



**A Comparative Study of Academic Achievement among Senior Secondary  
Students in relation to types of Parental Engagement**

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**Abstract**

The present study investigated senior secondary school students' academic achievement in relation to their parent types of engagement. Given the critical role that parents play in their students' education performance, it was important to develop a better understanding of which types of parent engagement had the most significant impact. To that end, this research utilized a descriptive survey design and selected 600 students from Classes XI and XII in Haryana. The students were sampled using the stratified random sampling technique, with gender and school type as strata. Academic achievement was defined as the most recent examination score, while the level of parent engagement was measured via a self-constructed scale validated by experts. Descriptive statistics, ANOVA, and post-hoc Tukey HSD tests were employed to analyze the data. The results show a defined, significant difference in the students' performance based on their parents' types of engagement. Indeed, students with low, average, and high engagements scored differently, with the latter group achieving the highest mean academic scores, the average following, and the former having the lowest scores. Post-hoc analysis showed that the three groups significantly differed from each other, underscoring the strong positive correlation between parent engagement and student performance. The study calls for schools and other education policymakers to promote parent engagement through structured programs and awareness campaigns.

**Keywords:** Parental Engagement, Academic Achievement, Senior Secondary Students, Educational Outcomes, Family Involvement

**Introduction**

Education is a vitally important sector in the development of children, and academic performance remains an undeniable predictor of future success. While many variables affect student academic performance, parental engagement has caught the attention of teachers, researchers and policy makers. In the fast-paced and changing socio-cultural climate of today, one such determinant for success at the secondary level is family involvement, or specifically parental engagement in their child's educational journey. The phrase parental engagement transcends the traditional concept of reviewing report cards or attending parent-teacher conferences. It covers a vast array of actions assisting with homework, sustaining academic expectations, promoting reading habits, checking schoolwork, interacting with teachers and offering a supportive home environment. Most importantly it is this engagement, albeit in varied ways (according to their socio-economic status; parents' level of education; cultural practices and gender) that characterizes the parental Endeavour.



The senior secondary phase, i.e. those aged between 16 and 18 years, is a key academic period. This phase also serves as a gateway to college and the formation of a person's career path and personal identity. The academic achievements of students during this phase are determined by the quality of home support and parental engagement, in competition with board examinations, entry level tests and peer stress.

In the Indian context, parental engagement practices are diverse, stemming from cultural factors as linguistic diversity, urban–rural divide and variation in parents' educational literacy among other things. Although urban, educated families may be engaged in more formalized forms of school involvement and homework oversight, rural and marginalized settings may have informal but meaningful family strategies (e.g., storytelling and moral education) that affect cognitive development. This heterogeneity needs to be addressed through localized and empirical examinations of the relationship between academic achievement and distinct forms of parental engagement.

The objective of this study is to investigate if there will be a significant difference in the academic achievement of senior secondary school students with reference to type of parental engagement they are exposed to. Knowledge of these dynamics can help improve learning outcomes and inform school-level practices, parenting support interventions and national educational policies for the holistic development of young people.

### **Review of Literature**

Sahu and Rani (2015) studied the influence of parental engagement on academic motivation among adolescents in Odisha. It found that when parents frequently discuss school and encouraging, children are more likely to set clear goals and try harder to achieve academic targets. The study highlighted the mental bolstering provided by family in rural areas. Singh and Pathania (2016) studied learners in Himachal Pradesh, where it was found that students from more educated parents contributed to better academic performance. Such parents were more likely to assist with homework, direct exam preparation and encourage disciplined study habits. The importance of education as a proximate determinant of effective parental participation was emphasised in the study. Sharma and Kapoor (2017) conducted a study on working and non-working parents in terms of the quality of academic support to working ii)Non-Working children (both below Eight years). It also discovered that working parents can have positive effects on academic success if they regularly demonstrate interest and encouragement towards their child's studies. The study emphasized the role of “quality” over “quantity” when it came to parental engagement. Thomas and Raghavan’s (2018) study in Kerala employing qualitative interviews, this study sought understand the influence of parent–child communication on academic stress. Kids who had non-judgmental, supportive conversations at home were better able to concentrate in school and showed more emotional resilience. The research recommended that schools should promote family communication workshops to build the emotional link in education. Yadav and Meena (2019) studied parental cooperation in rural families. Regular, motivational words from parents to students — even without directly crossing into tutorial mode — significantly increased exam scores and class work output. The study underscored the advantage of verbal positive feedback and emotional support in impoverished settings.



