

Parental Involvement as a Determinant of Academic Outcomes: Evidence from Scheduled Caste Students in Kerala

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Abstract

This study examined the level of parental involvement and its relationship with school outcomes among Scheduled Caste students in Kerala. A descriptive survey design was employed with a stratified random sample of 216 students (Std. VIII–X) and their 432 parents. Parental involvement was measured using the Parent Involvement in Children’s Education Scale (Parent and Child versions), while school outcome was assessed through official examination scores. Descriptive statistics indicated that most parents exhibited moderate involvement (71.11%), with only 13.33% demonstrating high involvement. Significant differences were observed across sub-groups: parents of boys showed higher involvement than parents of girls ($t = 3.49$, $p < .01$); urban parents were more involved than rural parents ($t = 4.58$, $p < .01$); and mothers reported greater involvement than fathers ($t = 5.21$, $p < .01$). Higher parental education was also associated with increased involvement. Pearson’s correlation revealed a significant positive relationship between parental involvement and school outcome for the total sample ($r = 0.431$, $p < .01$), with stronger association for mothers ($r = 0.494$) than fathers ($r = 0.351$).

Keywords: Parental Involvement, School Outcome, Scheduled Caste Students.

1. Introduction

Parental involvement has long been recognized as a crucial ecological factor shaping students’ academic development, influencing motivation, learning behaviours, and educational attainment. Contemporary research conceptualizes parental involvement as a multidimensional construct encompassing home-based support, communication with schools, academic monitoring, and expectations (Hill & Tyson, 2009; Wilder, 2019). Recent large-scale evidence indicates that active parental engagement is positively associated with improved academic performance, attendance, and socio-emotional outcomes across diverse educational contexts (OECD, 2021; UNICEF, 2022). In developing regions, parental involvement is particularly salient because it can compensate for structural disadvantages and enhance students’ resilience in schooling environments (UNESCO, 2020; Jeynes, 2018). However, the nature and intensity of parental engagement often vary across socio-cultural and socio-economic groups, including historically marginalized communities, thereby influencing equity in educational outcomes (World Bank, 2020; Singh & Mukherjee, 2022).

Within the Indian context, Scheduled Caste (SC) students continue to face systemic disparities in access to educational resources and achievement opportunities, making family support a critical determinant of their school success (Government of India, 2021; Pratham, 2023). Although research has examined general patterns of parental involvement and academic achievement, relatively few empirical studies have focused specifically on SC populations, particularly in relation to gender, locale, and differential roles of fathers and mothers. Moreover, limited attention has been given to how parental education shapes involvement patterns and how these variations relate to school outcomes across sub-groups. Addressing these gaps is essential for understanding the nuanced pathways through which family engagement contributes to educational equity. Therefore, the present study seeks to examine levels and differences in parental involvement and to explore its relationship with school outcomes among Scheduled Caste students in Kerala, thereby contributing context-specific evidence to the literature on family–school partnerships and social justice in education.

2. Objectives

The study set the following objectives in view:

1. To study the involvement of parents in the education of scheduled caste students (total sample as well as sub-samples based on gender and well as locale of the students).
2. To compare scheduled caste students with regard to parental involvement in their education based on gender (boys and girls) and locale (rural and urban).
3. To compare the level of involvement of fathers and mothers in the education of Scheduled Caste students.
4. To study the effect of education on the involvement of scheduled caste parents in the education of their children.
5. To find out the relationship between school outcome and parent involvement in the education of scheduled caste children (total sample and relevant sub-samples).
6. To compare fathers and mothers with respect to the relationship between parental involvement and the school outcomes of Scheduled Caste students.
7. To compare Scheduled Caste boys and girls with respect to the relationship between parental involvement and their school outcomes.

3. Hypotheses

The following null hypotheses were tested for the study

1. Scheduled Caste parents do not exhibit a high level of involvement in the education of their children.
2. There is no significant difference between Scheduled Caste boys and girls with respect to the level of parental involvement in their education.

3. There is no significant difference between rural and urban Scheduled Caste students with respect to the level of parental involvement in their education.
4. There is no significant difference between fathers and mothers of Scheduled Caste students in their level of involvement in their children's education.
5. There is no significant difference in the level of parental involvement among Scheduled Caste parents with different levels of educational attainment.
6. There is no significant relationship between parental involvement and school outcomes of Scheduled Caste students (for the total sample and relevant sub-samples).
7. There is no significant difference between Scheduled Caste fathers and mothers in the extent to which their involvement is related to their children's academic achievement.
8. There is no significant difference between Scheduled Caste boys and girls in the relationship between parental involvement and their academic achievement.

