80 (1.22)	2.96 (1.40)	1.508	0.212 ^{NS}
PTA Meeting	3.48 (1.05)	2.52 (1.45)	2.36 (1.28)	2.45 (1.52)	7.298	<0.001**

Source: Computed from primary Data.

Notes: ANOVA Test, The value within bracket refers to SD, ** denotes significant at 1% level, NS denotes non-significant.

The P value is less than 0.01, null hypothesis is rejected at 1% level with respect to dimensions of quality of education like strong student- teacher relationship, better feedback system, extra-curricular activities, good IT infrastructure and PTA meetings held at schools. As a result, there are significant differences among different category group of parents regarding these aspects of quality of education. Since P value is greater than 0.05, the null hypothesis is accepted with regard to the factors of quality of education like regular updating of syllabus and curriculum and parents involvement in school activities.

Table 7.12(b)

Factors of Quality of Education from Parents Perspective Based on Caste in Thrissur 2020

Quality of Education	Religion(I)	Religion (J)	Mean difference (I-J)	Std. error	P value
Strong students teacher relationship	OEC	OBC	0.873	0.214	0.000**
		SC/ST	0.599	0.334	0.278 ^{NS}
		Others	0.841	0.311	0.036*
	OBC	SC/ST	-0.274	0.291	0.784 ^{NS}
		Others	-0.031	0.265	0.999 ^{NS}
		SC/ST	0.242	0.368	0.913 ^{NS}
Better feedback system	OEC	OBC	0.669	0.199	0.005**
		SC/ST	0.893	0.310	0.022*
		Others	0.750	0.289	0.049*
	OBC	SC/ST	0.224	0.271	0.842 ^{NS}
		Others	0.081	0.247	0.988 ^{NS}
		SC/ST	-0.143	0.343	0.975 ^{NS}
Extra-Curricular activities	OEC	OBC	0.696	0.205	0.004**
		SC/ST	0.856	0.319	0.039*
		Others	1.189	0.298	0.000**
	OBC	SC/ST	0.160	0.279	0.940 ^{NS}
		Others	0.493	0.254	0.214 ^{NS}
		SC/ST	0.332	0.353	0.782 ^{NS}
Good IT infrastructure	OEC	OBC	0.607	0.201	0.015*
		SC/ST	0.919	0.313	0.019*
		Others	0.680	0.292	0.094 ^{NS}
	OBC	SC/ST	0.311	0.273	0.666 ^{NS}
		Others	0.072	0.249	0.991 ^{NS}
		SC/ST	-0.238	0.346	0.901 ^{NS}
PTA Meeting	OEC	OBC	0.959	0.217	0.000**
		SC/ST	1.120	0.338	0.006**
		Others	1.029	0.315	0.007**
	OBC	SC/ST	0.160	0.295	0.948 ^{NS}
		Others	0.069	0.269	0.994 ^{NS}
		SC/ST	-0.091	0.373	0.995 ^{NS}

Source: Computed from primary Data.

Notes: ** denotes significant at 1% level.

* denotes significant at 5% level.

NS denotes non- significant

Thus it shows that different caste groups have shown different perceptions regarding quality of education except regular updating of syllabus and curriculum. The perception of various caste groups of parents regarding the factors of quality of education is presented in the Table 7.12 (b). It is evident from the analysis that except OEC category of parents, other categories have not shown a positive approach towards the quality of education provided by the schools. The significant difference found among the perception of various category groups of parents on the basis of Post-hoc test regarding quality of education in Kerala. OEC parents are significantly different from OBC parents and other category of parents regarding the factor that

schools provide strong student teacher relationship and do not show a significant difference with SC/ST parents regarding the same factor.

Table 7.13

Caste of Parents and Level of Quality of Education in Thrissur District in 2020

Caste	Level of Quality of education			Total	Chi-quare Value	P value
	Low	Moderate	High			
OEC	5 (9.6%)	17 (32.7%)	30 (57.7%)	52 (100%)	24.160	<0.001**
OBC	54 (28.1%)	76 (39.6%)	62 (32.3%)	192 (100%)		
SC/ST	6 (24%)	16 (64%)	3 (12%)	25 (100%)		
Others	10 (32.3%)	14 (45.2%)	7 (22.6%)	31 (100%)		
Total	75 (25%)	123 (41%)	102 (34%)	300 (100%)		

Source: Computed from Primary Data.

Notes: Chi Square Test

The figures within parentheses refers to Row Percentage

** denotes significant at 1% level.

OBC parents are not significantly different from SC/ST and others and SC/ST parents are not significantly different from others about the same factor. On account of the better feedback system provided by schools, there are significant differences between OEC with OBC, SC/ST and others. OBC parents are not significantly different from SC/ST and others and SC/ST is not statistically different from others regarding the same factor. Regarding extra-curricular activities provided by schools, there are significant differences between OEC with OBC, SC/ST and others. OBC category of parents is not significantly different from SC/ST and others. SC/ ST category of parents are not significantly different from other categories regarding the same factor. OEC parents are significantly different from OBC and SC/ST parents and not significantly different from other category of parents considering the factor of good IT infrastructure provided by schools.

OBC parents are not different from SC/ST and others and SC/ST is not different from other categories regarding the same factor. On account of PTA meetings held at schools, OEC are different from OBC, SC/ST and other category of parents. OBC category of parents is not significantly different with SC/ST and others, and SC/ST parents are not different from other category of parents regarding the same. On the basis of mean score and the above related factors of quality of education, it is observed that OEC parents are more satisfied with all the dimensions quality of

education in schools. It is also statistically proved that all the other categories of parents including OBC, SC/ST and others are not that much satisfied by the quality of education provided by schools compared to OEC category of parents. So it is evident from the analysis that at quality of education provided by schools to be improved.

The perception of parents on quality of education with respect to their caste is compared and analyzed using Chi square test and the hypothesis is formulated that there is no significant association between caste of parents and level of Quality of Education. With the help of Chi square test, the significant association between caste of parents and level of quality of education is analysed and results are presented in the Table 7.13. It is clear that the P value is less than 0.01; the null hypothesis is rejected at 1 per cent level. Hence, it is interpreted that there is significant association between caste and level of quality of education provided by schools in Kerala.

On the basis of row percentage, 9.6 per cent of OEC parents have low level of favourable attitude towards quality of education provided by schools. It is evident that 32.7 per cent of them are at moderate level and 57.7 per cent of them are at high level. In the case of OBC parents, it was 28.1 per cent, 39.6 per cent and 32.3 per cent respectively. In the case of SC/ST parents, 24 per cent of them are under low level, 64 per cent of them are at moderate level and 12 per cent of them are at high level. In the case of other category of parents, it is 32.3 per cent, 45.2 per cent and 22.6 per cent respectively. So, it can be concluded that low level of favourable attitude towards quality of education is higher among other category of parents and high level of favourable attitude towards quality of education is higher among OEC and, moderate level of the same is higher among SC/ST parents. Thus it is statistically proven that caste wise there are differences among parents regarding quality of education provided by schools in Kerala.

7.3.4. Quality of Education and Class

The perception of parents on quality of education with respect to class in which their child is studying is compared and analyzed using ANOVA test and results are presented in the Table 7.14(a). The hypothesis is formulated that there is no significant difference among different parents on the basis of class their child is studying and different dimensions of quality of education. Since P value is less than 0.01, null hypothesis is rejected at 1% level with respect to the dimension of quality of education like extracurricular activities and PTA meeting held at schools. As a

result, there are significant differences among parents on the basis of class-wise in which their child is studying about these aspects of quality of education.

Table 7.14(a)
Quality of Education from Parents Perspective Based on Class wise in Thrissur in 2020

Quality of Education	Class Group			F value	P value
	9 th STD	10 th STD	Plus Two		
	Mean and SD	Mean and SD	Mean and SD		
Strong students teacher relationship	2.67 (1.47)	3.00 (1.32)	2.79 (1.41)	1.416	0.244 ^{NS}
Better Feedback System	2.88 (1.40)	3.27 (1.18)	3.06 (1.27)	1.321	0.100 ^{NS}
Regular Updating of syllabus and curriculum	2.77 (1.32)	2.67 (1.11)	2.89 (1.17)	0.747	0.475 ^{NS}
Extracurricular activities	2.68 (1.47)	3.35 (1.11)	2.75 (1.33)	8.125	<0.001 ^{**}
Good IT Infrastructure	2.78 (1.44)	3.29 (1.12)	2.86 (1.27)	4.571	0.011 [*]
Parents involvement in school activities	2.74 (1.42)	3.19 (1.17)	3.03 (1.27)	3.222	0.041 [*]
PTA meeting	2.38 (1.47)	3.11 (1.28)	2.48 (1.43)	8.240	<0.001 ^{**}

Source: Computed from primary Data.

Notes: ANOVA Test. The figures within parentheses refers to SD

** denotes significant at 1% level.

NS denotes non-significant.

Since the p value is less than 0.05, the null hypothesis is rejected at 5% level about the factors of quality of education like good IT Infrastructure and parents involvement in school activities. Therefore, it seems that there are significant differences among parents on the basis of class wise in which their child is studying concerning quality of education on the above said factors. Since the p value is less than 0.05, the null hypothesis is rejected at 5% level regarding the factors of quality of education like good IT Infrastructure and parents involvement in school activities. Therefore, it indicates that there are significant differences among parents on the basis of class wise their child is studying about quality of education on the above said factors. Since P value is greater than 0.05, the null hypothesis is accepted with regard to the factors of quality of education like strong student teacher relationship, better feedback system and regular updating of syllabus and curriculum. There are no significant differences among parents concerning these factors of quality of education.

By using the Post Hoc test the significant differences on the basis of class-wise results are presented in the Table 7.14 (b). In the case of the factor, extracurricular activities, parents of 9th standard children are different from those that of 10th standard and not different from plus two children's parents. It is also seen that parents of 10th standard children are different from those of plus two students.

Concerning the factor, good IT infrastructure, parents of 9th standard children are different from those of 10th standard and not different with plus two children's parents. It is also seen that parents of 10th standard children are not different from those of plus two students. On account of the factor of PTA Meeting the same trend is seen as in the case of extracurricular activities. Thus it is statistically proved that irrespective of the level of class in which their child is studying parents are not fully satisfied about the quality of education provided by schools.