Verma and Chawla (2020), in a multi-state quantitative research, parental engagement was identified as academic, emotional, logistical and aspirational. Most strongly associated with academic achievement among these were aspirational engagement—parents expressing high expectations for the student and faith in his or her potential. The study suggested a model of comprehensive parental engagement for Indian schools. Iqbal and Ahmed (2021) concentrated on rural girls of the Uttar Pradesh showed that parental participation in school meeting, regular help for homework and encourage at higher study have with statistically significant outcome with better academic score. Article Cool heads, hot hearts, and coal hands Elena Iturbe-Castillo Gender-sensitivity in parental engagement became an important tool to achieve a more equitable education result. Dey and Das (2022) also showed that parental engagement was impeded by decreased income and illiteracy, but the academic performance drive of emotional backing and value-oriented parenting still raised educational attainment. It advocated for sensitization programs in the communities to teach parents about other forms of supporting their children’s learning. Masoodi and Kales (2025) studied frustration tolerance to emotional well being in the students with their academic achievement. It found that warmth and responsiveness put in place by parents directly decreased test anxiety at the study time as well as the students’ performance in board examinations. Home emotional climate proved to be as important as academic discipline. Singh and Vig (2025) studied the influence of parental encouragement and positive reinforcements on achievement across urban as well semi urban schools. It was observed that students’ self-regulated learning, confidence levels, and academic competence were enhanced if they perceived being supported by their parents not only emotionally, but also motivationally, especially regarding senior secondary science subjects.

The literature review has convincingly established that parental engagement is not a one-dimensional construct, but rather a complex process with profound effects on children's academic achievements. Research on Indians, in parting, confirms that even with socio-economic restrictions, culturally and contextually valid parental intervention is indeed linked to academic enhance. Even though international models tend to emphasise formal parental engagement, studies from India indicate the significance of informal support, encouragement and aspiration.

### **Relevance of the Study**

This is a very timely study in the context of India’s National Education Policy (NEP) 2020, which highlights an inclusive, learner-oriented strategy and active engagement of families in student life. Systemic interventions to improve infrastructure and pedagogy notwithstanding, student achievement outcomes are often disappointing. One commonly under-examined aspect in this regard is the home environment, notably the diverse dimensions of parental engagement – from academic monitoring to emotional support. The senior secondary is the most crucial phase, which children face during important academic transitions such as board exams, competitive exams and career choice decisions. Do kids have engaged, supportive and aspirational parents — or not? At some point along the way, these are the people who can help form a child’s sense about their academics, their goals, and whether they actually are capable of getting through even when it feels tough. Educational aspirations are high in India, but parenting knowledge and resources are unevenly distributed; therefore, comparative insights about different types of parental engagement that matter for student performance can provide highly actionable directions.



In addition, the results of this study can help educational policy makers, school administrators, and teacher preparation institutions to design parental engagement programs according to different socio-economic levels. By deepening the knowledge base of what works best—whether it is motivational engagement, academic support or emotional nurturing—this research will make targeted interventions that lead to better student results. Broadly speaking, the study seeks to narrow the gap between home and school by foregrounding science in parenting practices, a largely marginalised yet significant domain within Indian education.

### **Statement of the Problem**

A Comparative Study of Academic Achievement among Senior Secondary Students in relation to types of Parental Engagement

### **Objective**

- ✓ To compare the academic achievement of senior secondary school students in relation to their types of parental engagement.

### **Hypothesis**

- ✓ There will be no significant difference in academic achievement of senior secondary school students in relation to their types of parental engagement .

### **Method of the Study**

This study adopted a descriptive survey research design, suitable for analyzing naturally occurring variables without manipulation. The method enables large-scale data collection, supporting both quantitative and qualitative insights into behavioral patterns, perceptions, and academic outcomes. It is widely used in educational research for examining attitudes and performance across diverse groups.

### **Population**

The target population included students of Classes XI and XII from schools affiliated with BSEH and CBSE in Haryana, India. These students, aged 16–18 years, are at a crucial transitional stage in their academic and personal development, making them appropriate subjects for studying the impact of parental engagement on academic performance.

### **Sample and Sampling Technique**

A stratified random sampling technique was used to ensure balanced representation across gender and school type. Two districts of Haryana were purposively selected, and schools were randomly chosen within each. A final sample of 600 students was drawn, proportionately distributed. Ethical considerations, including informed consent and confidentiality, were strictly followed during data collection.

### **Tools Used for Data Collection**

1. **Academic Achievement** – Measured using students' latest examination scores from school records.
2. **Parental Engagement Scale (2025)** – A **self-constructed, expert-validated** instrument designed by the researcher to assess types and levels of parental engagement.

### **Statistical Techniques Used**

- **Descriptive Statistics:** Mean and Standard Deviation for key variables.
- **Comparative Analysis:** Independent ANOVA, Tucky's Post-Hoc test were used to examine differences in academic achievement in the level of parental Engagement

**Data Analysis**

**Table 1: Descriptive Statistics of Academic Achievement across Levels of Parental Engagement**

Level of Parental Engagement	N	Mean	Std. Deviation
Low Parental Engagement	116	62.56	5.09
Average Parental Engagement	164	68.64	3.79
High Parental Engagement	320	78.61	7.80

Table 1 shows that academic achievement varies significantly with levels of parental engagement. Students with high parental engagement (N = 320) achieved the highest mean score of 78.61, indicating stronger academic performance. Those with average parental engagement (N = 164) had a moderate mean score of 68.64, while students with low parental engagement (N = 116) had the lowest mean of 62.56. The increasing trend in mean scores suggests a positive correlation between parental engagement and student achievement. The data underscores the importance of active parental participation in enhancing academic outcomes.