4. Methodology

The study employed a descriptive survey method to examine the role of family involvement in the education of Scheduled Caste students in Kerala. The population comprised Scheduled Caste students studying in secondary classes (Std. VIII–X) and their parents (fathers and mothers). Using stratified random sampling, a representative sample was drawn considering variables such as district, gender, grade level, and socio-demographic characteristics. The final sample consisted of 216 students and their 432 parents (216 fathers and 216 mothers). Data on parental involvement were collected using two standardized instruments: the Parent Involvement in Children's Education Scale (PICES) – Parent Version and the PICES – Children's Version (Sukumaran & Suresh, 2012). Both are 35-item Likert-type scales measuring seven dimensions of involvement, including home support, school linkage, learning motivation, and supervision. The tools demonstrate acceptable reliability (test–retest ≈ 0.74 – 0.79) and validity. School outcome data were obtained from students' official examination scores maintained by schools. Data were scored according to manual guidelines and analysed using SPSS. Statistical techniques included descriptive statistics (mean and standard deviation), two-tailed tests of significance, chi-square test, Pearson's product–moment correlation, and Fisher's z-transformation to examine group differences and relationships among variables.

5. Analysis and Interpretation

1) Involvement of Parents in the Education of Scheduled Caste Students

To understand the overall level and distribution of parental involvement, descriptive statistics were computed from the Parent Involvement in Children's Education Scale (PICES).

Table 1: Statistical Indices Pertaining to Parent Involvement Scores (Total Sample and Sub-samples)

Statistical Indices	Total Sample	Sub-Samples of Parents			
		Gender		Locale	
		Father	Mother	Rural	Urban
N	432	216	216	272	160
Range	55	51	55	54	53
Mean	73.98	71.19	76.76	71.22	76.34
σ	11.07	10.76	11.38	11.52	10.65
Median	75.00	70.00	77.00	70.00	75.00
Skewness	-0.17	-0.22	-0.24	-0.20	-0.24
SE _M	0.44	0.61	0.64	0.57	0.72
M _{POP} .05	73.12 - 74.84	70.00 - 72.38	75.50 - 78.02	70.11 - 72.33	74.92- 77.76
M _{POP} .01	72.84 - 75.12	69.63 - 72.75	75.11 - 78.41	69.76 - 72.68	74.47 - 78.21

The total sample (N = 432) yielded a mean parental involvement score of 73.98 (SD = 11.07), with a median of 75.00 and a slight negative skewness (Sk = -0.17), indicating a nearly symmetrical distribution. The range of 55 suggests heterogeneity in involvement levels. Confidence intervals further indicate that the population mean lies between 73.12 and 74.84 at the .05 level. Sub-sample analysis shows that mothers (M = 76.76) reported higher involvement than fathers (M = 71.19), and urban parents (M = 76.34) demonstrated greater involvement than rural parents (M = 71.22).

Table 2: Classification of Scheduled Caste Parents by Level of Involvement

Sl. No.	Parental Involvement Groups	Subjects	
		No.	%
1	High Parental Involvement Group (PICES Score 70 and above)	58	13.33
2	Average Parental Involvement Group (Between 36 -69)	307	71.11
3	Low parental Involvement Group (PICES Score 35 and below)	67	15.56
Total		432	100

The majority of parents (71.11%) fell within the average involvement category, while only 13.33% exhibited high involvement and 15.56% showed low involvement. This indicates that a large proportion of Scheduled Caste parents demonstrate moderate engagement in their children’s education, with relatively few showing high participation.

2) Group Differences in Parental Involvement

To examine demographic variations, mean scores were compared using significance tests.

Table 3: Comparison of Parental Involvement for Boys and Girls

Sub-samples	Statistical indices			t-value	Sig.
	N	M	SD		
Parents of Boys	101	76.77	11.65	3.49	.01
Parents of Girls	115	71.49	10.48		

A significant difference emerged between parents of boys ($M = 76.77$) and girls ($M = 71.49$), $t = 3.49$, $p < .01$, indicating greater parental involvement in the education of boys. This reflects gender-based disparities in educational support.

Table 4: Comparison of Rural and Urban Parents

Sub-samples	Statistical indices			t-value	Sig.
	N	M	SD		
Rural Parents	272	71.22	11.52	4.58	.01
Urban parents	160	76.34	10.65		

Urban parents ($M = 76.34$) demonstrated significantly higher involvement than rural parents ($M = 71.22$), $t = 4.58$, $p < .01$. The result suggests that socio-environmental factors associated with urban settings may facilitate greater parental engagement.

Table 5: Comparison of Fathers and Mothers

Sub-samples	Statistical indices			t-value	Sig.
	N	M	SD		
Fathers	216	71.19	10.76	5.21	.01
Mothers	216	76.76	11.38		

Mothers ($M = 76.76$) showed significantly higher involvement than fathers ($M = 71.19$), $t = 5.21$, $p < .01$, indicating a stronger maternal role in children’s educational processes.

Table 6: Comparison by Parental Educational Level

Group	Samples	Statistical indices			t-value	Sig.
		N	M	SD		
Mothers	High Education	49	76.73	9.76	2.97	.01
	Low Education Group	167	71.67	11.41		
Fathers	High Education	57	75.72	9.46	2.37	.05

Low Education Group 159 71.64 11.63

Parents with higher education exhibited significantly greater involvement than those with lower education, both for mothers ($t = 2.97, p < .01$) and fathers ($t = 2.37, p < .05$). This underscores parental education as an important predictor of engagement.