Table 7.14(b)
Factors of Quality of Education from Parents Perspective Based on Class Wise in Thrissur 2020

Quality of Education	Class group(I)	Class group (J)	Mean difference (I-J)	Std. error	P value
Extracurricular activities	9 th STD	10 th STD	-0.673	0.182	0.001**
		Plus Two	-0.064	0.188	0.938 ^{NS}
	10 th STD	Plus Two	0.609	0.189	0.004**
Good IT Infrastructure	9 th STD	10 th STD	-0.510	0.179	0.013**
		Plus Two	-0.088	0.184	0.881 ^{NS}
	10 th STD	Plus Two	0.421	0.185	0.061 ^{NS}
PTA meeting	9 th STD	10 th STD	-0.735	0.194	0.001**
		Plus Two	-0.108	0.199	0.851 ^{NS}
	10 th STD	Plus Two	0.627	0.200	0.006**

Source: Computed from primary Data.

Notes: ** denotes significant at 1% level.

NS denotes non- significant

The perception of parents on quality of education with respect to standard in which their child is studying is compared and analyzed using Chi square test (Table 7.15) and the hypothesis is formulated that there is no significant association between class and level of quality of education. For finding out the association between parents on the basis of the standard in which their child is studying and quality of education Chi Square test is used. As the P value is less than 0.01, the null hypothesis is rejected at 1 per cent level.

Hence, it seems that there is significant association between the standard in which their child is studying and quality of education provided by schools. It is statistically evident from the values of row percentage that, 36.2 per cent of parents of 9th standard children are satisfied by the quality of education provided by schools at low level. 31.4 per cent of them are at moderate level and 32.4 per cent of them are at high level. In the case of parents of 10th standard children, it was 16.5 per cent, 37.9 per cent and 45.6 per cent respectively. In the case of parents of Plus-two children, 21.7 per cent of them are under low level, 55.4 per cent of them are at moderate level and 22.8 per cent of them are at high level respectively. So, it can be argued that low

level of satisfaction regarding quality of education provided by schools given by parents is higher in the case of parents of 10th standard children and high level of the same are also given by parents of 10th standard, moderate level of the same is higher among parents of plus two children.

Table 7.15

Studying Standard and level of Quality of Education in Thrissur District in 2020

Studying STD	Level of Quality of Education			Total	Chi-square Value	P value
	Low	Moderate	High			
9 th STD	38 (36.2%)	33 (31.4%)	34 (32.4%)	105 (100%)	23.450	<0.001**
10 th STD	17 (16.5%)	39 (37.9%)	47 (45.6%)	103 (100%)		
Plus Two	20 (21.7%)	51 (55.4%)	21 (22.8%)	92 (100%)		
Total	75 (25%)	123 (41%)	102 (34%)	300 (100%)		

Source: Computed from Primary Data.

Notes: Chi Square Test

The figures within parentheses refers to Row Percentage

** denotes significant at 1% level.

Thus it is statistically proved that based on standard in which their child is studying there are differences among parents related to quality of education provided by schools in Kerala. As in the case of parental care and support also, parents of 10th class children and that of plus two classes are comparatively satisfied by it but it can be also seen by the results that the parents overall are not highly satisfied by the quality of education provided by schools in Kerala.

7.3.5. School Type and Quality of Education

The perception of parents on quality of education with respect to type of school their child is attending is compared and analyzed using ANOVA test (Table 7.16 (a)). The hypothesis is formulated that there is no significant difference among different parents on the basis of their school type with respect to dimensions of quality of education. Since P value is less than 0.01, null hypothesis is rejected at 1% level with respect to dimensions of quality of education like strong student teacher relationship, better feedback system, extracurricular activities and PTA meetings held at schools. As a result, there are significant differences among different category group of parents about these aspects of quality of education. Since the p value is less than 0.05, the null hypothesis is rejected at 5% level regarding the factor of quality of education that schools provide good IT infrastructure and parental involvement in school activities. Therefore, it is inferred that there are significant differences among

various category group of parents regarding quality of education in Kerala. Since P value is greater than 0.05, the null hypothesis is accepted with regard to only one factor of quality of education like regular updating of syllabus and curriculum.

Table 7.16(a)

Quality of Education from Parents Perspective Based on School Type in Thrissur in 2020

Quality of Education	School type			F value	P value
	Govt.	Aided	CBSE		
	Mean and SD	Mean and SD	Mean and SD		
Strong students teacher relationship	2.58 (1.44)	2.65 (1.43)	3.51 (1.02)	11.480	<0.001**
Better Feedback System	2.86 (1.36)	2.95 (1.35)	3.63 (0.87)	8.712	<0.001**
Regular Updating of syllabus and curriculum	2.70 (1.31)	2.87 (1.22)	2.72 (0.97)	0.647	0.524 ^{NS}
Extracurricular Activities	2.72 (1.42)	2.83 (1.39)	3.45 (0.95)	7.003	0.001**
Good IT Infrastructure	2.94 (1.33)	2.82 (1.37)	3.33 (1.05)	3.551	0.030*
Parental Involvement in School Activities	2.81 (1.40)	2.92 (1.35)	3.36 (0.96)	4.020	0.019*
PTA meeting	2.37 (1.46)	2.47 (1.44)	3.48 (0.99)	15.936	<0.001**

Source: Computed from primary Data.

Notes: ANOVA Test; The figures within parentheses refers to SD

** denotes significant at 1% level, NS denotes non-significant.

Thus, it is clear that there exists difference among parents on the basis of school types in which their child is studying regarding Quality of Education. Parents have shown different opinions regarding the six dimensions of quality of education and not different, with respect to only one dimension of quality of education like regular updating of syllabus and curriculum. It is also evident from the analysis that except parents of CBSE School going children, other parents are not in favour of the quality of education provided by the schools in Kerala. The following significant difference found among parents on the basis of school types in which their child is studying regarding quality of education on the basis of Post-hoc test (Table 7.16 (b)). Parents of government school going children are different with CBSE School going parents and parents of aided school going children are different with that of CBSE and there are no differences between government and aided school going children's parents regarding the time they spent with their child at home. Taking consideration, better feedback system provided by schools, parents of children attending government schools are different with that of CBSE and parents of children attending aided

schools are different with that of CBSE. There is no significant difference between government and aided school attending children's parents in this regard.

Table 7.16(b)

Factors of Quality of Education from Parents Perspective Based on School Type in Thrissur 2020

Quality of Education	School type (I)	School type (J)	Mean difference (I-J)	Std. error	P value
Strong students teacher relationship	Govt.	Aided	-0.069	0.178	0.919 ^{NS}
		CBSE	-0.931	0.210	0.000 ^{**}
	Aided	CBSE	-0.861	0.204	0.000 ^{**}
Better Feedback System	Govt.	Aided	-0.090	0.166	0.850 ^{NS}
		CBSE	-0.771	0.196	0.000 ^{**}
	Aided	CBSE	-0.680	0.191	0.001 [*]
Extracurricular Activities	Govt.	Aided	-0.116	0.174	0.782 ^{NS}
		CBSE	-0.733	0.204	0.001 [*]
	Aided	CBSE	-0.617	0.199	0.006 [*]
Good IT Infrastructure	Govt.	Aided	0.121	0.170	0.755 ^{NS}
		CBSE	-0.393	0.200	0.123 ^{NS}
	Aided	CBSE	-0.515	0.195	0.024 [*]
Parental Involvement in School Activities	Govt.	Aided	-0.112	0.170	0.787 ^{NS}
		CBSE	-0.552	0.200	0.017 [*]
	Aided	CBSE	-0.440	0.195	0.064 ^{NS}
PTA meeting	Govt.	Aided	-0.105	0.179	0.828 ^{NS}
		CBSE	-1.114	0.211	0.000 ^{**}
	Aided	CBSE	-1.009	0.206	0.000 ^{**}

Source: Computed from primary Data.

Notes: ** denotes significant at 1% level.

* denotes significant at 5% level.

NS denotes non- significant.

Parents of children attending government schools are different with that of CBSE and parents of children attending aided school are different with that of CBSE on account of extracurricular activities held in schools and there is no significant difference between government and aided school attending children's parents in this regard. On account of good IT infrastructure provided by schools, there are no significant differences between Government and CBSE, aided and Government and significant differences between aided and CBSE parents. Regarding parental involvement in school activities there is no significant difference between government and aided and aided and CBSE parents but difference is seen between government and CBSE parents. In the case of PTA meetings held at schools, there are significant differences between government and CBSE, aided and CBSE and not much difference between government and aided schools. On the basis of mean score and the related factors of quality of education and school type in which their child is studying, it is observed that parents of CBSE School attending children are more satisfied regarding all the above said dimensions. On the other hand, parents of government and aided school

children are comparatively less satisfied in this regard. Parents of government school going children are more satisfied by the good IT infrastructure of schools, aided school children's parents and CBSE school going children's parents are more satisfied by the better feedback system. It is also statistically proved that regarding almost all the aspects of quality aspects of school education, there are much differences seen between CBSE and government schools on the one hand, and CBSE and aided schools on the other.

Table 7.17
School Type and Level of Quality of Education in Thrissur District in 2020

School type	Level of Quality of Education			Total	Chi-square Value	P value
	Low	Moderate	High			
Govt.	34 (31.5%)	47 (43.5%)	27 (25%)	108 (100%)	24.338	<0.001**
Aided	36 (29%)	51 (41.1%)	37 (29.8%)	124 (100%)		
CBSE	5 (7.4%)	25 (36.8%)	38 (55.9%)	68 (100%)		
Total	75 (25%)	123 (41%)	102 (34%)	300 (100%)		

Source: Computed from Primary Data.

Note: Chi Square Test

The figures within parentheses refers to Row Percentage

* denotes significant at 1% level.