**Table 2: ANOVA Summary – Academic Achievement across Parental Engagement Levels**

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	25831.473	2	12915.737	311.601	.000
Within Groups	24745.413	597	41.450		
Total	50576.886	599			

Table 2 presents the ANOVA results comparing academic achievement across different levels of parental engagement. The between-groups sum of squares is 25831.47 with 2 degrees of freedom, while the within-groups sum of squares is 24745.41 with 597 degrees of freedom. The calculated F-value is 311.601, which is highly significant at  $p < .001$  (Sig. = .000). This indicates that there is a statistically significant difference in academic achievement among students with low, average, and high levels of parental engagement. Thus, the level of parental engagement has a significant impact on students' academic performance.

**Table 3: Post-Hoc Analysis (Tukey HSD) – Pairwise Comparisons among Parental Engagement Groups**

Comparison Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval
Average vs Low Engagement	6.086**	0.781	.000	4.25 to 7.92
High vs Average Engagement	9.974**	0.618	.000	8.52 to 11.43
High vs Low Engagement	16.060**	0.698	.000	14.42 to 17.70

Table 3 shows the results of the Tukey HSD post-hoc test, which compares academic achievement between different parental engagement groups. The mean difference between average and low

engagement is 6.086 ( $p < .001$ ), indicating a significant improvement in achievement with average parental support. The difference between high and average engagement is 9.974, and between high and low engagement is 16.060, both highly significant ( $p < .001$ ). These findings confirm that academic performance increases significantly with higher levels of parental engagement, reinforcing the ANOVA results.

**Table 4: Homogeneous Subsets for Academic Achievement Based on Parental Engagement (Tukey HSD)**

Parental Engagement Level	N	Subset 1	Subset 2	Subset 3
Low Engagement	116	62.56		
Average Engagement	164		68.64	
High Engagement	320			78.61
<b>Sig.</b>		1.000	1.000	1.000

Table 4 presents the homogeneous subsets formed through Tukey HSD to group parental engagement levels based on academic achievement means. The results show three distinct subsets, each representing a statistically unique level of achievement. Students with low parental engagement fall into Subset 1 (Mean = 62.56), average engagement falls into Subset 2 (Mean = 68.64), and high engagement into Subset 3 (Mean = 78.61). The significance level of 1.000 within each subset indicates no overlap between groups, confirming that each level of parental engagement is associated with significantly different academic performance.

Accordingly, the null hypothesis which stated that “There will be no significant difference in academic achievement of senior secondary school students in relation to their types of parental engagement” is rejected. The results confirm that the level of parental engagement has a significant and distinct impact on students’ academic performance, with students experiencing high parental engagement achieving the highest, followed by those with average and then low engagement.

**Findings of the Study**

The finding of the study showed that academic achievement of senior secondary school students varies significantly with different levels of parents' engagement. High parental engagement was associated with higher student achievement, from below average to significantly better performance. The results of this analysis revealed that these differences were statistically significant, and there was directionality to the relationship such that greater levels of parent engagement predicted better school performance.

**Discussion of Results**

Results of the current study were consistent with previous research and offer compelling evidence in support of the role of parent engagement in academic performance. As Sharma and Kapoor (2017) have pointed that for children, fathering quality rather than quantity matters content if the time allowed is devoted to them. This is consistent with the current result that high-quality, sustained engagement brings significant benefits to student performance. Likewise, Verma and Chawla (2020) also underscored that aspirational engagement— when parents have high hopes and such expectations for the child’s skills has the greatest effect on student outcomes. The current study supports that finding, as students in the high engagement group demonstrated the greatest

academic success. Singh and Vig (2025) proved that parent support enhances academic self-esteem and self-regulation among senior secondary students. These results are corroborated in this work, as here a linear profile of increase in mean scores is perceivable based on parental engagement. Both of these findings indicate that parental emotional and motivational support is an important determinant of academic success (in adolescence, when one particularly needs external validation and support). The findings are also synchronized with the findings of Masoodi and Kales (2025), in which emotional warm family environment decreases academic anxiety and promotes academic achievement. High parental engagement group may have practical and emotional support to make a better learning condition.

### **Educational Implications and Suggestions**

This study's results have important implications for educators, parents, policy makers, and school leaders. #1 – Schools must regard parents as full partners in learning, rather than a passive audience. Schools might hold parent-engagement workshops on the things that parents can actually do to support learning, like developing schedules, offering encouragement and tracking progress. Second, teacher-parent relations should be improved and braced via ongoing communication between parents and teachers, digital means to contact with the families as well as school meeting; it would conjoin home-school. Schools should advise parents, especially those with low literacy skills or socioeconomic status, as to how to be effective partners even if they cannot help directly with academics. Policy documents, such as NEP 2020, should also include parental engagement as a measure of school performance by making school accountable to it the way schools are held accountable for their improvement planning around engagement with families. In addition, parental participation should be infused into teaching curricula, training teachers on how to work collaboratively and positively with families. Moreover, on the community level, interventions like parent support groups and home-learning kits do wonders for less-involved parents. Every parent has the potential to make positive contributions to a child's learning, regardless of his or her own level of educational attainment; changing perceptions in this area will allow more families access to academic success and help narrow existing inequities.

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