3) Relationship Between School Outcome and Parental Involvement

Pearson’s product–moment correlation was computed to examine the association between school outcome and parental involvement.

Table 7: Correlation Between School Outcome and Parental Involvement (Total Sample and Sub-samples)

Group	Sample	N	r	SE _r	Sig.	r _{POP}	
						.05 level	.01 level
Total Sample	Parents	432	0.431	0.032	.001	0.37 - 0.49	0.35 - 0.52
	Fathers	216	0.351	0.049	.001	0.25 - 0.45	0.22 - 0.48
Parents	Mothers	216	0.494	0.043	.001	0.41- 0.58	0.38 - 0.60
	Children's						
Gender	Boys	101	0.468	0.062	.001	0.35 - 0.59	0.31 - 0.63
	Girls	115	0.413	0.067	.001	0.28 - 0.54	0.24 - 0.59

For the total sample, a significant positive correlation was observed ($r = 0.431, p < .01$), indicating that higher parental involvement is associated with better academic outcomes. Sub-sample correlations were also significant: fathers ($r = 0.351$), mothers ($r = 0.494$), boys ($r = 0.468$), and girls ($r = 0.413$). These findings confirm a consistent positive association across groups, with the strongest relationship observed for mothers.

4) Comparison of Correlations for Fathers and Mothers

Table 8: Fisher’s z Comparison of Correlations for Fathers and Mothers

Groups	Statistical Indices			Z _{observed}	Sig.
	N	r	z		
Fathers	216	0.351	0.37	2.12	.05
Mothers	216	0.494	0.54		

The difference between correlations for fathers and mothers was significant ($Z_{observed} = 2.12, p < .05$), indicating that maternal involvement has a stronger association with academic achievement than paternal involvement.

5) Comparison of Correlations for Boys and Girls

Table 9: Fisher’s z Comparison of Correlations for Boys and Girls

Groups	Statistical Indices			Z_{observed}	Sig.
	N	r	z		
Boys	101	0.468	0.51	0.63	NS
Girls	115	0.413	0.44		

The difference between correlations for boys and girls was not significant ($Z_{\text{observed}} = 0.63, p > .05$), suggesting that parental involvement influences academic outcomes similarly for both genders.

6. Discussion of the Results

The present study examined the level and determinants of parental involvement and its association with school outcomes among Scheduled Caste students. The findings revealed that most parents demonstrated moderate involvement, with only a small proportion showing high engagement. This pattern is consistent with research indicating that socio-economically disadvantaged communities often exhibit constrained but meaningful participation in children’s education due to structural and resource limitations (UNESCO, 2020; World Bank, 2022). Significant differences emerged across demographic variables. Parents of boys received higher involvement scores than parents of girls, reflecting gendered educational expectations that continue to persist in some social contexts (Singh & Mukherjee, 2022). Similarly, urban parents exhibited greater involvement than rural parents, which may be attributed to better access to educational resources, higher awareness, and more frequent school–home interactions in urban settings (OECD, 2021). The finding that mothers were more involved than fathers align with literature emphasizing the central caregiving and academic support role often played by mothers in children’s schooling (Jeynes, 2018). Furthermore, higher parental education was associated with greater involvement, supporting evidence that educated parents possess greater academic self-efficacy and capacity to support learning (Hill & Tyson, 2009). A key contribution of the study is the identification of a significant positive relationship between parental involvement and school outcomes ($r = 0.431$), confirming that increased engagement is associated with better academic performance. Similar findings have been reported across diverse contexts, indicating that parental involvement enhances motivation, learning behaviours, and achievement (Wilder, 2019; Castro et al., 2015). The stronger correlation observed for mothers compared to fathers further suggests that maternal engagement may exert a more direct influence on students’ academic routines. However, the absence of gender differences in the strength of the relationship indicates that parental involvement benefits boys and girls equally, reinforcing the universal value of family engagement in education.

7. Conclusion

The study provides empirical evidence that parental involvement among Scheduled Caste families in Kerala is generally moderate but varies significantly across gender, locale, parental education, and parent gender. Mothers, urban parents, and better-educated parents demonstrated higher levels of engagement, highlighting the influence of socio-cultural and educational factors on family participation in schooling. Importantly, the study establishes a significant positive association between parental involvement and students' academic outcomes, underscoring its role as a key determinant of educational success. The findings suggest that strengthening parental engagement, particularly among rural and less-educated families, could serve as an effective strategy for improving the academic performance of Scheduled Caste students. Educational policies and school-based interventions should therefore focus on building parent–school partnerships, enhancing parental awareness, and creating supportive environments that enable meaningful participation. Overall, the study reinforces the critical role of family involvement in promoting equity and academic achievement among marginalized student populations.

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