Both government and aided schools reflect same picture that focus on the importance of improvement in quality of education provided by these schools. So, on the basis of mean scores it is obvious that parents are not fully satisfied by the quality of education provided by schools. The perception of parents on quality of education with respect to type of school is compared and analyzed using Chi square test (Table 7.17). The hypothesis is formulated that there is no significant association between class and level of quality of education. To find out any association among parents on the basis of school type in which their child is studying and quality of education chi square test is used. From the analysis it is seen that the P value is less than 0.01, and the null hypothesis is rejected at 1 per cent level. Hence, it is inferred that there is significant association between school type and quality of education provided by schools in Kerala. On the basis of row percentage, 31.5 per cent of government school going children's parents are of the opinion that the quality of education provided by schools are at low level, 43.5 per cent of them are at moderate level and 25 per cent of them are at high level. In the case of parents of aided school going children, it was 29 per cent, 41.1 per cent and 29.8 per cent respectively. In the case of parents of CBSE

school going children, 7.4 per cent of them are under low level, 36.8 per cent of them are at moderate level and 55.9 per cent of them are at high level respectively.

So, it is evident that low level of quality of education provided by schools is higher in the opinion of parents of government school going children and high level of quality of education are provided by schools according to the parents of CBSE school going children, moderate level of the same is higher among parents of aided school going children. Thus it is statistically proved that based on school type of children there are differences among parents related to quality of education provided by schools. It is also clear that most of the parents are not satisfied by the quality of education provided by schools except in CBSE schools.

7.3.6. Quality of Education and Geographical Location

The perception of parents on quality of education with respect to the geographical area is compared and analyzed using T test (Table 7.18). The hypothesis is formulated that there is no significant difference among different parents on the basis of geographical area with respect to dimensions of quality of education. The mean score and one sample T test for measuring the significant difference between parents based on the area in which they are living and the factors of quality of education are analysed. As the P value is less than 0.01, the null hypothesis is rejected at 1 per cent level with regard to the factors of quality of education like strong student teacher relationship, better feedback System, extracurricular activities, good IT Infrastructure and PTA meetings held at schools. Thus there are significant differences among parents on the basis of the area in which they are living regarding quality of education. Since p value is more than 0.05, the null hypothesis is accepted at 5 per cent level regarding the factors of quality of education like regular updating of syllabus and curriculum and parent's involvement in school activities. Thus there are no significant differences among parents on the basis of the area in which they are living regarding these above said aspects of quality of education. Based on mean score, it can be interpreted that families in which parents living in urban areas are more satisfied by the quality of education provided by schools than parents living in rural areas by taking into account all the dimensions. Thus it is evident that there are rural and urban differences regarding quality of education on the basis of locality or area in which they are living with respect to dimensions of quality of education.

Table 7.18
Quality of Education and the Perspective of Parents on the Basis of Locality in Thrissur (2020)

Quality of Education	Locality				T value	P value
	Rural		Urban			
	Mean	SD	Mean	SD		
Strong students teacher relationship	2.43	1.44	3.34	1.16	-5.83	<0.001**
Better Feedback System	2.80	1.38	3.42	1.08	-4.21	<0.001**
Regular Updating of syllabus and curriculum	2.79	1.30	2.75	1.06	0.23	0.816 ^{NS}
Extracurricular activities	2.65	1.41	3.31	1.15	-4.28	<0.001**
Good IT Infrastructure	2.73	1.37	3.31	1.13	-3.84	<0.001**
Parent's involvement in school activities	2.83	1.38	3.19	1.17	-2.40	0.017 ^{NS}
PTA meeting	2.21	1.41	3.27	1.22	-6.78	<0.001**

Source: Computed from Primary Data.

Notes: Mean score and Independent T Test

** denotes significant at 1% level, NS denotes non-significant

The perception of parents on quality of education with respect to geographical area is compared and analyzed using Chi square test (Table 7.19). The hypothesis is formulated that there is no significant association between geographical area and level of quality of education. The P value is less than 0.01; the null hypothesis is rejected at 1 per cent level.

Table 7.19
Locality and Level of Quality of Education in Thrissur District in 2020

Locality	Level of Quality of Education			Total	Chi-square Value	P value
	Low	Moderate	High			
Rural	58 (33.7%)	83 (48.3%)	31 (18%)	172 (100%)	47.705	<0.001**
Urban	17 (13.3%)	40 (31.3%)	71 (55.5%)	128 (100%)		
Total	75 (25%)	123 (41%)	102 (34%)	300 (100%)		

Source: Computed from Primary Data.

Notes: Chi Square Test,

The figures within parentheses refers to Row Percentage

** denotes significant at 1% level.

Hence, it can be interpreted that there is significant association among parents based on the area where they are living and quality of education provided by schools. It is statistically evident from the values of row percentage that, 33.7 per cent of parents living in rural areas are satisfied by the quality of education provided by schools at low level, 48.3 per cent of them are at moderate level and 18 per cent of them are at high level. In the case of parents living in urban areas, it was 13.3 per

cent, 31.3 and 55.5 respectively. So, it is identified that low level of satisfaction regarding quality of education provided by schools are given by parents living in rural areas and high level of the same are given by parents living in urban areas, moderate level of the same is higher among parents living in rural areas.

Table 7.20

The level of Quality of Education in Thrissur District in 2020

Attribute	Low level (Q1)	Moderate level (Q2)	High level (Q3)	Total	Chi-Square value	P value
Quality of education	75 (25%)	123 (41%)	102 (34%)	300 (100%)	11.580	0.003**

Source: Computed from Primary Data

Notes: Level Test,

** denotes significant at 1% level.

Thus it is statistically proven that based on the area or locality in which parents are living; there are significant differences among them related to quality of education provided by schools. Thus it is statistically proved that parents living in urban areas are more satisfied by the quality of education in schools than parents living in rural areas. This may be due to the well-equipped and well-furnished availability of schools existing in towns and cities than in villages and semi urban or rural areas. Thus there are rural- urban differences regarding quality of education. The level of quality of education in Thrissur district is analysed with the help of Level test and results are presented in the Table 7.20. Since the P value is less than 0.01, the proportion of level of quality of education in Thrissur is not equally distributed. It indicates that there are significant differences regarding the level of quality of education. From the above table it is observed that 25 percent of parents have low level of satisfaction regarding quality of education. It is seen from the table 8.16 that 41 percent of parents have moderate level of satisfaction regarding quality of education and 34 percent of parents are highly satisfied about the quality of education. So, it is analysed that most of the parents are moderately satisfied about schools.

7.4. Problems of School Education and Quality

There are so many problems from the perspectives of parents related to school education. The problems are poor household atmosphere, low educational level of the parents, poor academic performance of child, financial problems, time constraint of parents, lack of motivation, love and affection from family and problems related to

school environment and lack of government support in the form of scholarship. All these problems affect school education quality. The perspective of parents on different aspects of school education of their child helps to understand about the school educational standards. Thus, the most relevant problem from the perspective of parents are poor household atmosphere (2.53) followed by time constraint of parents (2.34), lack of government support in the form of scholarship (2.33), financial problems (2.31), problems related to school environment (2.30), poor academic performance of child (2.29), low educational level of the parents (2.28) and the least relevant are lack of motivation, love and affection from family (2.12).

Table 7.21

Problems of School Education from the Perspective of Parents in Thrissur District in 2020

SI No	Factors of Problems of school education	Mean	Standard Deviation	Mean difference	T value	P Value	Rank
1	Poor household atmosphere	2.53	1.18	-0.64	-9.42	<0.001**	I
2	Low educational level of the parents	2.28	1.12	-0.70	-10.79	<0.001**	VII
3	Poor academic performance of child	2.29	1.08	-0.71	-11.37	<0.001**	VI
4	Financial problems	2.31	1.08	-0.69	-10.98	<0.001**	IV
5	Time constraint of parents	2.34	1.06	-0.66	-10.85	<0.001**	II
6	Lack of motivation, love and affection from family	2.12	1.06	-0.88	-14.34	<0.001**	VIII
7	Problems related to school environment	2.30	1.08	-0.69	-11.01	<0.001**	V
8	Lack of Govt. support in the form of scholarship	2.33	1.04	-0.67	-11.10	<0.001**	III

Source: Computed from Primary Data

Notes: Mean Score and One Sample T Test,

Test Value: 3; ** denotes significant at 1% level.

7.4.1. Age of Parents and Problems of School Education

The perception of parents related to the problems of school education with respect to their age is analyzed using ANOVA test and results are presented in the Table 7.22. The hypothesis is formulated that there is no significant difference among age group of parents with respect to dimensions of problems related to school education. The various factors related to the problems of school education from the perspective of parents of different age group is being analysed with the help of ANOVA test. The P value is greater than 0.05 for all the factors of problems of school education. So it indicates that the null hypothesis is accepted with regard to all these factors of problems of school education. Regarding all the different dimensions of

problems of school education, i.e. poor household atmosphere, low educational level of the parents, poor academic performance of child, financial problems, time constraint of parents, lack of motivation, love and affection from family, problems related to school environment and lack of government support in the form of scholarship there are no statistically proved differences between different age group of parents.

Table 7.22

Problems of School Education from the Perspective of Parents in 2020

Problems of School education	Age group			F value	P value
	31 to 40 years	41 to 50 years	Above 51 years		
	Mean and SD	Mean and SD	Mean and SD		
Poor household atmosphere	2.31 (1.16)	2.38 (1.18)	2.31 (1.31)	0.112	0.894 ^{NS}
Low educational level of the parents	2.28 (1.12)	2.34 (1.13)	2.06 (1.13)	0.730	0.483 ^{NS}
Poor academic performance of child	2.26 (1.08)	2.30 (1.07)	2.27 (1.13)	0.053	0.949 ^{NS}
Financial problems	2.25 (1.07)	2.37 (1.09)	2.10 (1.11)	0.968	0.381 ^{NS}
Time constraint of parents	2.25 (1.06)	2.41 (1.06)	2.10 (1.04)	1.470	0.232 ^{NS}
Lack of motivation, love and affection from family	2.09 (1.06)	2.14 (1.04)	2.06 (1.22)	0.098	0.907 ^{NS}
Problems related to school environment	2.27 (1.13)	2.35 (1.05)	2.17 (1.10)	0.418	0.659 ^{NS}
Lack of Govt. support in the form of scholarship	2.28 (1.06)	2.41 (1.03)	1.96 (0.94)	2.459	0.087 ^{NS}

Source: Computed from Primary Data.

Notes: ANOVA Test.

The figures within parentheses refers to SD

NS denotes non-significant.

The results thus shows that in the case of 31-40 age group of parents the most relevant problem is poor household atmosphere (2.31) and the least affected problem is lack of motivation, love and affection from family (2.09). In the case of 41-50 aged group of parents the most important problems are time constraints of parents (2.41) and lack of government support in the form of scholarship (2.41) and the least affected one is related to lack of motivation, love and affection from family (2.14). In the case of above 51 years of aged group of parents it is poor household atmosphere (2.31) and lack of Government support in the form of scholarship (1.96) respectively.

7.4.2. Religion of Parents and Problems of School Education

The problems of school education from the part of parents on the basis of their caste are analyzed with the help of ANOVA test is shown in the Table 7.23 (a)The perception of parents related to the problems of school education with respect to their religion is analyzed and compared using ANOVA test. The hypothesis is formulated

that there is no significant difference among parents on the basis of their religion regarding different dimensions of problems related to school education.

Table 7.23(a)
Problems of School Education on the Basis of Religion in Thrissur District in 2020

Problems of school education	Religion			F value	P value
	Hindu	Christian	Muslim		
	Mean and SD	Mean and SD	Mean and SD		
Poor household atmosphere	2.15 (1.19)	2.74 (1.10)	2.40 (1.17)	5.155	0.006**
Low educational level of the parents	2.10 (1.12)	2.47 (1.11)	2.46 (1.10)	4.071	0.018*
Poor academic performance of child	2.15 (1.12)	2.49 (0.99)	2.36 (1.04)	2.256	0.107 ^{NS}
Financial problems	2.21 (1.11)	2.41 (1.04)	2.38 (1.06)	1.036	0.356 ^{NS}
Time constraint of parents	2.17 (1.08)	2.47 (1.01)	2.46 (1.04)	2.810	0.062 ^{NS}
Lack of motivation, love and affection from family	1.90 (1.03)	2.30 (0.99)	2.31 (1.08)	5.806	0.003**
Problems related to school environment	2.24 (1.13)	2.29 (0.97)	2.40 (1.07)	0.717	0.489 ^{NS}
Lack of Govt. support in the form of scholarship	2.26 (1.12)	2.27 (0.89)	2.44 (1.00)	1.025	0.360 ^{NS}

Source: Computed from primary Data.

Notes: ANOVA Test. The figures within parentheses refers to SD

** denotes significant at 1% level,* denotes significant at 5% level,

NS denotes non-significant.

The P value is less than 0.01; null hypothesis is rejected at 1% level with respect to the dimensions of problems of school education like poor household atmosphere and lack of motivation, love and affection from family. Thus there is significant difference among different caste group of parents regarding these aspects of problems of school education. The P value is less than 0.05; null hypothesis is rejected at 5% level with respect to dimensions of problems of school education like low educational level of the parents.

As a result, there is significant difference among different caste group of parents regarding this aspect of problems of school education. Since P value is greater than 0.05, the null hypothesis is accepted with regard to the factors of problems of school education like poor academic performance of child, financial problems, time constraint of parents, problems related to school environment and lack of government support in the form of scholarship. Thus it is clear that different caste groups have shown almost similar opinion about all these dimensions of problems of school education except poor household atmosphere, low educational level of the parents and lack of motivation, love and affection from family. In the case of Hindu parents the most important problem of school education is lack of government support in the form of scholarship (2.26) and the least important is lack of motivation, love and

affection from family (1.90). Christian parents are more concerned about the problem of poor household atmosphere (2.74) and least concerned by lack of government support in the form of scholarship (2.27). From the perspective of Muslims it is low educational level of parents (2.46) and time constraint of parents (2.46) and lack of motivation, love and affection from family (2.31) respectively.

Table 7.23(b)
Problems of School Education on the Basis of Religion in Thrissur in 2020

Problems of School Education	Religion (I)	Religion (J)	Mean difference (I-J)	Std. error	P value
Poor household atmosphere	Hindu	Christian	-0.588	0.186	0.005**
		Muslim	-0.252	0.151	0.220 ^{NS}
	Christian	Muslim	0.335	0.195	0.199 ^{NS}
Low educational level of the parents	Hindu	Christian	-0.372	0.177	0.092 ^{NS}
		Muslim	-0.366	0.144	0.031*
	Christian	Muslim	0.006	0.185	0.999 ^{NS}
Lack of motivation from family	Hindu	Christian	-0.409	0.166	0.039*
		Muslim	-0.414	0.135	0.007**
	Christian	Muslim	-0.005	0.174	1.000 ^{NS}

Source: Computed from primary Data.

Notes: ** denotes significant at 1% level.

* denotes significant at 5% level.

NS denotes non-significant

By using Turkey HSD post hoc test, the following significant difference found among the perception of various parents on the basis of their religion regarding problems of school education in Kerala is presented in the Table 7.23 (b). Hindu parents are significantly differed with Christian parents regarding the factor poor household atmosphere and Christian parents have not shown a significant difference with Muslim parents regarding the same factor. Considering the low educational level of the parents there are significant differences between Hindus and Muslims and no significant differences between Christians and Muslims.

Regarding lack of motivation, love and affection from family, Hindu parents are significantly differed with Christian and Muslim parents there are significant differences between Hindus and Christians and no significant differences between Christians and Muslims. On the basis of mean score, it can be observed that Christian parents expressed more problems related to school education and low educational level of the parents than Muslims and Hindu parents and Christian and Muslim parents consider the problem of lack of motivation, love and affection from family more than Hindu parents. There are significant differences between Christians and Hindus and no significant differences between Christians and Muslims regarding the

same. It is also apparent that all the parents irrespective of different caste have not revealed many problems related to school education.

7.4.3. Caste of Parents and Problems of School Education

The perception of parents related to the problems of school education with respect to their caste is analyzed and compared using ANOVA test is presented in the Table 7.24(a).

Table 7.24 (a)
Problems of School Education on the Basis of Caste in Thrissur District in 2020

Problems of School Education	Caste				F value	P value
	OEC	OBC	SC/ST	Others		
	Mean and SD	Mean and SD	Mean and SD	Mean and SD		
Poor household atmosphere	2.63 (1.06)	2.29 (1.19)	2.44 (1.19)	2.19 (1.30)	1.379	0.249 ^{NS}
Low educational level of the parents	2.38 (1.06)	2.27 (1.12)	2.72 (1.10)	1.96 (1.22)	2.217	0.086 ^{NS}
Poor academic performance of child	2.63 (0.95)	2.23 (1.10)	2.56 (1.08)	1.80 (0.94)	4.648	0.003 ^{**}
Financial problems	2.46 (0.95)	2.31 (1.12)	2.56 (0.96)	1.80 (1.07)	3.053	0.029 [*]
Time constraint of parents	2.65 (0.96)	2.29 (1.06)	2.56 (0.96)	1.87 (1.14)	4.124	0.007 ^{**}
Lack of motivation, love and affection from family	2.25 (0.92)	2.12 (1.09)	2.44 (1.08)	1.61 (0.88)	3.452	0.017 [*]
Problems related to school environment	2.40 (0.93)	2.32 (1.12)	2.64 (1.03)	1.77 (0.99)	3.524	0.015 [*]
Lack of Govt. support in the form of scholarship	2.48 (0.91)	2.34 (1.07)	2.44 (1.00)	1.87 (1.02)	2.507	0.059 ^{NS}

Source: Computed from primary Data.

Notes: . ANOVA Test. The figures within parentheses refers to SD

** denotes significant at 1% level,

* denotes significant at 5% level, NS denotes non-significant.

The hypothesis is formulated that there is no significant difference among parents on the basis of their caste regarding different dimensions of problems related to school education. As the P value is less than 0.01, null hypothesis is rejected at 1% level with respect to dimensions of problems of school education like poor academic performance of child and time constraint of parents so that there are significant differences among different category group of parents regarding these aspects. Since the p value is less than 0.05, the null hypothesis is rejected at 5% level regarding the factor of problems of school education like financial problems, lack of motivation, love and affection from family and problems related to school environment. Therefore, it is inferred that there are significant differences among various category group of parents regarding these aspects of problems of school education in Kerala.

Since P value is greater than 0.05, the null hypothesis is accepted with regard to the factors of problems of school education like poor household atmosphere, low educational level of the parents and lack of government support in the form of scholarship so that there exists no significant differences among parents regarding

these aspects of problems of school education. Thus it is clear that different category group of parents have shown different opinions regarding the five dimensions of problems of school education and not different with respect to the three dimensions of the same. It is also clear from the analysis that all the categories of parents have not expressed much problems related to school education in Kerala. The following significant difference found among the perception of various category groups of parents on the basis of post-hoc test regarding problems of school education in Kerala (Table 24(b)).

Table 7.24(b)
Problems of School Education on the Basis of Caste in Thrissur in 2020(Post Hoc Test)

Problems of School Education	Caste(I)	Caste (J)	Mean difference (I-J)	Std. error	P value
Poor academic performance of child	OEC	OBC	0.395	0.166	0.083 ^{NS}
		SC/ST	0.074	0.258	0.992 ^{NS}
		Others	0.828	0.241	0.004 ^{**}
	OBC	SC/ST	-0.320	0.225	0.489 ^{NS}
		Others	0.433	0.205	0.153 ^{NS}
		SC/ST	Others	0.753	0.285
Financial problems	OEC	OBC	0.143	0.168	0.828 ^{NS}
		SC/ST	-0.098	0.262	0.982 ^{NS}
		Others	0.655	0.244	0.039 [*]
	OBC	SC/ST	-0.242	0.229	0.715 ^{NS}
		Others	0.511	0.208	0.070 ^{NS}
	SC/ST	Others	0.753	0.289	0.048 [*]
Time constraint of parents	OEC	OBC	0.362	0.163	0.123 ^{NS}
		SC/ST	0.093	0.255	0.983 ^{NS}
		Others	0.782	0.237	0.006 ^{**}
	OBC	SC/ST	-0.268	0.222	0.625 ^{NS}
		Others	0.420	0.202	0.164 ^{NS}
	SC/ST	Others	0.689	0.281	0.071 ^{NS}
Lack of motivation, love and affection from family	OEC	OBC	0.125	0.164	0.872 ^{NS}
		SC/ST	-0.190	0.255	0.879 ^{NS}
		Others	0.637	0.238	0.039 [*]
	OBC	SC/ST	-0.315	0.223	0.493 ^{NS}
		Others	0.512	0.203	0.059 ^{NS}
	SC/ST	Others	0.827	0.282	0.019 [*]
Problems related to school environment	OEC	OBC	0.075	0.167	0.969 ^{NS}
		SC/ST	-0.236	0.260	0.802 ^{NS}
		Others	0.629	0.243	0.049 [*]
	OBC	SC/ST	-0.311	0.227	0.520 ^{NS}
		Others	0.553	0.207	0.040 [*]
	SC/ST	Others	0.865	0.288	0.015 [*]

Source: Computed from primary Data.
Notes: ** denotes significant at 1% level.
* denotes significant at 5% level.
NS denotes non- significant

OEC parents are significantly differed from other category of parents regarding the problem of poor academic performance of child and not shown a significant difference with OBC and SC/ST parents regarding the same factor. OBC parents are not significantly different from SC/ST and others and SC/ST parents are

significantly different from others regarding the same factor. On account of financial problems faced by parents, there are significant differences between OEC and others and no significant differences with OBC and SC/ST categories of parents. OBC parents are not significantly different from SC/ST and others and SC/ST are statistically different from others regarding the same factor.

Table 7.25
Problems of School Education and Caste of Parents in Thrissur District in 2020

Caste	Level of Problems of School Education			Total	Chi-square Value	P value
	Low	Moderate	High			
OEC	5 (9.6%)	32 (61.5%)	15 (28.8%)	52 (100%)	17.959	0.006**
OBC	57 (29.7%)	82 (42.7%)	53 (27.6%)	192 (100%)		
SC/ST	5 (20%)	10 (40%)	10 (40%)	25 (100%)		
Others	14 (45.2%)	13 (41.9%)	4 (12.9%)	31 (100%)		
Total	81 (27%)	137 (45.7%)	82 (27.3%)	300 (100%)		

Source: Computed from Primary Data.

Notes: Chi Square Test

The value within () refers to Row Percentage

** denotes 1 % level significance.

Regarding the time constraint of parents, there are significant differences between OEC and others and no significant differences with OBC and SC/ST categories of parents. OBC category of parents is not significantly different from SC/ST and others. SC/ST category of parents is not significantly different from other categories regarding the same factor. OEC parents are significantly different from other category of parents and not significantly different from OBC and SC/ST category of parents considering the problem of lack of motivation, love and affection from family. OBC parents are not different from SC/ ST and others and SC/ST is different from other categories regarding the same factor. On account of problems related to school environment, OEC are different from other category of parents and not different from OBC and SC/ST parents. OBC category of parents is not significantly different from SC/ST and different with other category of parents and SC/ST parents are significantly different from other category of parents regarding the same.

On the basis of mean score and the above related factors of problems of school education, it can be observed that OEC parents revealed that they face these problems

compared to other category of parents. According to OEC parents the most important problem of school education in Kerala is the time constraints of parents, to OBC category of parents it is lack of government support in the form of scholarship, to SC/ST parents it is low educational level of the parents and for other categories it is poor household atmosphere. The perception of parents related to the problems of school education with respect to caste is analyzed using Chi Square test and the hypothesis is formulated that there is no significant association between caste of parents and level of problems of School Education. With the help of Chi square test, the significant association between caste of parents and level of problems of school education is analysed (Table 7.25). It is seen that the P value is less than 0.01; the null hypothesis is rejected at 1 per cent level. Hence, it is shown that there is significant association between caste and level of problems of school education.

On the basis of row percentage, 9.6 per cent of OEC parents are having low level of problems related to school education. It is obvious that 61.5 per cent of them are at moderate level and 28.8 per cent of them are at high level. In the case of OBC parents, it was 29.7 per cent, 42.7 per cent and 27.6 per cent respectively. In the case of SC/ST parents, 20 per cent of them are under low level, 40 per cent of them are at moderate level and 40 per cent of them are at high level. In the case of other category of parents, it is 45.2 per cent, 41.9 per cent and 12.9 per cent respectively.

So, it is evident that low level of problems related to school education is higher among other category of parents and high level of problems related to school education is higher among SC/ST parents and, moderate level of the same is higher among OEC parents. Thus it is statistically proved that caste wise there are differences among parents related to school education in Kerala. It is also clear that most of the parents do not have much problems related to school education.

7.4.4. School Type and Problems of School Education

In the case of parents of children attending Government schools the most important problems are lack of Government support in the form of scholarship (2.48) and the least problem is lack of motivation, love and affection from family (2.19). From the perspective of parents of children attending aided schools it is time constraints of parents (2.31) and lack of motivation, love and affection from family (1.99) and to parents of CBSE school attending children it is poor household atmosphere (2.47) and lack of motivation, love and affection from family (2.23)

respectively. Therefore, it is inferred that there are no significant differences among parents on the basis of school types in which their child is studying except one aspect of the problems of School Education.

Table 7.26(a)
Problems of School Education on the Basis of School Type in Thrissur District in 2020

Problems of School Education	School Type			F value	P value
	Govt.	Aided	CBSE		
	Mean and SD	Mean and SD	Mean and SD		
Poor household atmosphere	2.37 (1.25)	2.26 (1.21)	2.47 (1.02)	0.689	0.503 ^{NS}
Low educational level of the parents	2.30 (1.19)	2.21 (1.13)	2.42 (1.01)	0.756	0.471 ^{NS}
Poor academic performance of child	2.37 (1.16)	2.18 (1.09)	2.33 (0.89)	1.018	0.363 ^{NS}
Financial problems	2.45 (1.17)	2.20 (1.08)	2.26 (0.92)	1.533	0.218 ^{NS}
Time Constraints of Parents	2.37 (1.10)	2.31 (1.10)	2.29 (0.91)	0.167	0.846 ^{NS}
Lack of motivation, love and affection from family	2.19 (1.17)	1.99 (1.05)	2.23 (0.84)	1.572	0.209 ^{NS}
Problems related to school environment	2.45 (1.17)	2.20 (1.11)	2.27 (0.84)	1.599	0.204 ^{NS}
Lack of Govt support in the form of scholarship	2.48 (1.10)	2.14 (1.04)	2.42 (0.90)	3.421	0.034 [*]

Source: Computed from primary Data.

Notes: ANOVA Test.

The figures within parentheses refers to SD

** denotes significant at 1% level, * denotes significant at 5% level

NS denotes non-significant.

Since P value is greater than 0.05, the null hypothesis is accepted with regard to all the other factors of problems of school education, like poor household atmosphere, low educational level of the parents, poor academic performance of child, financial problems, time constraints of parents, lack of motivation, love and affection from family and problems related to school environment. Thus it is clear that there exists no significant difference among parents on the basis of school types in which their child is studying regarding problems of school education. Significant difference is found among parents on the basis of school types in which their child is studying regarding problems of school education on the basis of Post-hoc test is presented in the Table 7.26 (b). Parents of government school going children are different with aided school going children's parents and not different with that of CBSE School going children's parents and parents of aided school going children are not different with that of CBSE regarding the lack of government support in the form of scholarship. On the basis of mean score and the above related factors of problems of school education on the basis of school type in which their child is studying, it can be

observed that parents of all the school types do not face much problems related to school education and comparatively there is no significant differences seen among all these groups. According to government school attending children’s parents, the most important problem is lack of government support in the form of scholarship.

Table 7.26(b)
Problems of School Education on the Basis of School Type in Thrissur in 2020(Post Hoc Test)

Problems of School Education	School type (I)	School type (J)	Mean difference (I-J)	Std. error	P value
Lack of Govt support in the form of scholarship	Govt.	Aided	0.336	0.136	0.038*
		CBSE	0.055	0.160	0.937 ^{NS}
	Aided	CBSE	-0.281	0.156	0.172 ^{NS}

Source: Computed from primary Data.
Notes * denotes significant at 5% level.
NS denotes non – significant.

To aided school children’s parents it is time constraints of parents and in the opinion of CBSE school children’s parents it is poor household atmosphere of parents. All this indicate the importance they give to their child irrespective of the financial background.

Table 7.27
Problems of School Education and School Type of Parents in Thrissur District in 2020

School type	Level of Problems of School Education			Total	Chi-square Value	P value
	Low	Moderate	High			
Govt.	31 (28.7%)	41 (38%)	36 (33.3%)	108 (100%)	11.646	0.020*
Aided	40 (32.3%)	56 (45.2%)	28 (22.6%)	124 (100%)		
CBSE	10 (14.7%)	40 (58.8%)	18 (26.5%)	68 (100%)		
Total	81 (27%)	137 (45.7%)	82 (27.3%)	300 (100%)		

Source: Computed from Primary Data.
Notes: Chi Square Test
The figures within parentheses refers to Row Percentage
* denotes 5 % level significance.

This clearly throws light in to the fact that majority of the students studying in CBSE schools are not financially well to do, but parents are willing to send their children to CBSE irrespective of their financial background. The perception of parents related to the problems of school education with respect to type of school is analyzed using Chi Square test and results are presented in the table 7.27. The hypothesis is formulated that there is no significant association between school type and level of problems of school education. From the analysis it is seen that the P value is less than 0.05, the null hypothesis is rejected at 5 per cent level. Hence, it can be inferred that there is significant association between school type and problems of school education

in Kerala. On the basis of row percentage, 28.7 per cent of government schools going children's parents are of the opinion that the problems related to school education are at low level. 38 per cent of them are at moderate level and 33.3 per cent of them are at high level. In the case of parents of aided school going children, it was 32.3 per cent, 45.2 per cent and 22.6 per cent respectively. In the case of parents of CBSE School going children, 14.7 per cent of them are under low level, 58.8 per cent of them are at moderate level and 26.5 per cent of them are at high level respectively. So, it is concluded that low level of problems related to schools is higher in the opinion of parents of aided school going children and high level of problems related to schools are by parents of government school going children; moderate level of the same is higher among parents of CBSE school going children. Thus it is statistically proved that based on school type of children there are differences among parents related to problems of school education in Kerala.

7.4.5. Geographical Location and Problems of School Education

With the help of mean score and one sample T test the significant difference between parents based on the area in which they are living and the problems of School Education are being analysed and results are presented in the Table 7.28. The P value is less than 0.01; the null hypothesis is rejected at 1 per cent level with regard to the factor of problems of school education like low educational level of parents. Thus there are significant differences among parents on the basis of the area in which they are living regarding this aspect of problems related to school education. Since the p value is less than 0.05, the null hypothesis is rejected at 5 per cent level with regard to the factors of problems of school education like lack of motivation, love and affection from family.

Thus there are significant differences among parents on the basis of the area in which they are living regarding this aspect of problems related to school education. Since the p value is higher than 0.05, the hypothesis is accepted for the other factors of problems of school education like poor household atmosphere, poor academic performance of child, financial problems, time constraints of parents, problems related to school environment and lack of government support in the form of scholarship. It indicates that there are no significant differences among parents based on the area in which they are living and the above said factors of problems related to school education. Based on mean score, it is evident that there are not many problems

related to school education among parents but comparatively, the problems are more in the case of parents living in urban areas. Thus it is obvious that there are rural urban differences regarding problems related to school education.

Table 7.28

Problems of School Education from the Perspective of Parents on the Basis of Locality in Thrissur (2020)

Problems of School Education	Locality				T value	P value
	Rural		Urban			
	Mean	SD	Mean	SD		
Poor household atmosphere	2.23	1.25	2.50	1.07	-1.95	0.052 ^{NS}
Low educational level of the parents	2.13	1.15	2.50	1.05	-2.82	0.005 ^{**}
Poor academic performance of child	2.21	1.14	2.39	0.98	-1.39	0.165 ^{NS}
Financial problems	2.25	1.14	2.38	1.00	-1.00	0.318 ^{NS}
Time Constraints of Parents	2.29	1.12	2.39	0.97	-0.80	0.422 ^{NS}
Lack of motivation, love and affection from family	2.00	1.12	2.27	0.96	-2.17	0.031 [*]
Problems related to school environment	2.26	1.17	2.36	0.95	-0.78	0.432 ^{NS}
Lack of Govt support in the form of scholarship	2.27	1.09	2.39	0.97	-0.97	0.328 ^{NS}

Source: Computed from Primary Data.

Notes: Mean Score and Independent T Test

** denotes significant at 1% level, *denotes significant at 5% level,

NS denotes non-significant

The perception of parents related to the problems of school education with respect to geographical area is analyzed using Chi Square test in the Table 7.29 and the hypothesis is formulated that there is no significant association between geographical area and level of problems of school education. For finding out the association between parents on the basis of area or locality in which they are living and problems of school education, Chi Square test is used for analysis.

The P value is less than 0.01; the null hypothesis is rejected at 1 per cent level. Hence, it is interpreted that there is significant association among parents based on the area in which they are living and the problems related to school education. It is statistically evident from the values of row percentage that, 34.9 per cent of parents living in rural areas have addressed problems related to school education at low level, 39.5 per cent of them are at moderate level and 25.6 per cent of them are at high level. In the case of parents living in urban areas, it was 16.4 per cent, 53.9 and 29.7 respectively.

So, it seems that low level of problems related to school education are given by parents living in rural areas and high level of the same are given by parents living in urban areas, moderate level of the same is higher among parents living in urban

areas. Thus it is statistically proved that based on the area or locality in which parents live; there are significant differences among them related to problems of school education. Thus there are differences in terms of problems related to school education based on the area in which they are living but all the parents do not have many problems. So it is evident that there are rural urban differences related to problems of school education.

Table 7.29
Problems of School Education and Locality of Parents in Thrissur District in 2020

Locality	Level of Problems of School Education			Total	Chi-square Value	P value
	Low	Moderate	High			
Rural	60 (34.9%)	68 (39.5%)	44 (25.6%)	172 (100%)	13.052	0.001**
Urban	21 (16.4%)	69 (53.9%)	38 (29.7)	128 (100%)		
Total	81 (27%)	137 (45.7%)	82 (27.3%)	300 (100%)		

Source: Computed from Primary Data.

Notes: Chi Square Test

. The figures within parentheses refers to Row Percentage,

** denotes 1 % level significance

The level of problems of school education in Thrissur is analysed with the help of level test. Since the P value is less than 0.01, the proportions of level of problems of school education in Thrissur are not equally distributed.

Table 7.30
The Level of Problems of School Education in Thrissur District in 2020

Attribute	Low level (Q1)	Moderate level (Q2)	High level (Q3)	Total	Chi-Square value	P value
Problems of school education	81 (27%)	137 (45.7%)	82 (27.3%)	300 (100%)	20.540	<0.001**

Source: computed from Primary Data

Notes: Level Test, ** denotes significant at 1% level.

It indicates that there are significant differences regarding problems of school education in Kerala. From the Table 7.30, it is observed that 27 percent of parents have low level of problems regarding problems of school education (poor household atmosphere, low educational level of the parents, poor academic performance of child, financial problems, time constraints of parents, lack of motivation, love and affection from family, problems related to school environment and lack of Government support in the form of scholarship). Among parents, 45.7 per cent of them have moderate level of problems regarding problems of school education and 27.3 percent of parents have high level of problems related to school education.

7.5. Effects of Home Environment and School Environment

To explore the effects of students' home environment and school environment on their engagement in learning and satisfaction, and also to test the mediating role of students satisfaction in the relationship between students' school environment and their engagement in learning, has been achieved by testing Co-variance Based Confirmatory Factor Analysis (CB-CFA) and Structural Equation Modelling (SEM) techniques. This contains two parts. Part one deals with Co-variance Based Confirmatory Factor Analysis (CB-CFA) and part two deals with the development of Structural Equation Modelling (SEM).

It also contains an overview of SEM techniques. The summary of hypotheses testing is also given at the end of this chapter. The objective is to explore the effects of students' home environment and school environment on their engagement in learning and satisfaction, and also to test the mediating role of students' satisfaction in the relationship between students' school environment and their engagement in learning. To achieve this objective, Co-variance Based Confirmatory Factor Analysis (CB-CFA) and Structural Equation Modelling (SEM) techniques were employed using IBM SPSS AMOS 21 software package. To test the mediation effect in the model, the bootstrapping procedures were adopted using 1000 bootstrap samples

7.5.1. Co-variance Based Confirmatory Factor Analysis

In statistics, confirmatory factor analysis is a special form of factor analysis, most commonly used in social research. It is used to test whether measures of a construct are consistent with a researcher's understanding of the nature of that construct. Confirmatory factor analysis (CFA) is a multivariate statistical procedure that is used to test how well the measured variables represent the number of constructs. Confirmatory factor analysis (CFA) and exploratory factor analysis (EFA) are similar techniques, but in exploratory factor analysis (EFA), data is simply explored and provides information about the numbers of factors required to represent the data. In exploratory factor analysis, all measured variables are related to every latent variable. But in confirmatory factor analysis (CFA), researchers can specify the number of factors required in the data and which measured variable is related to which latent variable. Confirmatory factor analysis (CFA) is a tool that is used to confirm or reject the measurement theory.

7.5.2. Assessment Criteria of CB-CFA Models

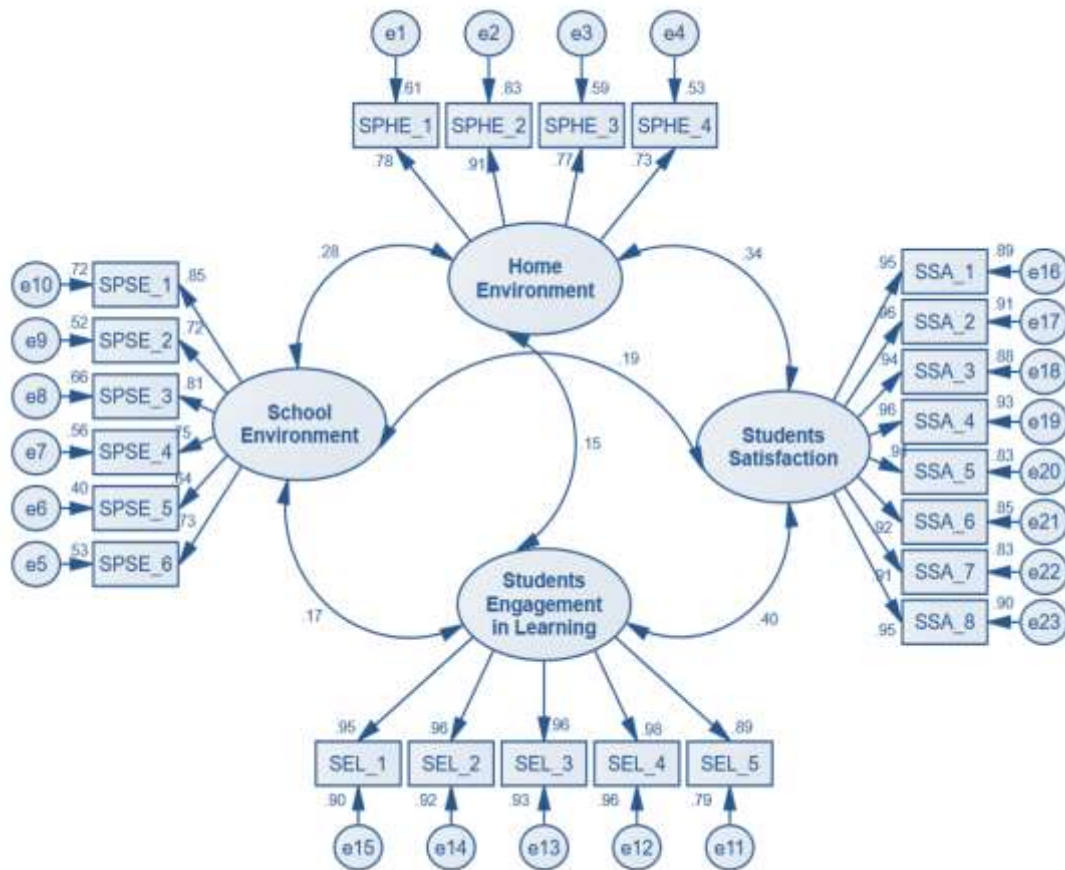
It is necessary to establish Construct validity (convergent and discriminant validity) as well as reliability (Composite reliability) for doing Confirmatory factor analysis. Confirmatory factor analysis (CFA) is a statistical technique used to verify the factor structure of a set of observed variables. CFA allows the researcher to test the hypothesis that a relationship between observed variables and their underlying latent constructs exists (Suhr, 2009). The factors have to demonstrate adequate validity and reliability. The following tools are employed for the assessment of the measurement model:

- (1) Composite Reliability (CR)
- (2) Construct validity
 - (a) Convergent Validity
 - (b) Discriminant Validity.

1. Composite Reliability (CR) is a measure of the overall reliability of a construct. The value varies between 0 and 1. Values of composite reliability of >0.7 and above are good (Hair et al., 2010). Values less than 0.6 indicate lack of internal consistency.
2. Construct validity: construct validity can be measured by two methods, convergent validity and discriminant validity
 - (a) *Convergent Validity* – the items that are indicators or the observed variables in a specific construct should converge or share a high proportion of variance with each other. According to Hair et. al, (2010), if there are convergent validity issues in the validity examination, then it indicates that the latent factor is not well explained by the observed variables. Malhotra et. al, (2001) observe that AVE is a strict measure of convergent validity even more conservative than CR. The researcher has used the average variance extracted (AVE) for measuring convergent validity for this study. The value of AVE is calculated by using standardized factor loadings. The threshold value of AVE is >0.5 (Hair et. al., 2010). Item factor loadings are also a measure to identify convergent validity (Hair et. al., 2010). The threshold value of standardized factor loading for establishing item validity is >0.5 for this study (Hair et. al., 2010). If the standardized factor loadings and AVE values are more than 0.5, it indicates adequate convergence.

(b) *Discriminant validity* is the extent to which a construct is truly distinct from other constructs. High discriminant validity indicates that a construct is unique and captures phenomena that are not represented by other constructs. If the discriminant validity examination does not yield the required results, it indicates that the variables correlate with variables of the other constructs to a large extent i.e. the latent variable is better explained by some other variables than by its own observed variables. The researcher has used the Fornell and Larcker (1981) criterion which is a conservative method of assessing discriminant validity. It compares the square root of AVE with the latent variable correlations. The square root of AVE of each construct should be greater than its latent variable correlation with any other constructs. By this, discriminant validity can be established.

Figure 7.1
Confirmatory Factor Analysis for students' Home Environment, School Environment, and Engagement in Learning and Students Satisfaction Constructs



Source: Prepared by the Investigator

Table 7.31
Model Fit Indices for the CFA Model and Student Satisfaction

ATTRIBUTES	CMIN/DF	P-VALUE	GFI	AGFI	CFI	RMSEA
Study model	3.524	0.000	0.955	0.990	0.964	0.051
Recommended value	Acceptable fit [1-5]	Greater than 0.05	Greater than 0.9	Greater than 0.9	Greater than 0.9	Less than 0.08
Literature support	Hair et al., (1998)	Barrett (2007)	Hair et al. (2006)	Hair et al. (2006)	Hu and Bentler (1999)	Hair et al. (2006)

Source: Computed from Primary Data

Table 7.31 represents the CFA model fit indices to assess the overall model fit. The value of Chi-Square to the degrees of freedom ratio for an acceptable model should be less than 5. In this case, the value is 3.524 which is very well within the suggested maximum value.

Table 7.32
Final Reliability and Validity of CFA Model and Student Satisfaction Constructs

Constructs	Item code	Factor loading	Cronbach's Alpha Final	AVE	Composite Reliability
Students Perception of Home Environment (SPHE)	SPHE 1	0.78	0.89	0.64	0.88
	SPHE 2	0.91			
	SPHE 3	0.77			
	SPHE 4	0.73			
Students Perception of School Environment (SPSE)	SPSE 1	0.85	0.88	0.57	0.89
	SPSE 2	0.72			
	SPSE 3	0.81			
	SPSE 4	0.75			
	SPSE 5	0.64			
	SPSE 6	0.73			
Students Engagement in Learning (SEL)	SEL 1	0.95	0.97	0.90	0.98
	SEL 2	0.96			
	SEL 3	0.96			
	SEL 4	0.98			
	SEL 5	0.89			
Students Satisfaction (SSA)	SSA 1	0.95	0.96	0.88	0.98
	SSA 2	0.96			
	SSA 3	0.94			
	SSA 4	0.96			
	SSA 5	0.91			
	SSA 6	0.92			
	SSA 7	0.91			
	SSA 8	0.95			

Source: Computed from Primary Data

Note: ** denotes significant at 1% level

The RMSEA score is 0.051, well below the accepted threshold score of 0.08. Moreover, the GFI and AGFI values are above 0.9 and CFI is above 0.9 for which 1.0 indicates exact fit. Thus, the model is a good fit and can be considered for further analysis and model building.

From Table 7.32 it is inferred that all the factor loadings are above the threshold level of 0.5 which establishes the item validity of the constructs. The researcher has adopted the Cronbach's Alpha reliability test after the full scale data collection. The final values of Cronbach's Alpha are found to be greater than 0.9 which confirms the reliability of the constructs employed to measure the construct. The Composite Reliability values are found to be greater than 0.9 which indicates that all the constructs have a high level of internal consistency reliability. The Average Variance Extracted (AVE) values are also found to be above the recommended threshold value of >0.5. Thus, it is inferred that all constructs have high levels of convergence. As all the criteria meet the recommended value, the data is suitable for further analysis and SEM development.

Table 7.33
Discriminant Validity Among the Students' Home Environment, School Environment, Engagement in Learning and Students Satisfaction Constructs

Constructs	Students Perception of Home Environment	Students Perception of School Environment	Students Engagement in Learning	Students Satisfaction
Students Perception of Home Environment	(0.80)			
Students Perception of School Environment	0.28	(0.75)		
Students Engagement in Learning	0.15	0.17	(0.95)	
Students Satisfaction	0.34	0.19	0.40	(0.94)

Source: Computed from Primary Data

Table 7.33 displays the square root of AVE values and inter construct latent constructs correlations. Values in brackets are the square root of AVE scores which

must be greater than the inter construct latent variable correlation values to establish the non-existence of any relationship. From the table 7.33, it is observed that no relationship exists among the constructs and discriminant validity for service quality constructs is established.

7.5.3. Co-variance Based Structural Equation Modeling techniques

Structural equation modeling (SEM) is a multivariate statistical analysis technique that is used to analyse the structural relationships. It is the combination of factor analysis and analysis. A lot of researchers preferred this method because it estimates the multiple and interrelated dependence in a single analysis. In this analysis, mainly two types of variables are used, that is, endogenous variables (dependent variable) and exogenous variables (independent variable). Covariance based structural equation modelling is a confirmatory approach and is mainly used for hypotheses testing and for the analysis of a structural theory bearing some phenomenon. In this study, IBM SPSS AMOS 21 software package was used to run the Structural Equation Modelling. In order to develop SEM, the following hypotheses are to be tested.

Table 7.34
Hypotheses for Model Building

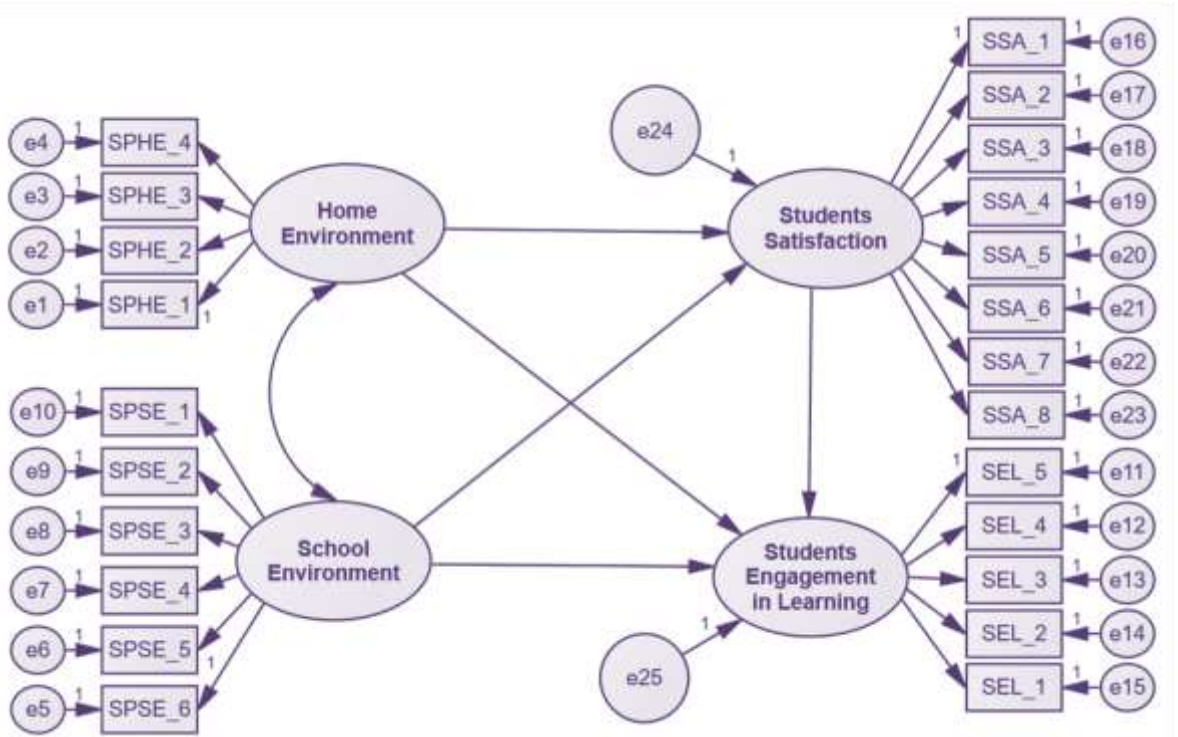
Hypotheses No.	Hypotheses of model building
SM.H1	Home environment of school students has a positive effect on students' satisfaction
SM.H2	School environment of school students has a positive effect on students' satisfaction
SM.H3	Home environment of school students has a positive effect on students engagement in learning
SM.H4	School environment of school students has a positive effect on students engagement in learning
SM.H5	Students satisfaction has a positive effect on students engagement in learning
SM.H6	Students satisfaction mediates in the relationship between school environment and students engagement in learning

Source: Computed from Primary Data

Note: SM.H1 to SM.H6 indicates Structural Model Hypotheses

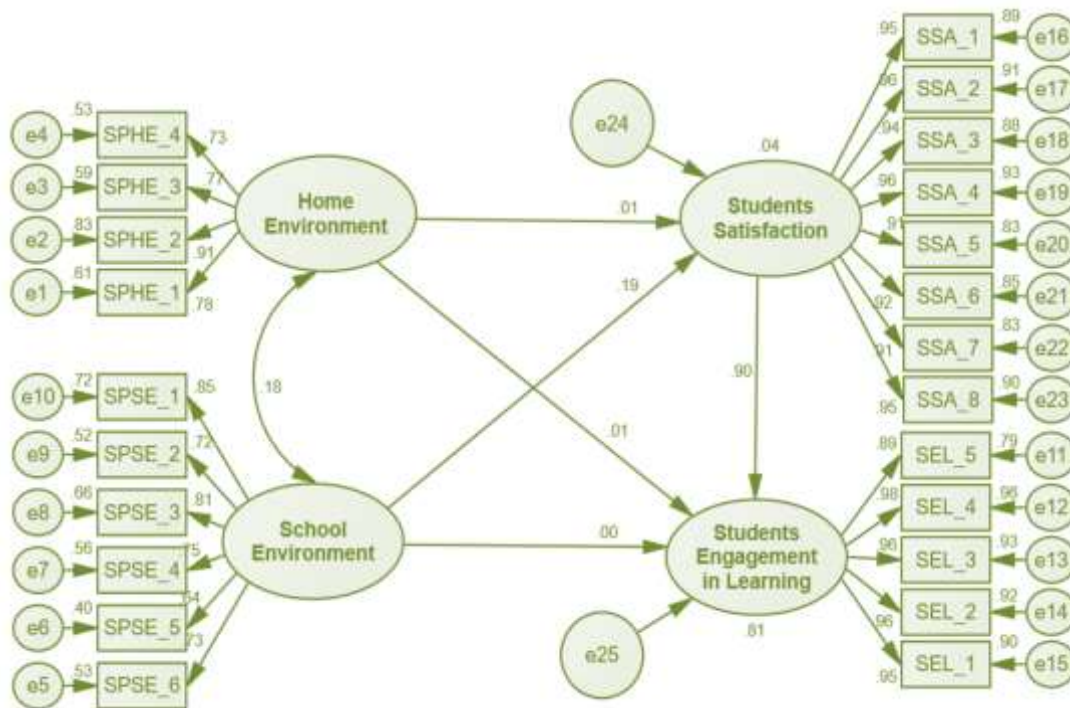
Figure 7.2

Hypothesized Conceptual Model for School Students in Kerala (Effects of Students' Home Environment and School Environment on their Engagement in Learning and Satisfaction)



Source: Prepared by the Investigator

Figure 7.3
Tested Structural Equation Model (Effects of Environment on Students' Satisfaction and their Engagement in Learning)



Source: Prepared by the Investigator

Table 7.35 represents the SEM model fit indices to assess the model fit. The value of Chi-Square to the degrees of freedom ratio for an acceptable model should be less than 5. In this case, the value is 3.187 which is very well within the suggested maximum value.

Table 7.35

Fit Indices for the Structural Equation Model for School Students in Kerala

MODEL	CMIN/DF	P-VALUE	GFI	AGFI	CFI	RMSEA
Study model	3.187	0.000	0.924	0.901	0.941	0.066
Recommended value	Acceptable fit [1-5]	Greater than 0.05	Greater than 0.9	Greater than 0.9	Greater than 0.9	Less than 0.08

Source: Computed from Primary Data

The RMSEA score is 0.066, below the accepted threshold score of 0.08. Moreover, the GFI and AGFI values are above 0.9 and CFI is above 0.9 for which 1.0 indicates exact fit. Thus, the SEM model is a good fit.

Table 7.36

Path Analysis on Student’s Satisfaction

Constructs path index			Standardized co-efficient (Beta)	R ² Value	Critical Ratio	P value
Students Satisfaction	←	Home Environment	0.01	0.04	0.977	0.841 ^{NS}
Students Satisfaction	←	School Environment	0.19		2.974	<0.001**
Students Engagement in Learning	←	Home Environment	0.01	0.81	0.247	0.847 ^{NS}
Students Engagement in Learning	←	School Environment	0.00		0.254	0.947 ^{NS}
Students Engagement in Learning	←	Students satisfaction	0.90		7.64	<0.001**

Source: Computed from Primary Data

Notes: ** indicates significant at 1% level; NS denotes Not Significant

7.5.4. Results of Path Analysis and Hypotheses Testing

The standardized beta coefficient of home environment of the school students on their satisfaction is 0.01 that represents the partial effect of home environment on

student's satisfaction, holding the other path variables as constant. The estimated positive sign implies that such effect is positive but the P value indicates that this effect is not statistically significant. It indicates that home environment of school students does not have any effect on students' satisfaction. The standardized beta coefficient of school environment of the students on their satisfaction is 0.19 represents the partial effect of school environment on student's satisfaction, holding the other path variables as constant. The estimated positive sign implies that such effect is positive and students' satisfaction would increase by 0.19 for every unit of standard deviation increase in school environment and this coefficient value is significant at 1% level. It reveals that school environment of school students plays a role in students' satisfaction.

The standardized beta coefficient of home environment of the school students on their engagement in learning is 0.01 represents the partial effect of home environment on student's engagement in learning, holding the other path variables as constant. The estimated positive sign implies that such effect is positive but the P value indicates that this effect is not statistically significant. It shows that home environment of school students does not lead to their engagement in learning.

The standardized beta coefficient of school environment on student's engagement in learning is 0.00 represents that students' school environment does not have any effect on engagement in learning. The study reveals that the students' satisfaction has a positive effect on their engagement in learning. The standardized beta coefficient of students' satisfaction on their engagement in learning is 0.90 which represents the partial effects of students' satisfaction on their engagement in learning, holding the other path variables as constant. The estimated positive value implies that such effect is positive and the students' engagement would increase by 0.90 for every unit of standard deviation increase in students' satisfaction and this coefficient value is significant at 1% level.

The explanatory power of the structural equation model is assessed by evaluating the R^2 value of the dependent constructs. The R squared coefficient measures the percentage of variation that is explained by the model (See Model figure). The coefficient of determination for students' satisfaction, (R^2) is 0.04. This value implies that only 4% of the variation in students' satisfaction is explained by students' home environment and school environment. This value leads to the

conclusion that other independent variables are highly necessary for predicting students' satisfaction besides these independent constructs like students' home environment and school environment. The remaining 96% of the variation in students' satisfaction is not explained by these independent constructs. It means that satisfaction of the school students in Kerala does not depend greatly upon their home environment and school environment.

The coefficient of determination for students' engagement in learning (R^2) is 0.81. This value implies that about 81% of the variation in students' engagement in learning is explained by students home environment, school environment and students satisfaction. This value leads to the conclusion that other independent variables are needed for predicting students' engagement in learning construct besides these independent constructs like students home environment, school environment and students satisfaction. The remaining 19% of the variation in students' engagement in learning is not explained by these independent constructs. It is also found that students' engagement in learning is mainly depends on their satisfaction level, not from their school and home environments.

Table 7.37
Mediation Testing in the Model (Direct and Indirect Effect Path) Using Bootstrapping Procedure (Summary of Estimates)

Independent construct	Mediation construct	Dependent construct	Direct effect	Indirect effect (Mediation effect)	Result
Students School Environment	Students Satisfaction	Students Engagement in Learning	0.00 ^{NS}	0.17**	Full mediation

Source: Computed from Primary Data

Notes: ** Significant at 1% level;

NS denotes Not-significant;

Indirect effect values are computed through bootstrapping procedure with 1000 bootstrap samples

Table 7.37 reveals both direct and indirect effects in the model. The direct effect of students school environment and students engagement in learning, and indirect effect (mediation effect) of students school environment and students engagement in learning via students satisfaction can be identified in the model. The test results show that there is no significant direct effect between students school environment and students engagement in learning. Whereas, there is significant

indirect effect (mediation effect) between students school environment and students engagement in learning via students satisfaction. Full mediating effect can be seen in the model in between students school environment and students engagement in learning via students satisfaction since the direct effect in the model is insignificant and mediation effect is significant. The mediation effects of this path is examined using bootstrapping (1000 bootstrap samples) methods with the help of IBM-SPSS-AMOS-21 software package. The result indicates that for attaining better learning engagement among school students in Kerala, the attainment of their satisfaction in study is inevitable factor. Without attaining the students' satisfaction, the efforts invested for making the engagement of students in their learning will be waste of effort.

Table 7.38
Result Summary of Hypothesis Testing

Hypotheses No.	Hypotheses of the model developed	Result of Hypotheses testing
SM.H1	Home environment of school students has a positive effect on students' satisfaction	Not Supported
SM.H2	School environment of school students has a positive effect on students' satisfaction	Supported
SM.H3	Home environment of school students has a positive effect on students engagement in learning	Not Supported
SM.H4	School environment of school students has a positive effect on students engagement in learning	Not Supported
SM.H5	Students satisfaction has a positive effect on students engagement in learning	Supported
SM.H6	Students satisfaction mediates in the relationship between school environment and students engagement in learning	Supported

Source: Computed from Primary Data

Note: SM.H1 to SM.H6 indicates Structural Model Hypotheses

In this analysis, six hypotheses including mediation hypothesis were developed and tested using CB SEM techniques and a model for school students in Kerala was developed based on the results of the hypotheses testing (table 7.38). Three hypotheses are supported and three hypotheses are not supported in this model. It is hypothesised that home environment of school students do not have positive effect on students' satisfaction, school environment of school students has a positive effect on students' satisfaction, home environment of school students do not have positive effect on students engagement in learning, school environment of school

students do not have positive effect on students engagement in learning, students satisfaction has a positive effect on students engagement in learning and students satisfaction mediates in the relationship between school environment and students engagement in learning. The fit indices show that both CFA and SEM models are a good fit.