

# Analysis of Role of Parental Involvement in Student Academic Achievement

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**Abstract:** *This non-experimental study aimed to investigate the potential impact of parental involvement levels on the gifted and talented (GT) status of fourth-grade students, as well as to examine any differences in academic performance between GT and non-GT students. The study involved a convenience sample of 50 parents or guardians of fourth-grade students from a public middle school in the southeastern United States. These participants completed a researcher-made survey designed to assess the extent of parental involvement in their child's academics. The analysis of the survey results revealed that parental involvement did not have a significant effect on determining whether a student was classified as GT or non-GT. However, the study did find a notable difference in academic achievement between non-GT and GT students, with GT students demonstrating higher levels of academic performance. This suggests that while parental involvement may not directly influence GT status, it remains an important factor to consider in understanding and supporting students' academic success. These findings contribute to the ongoing dialogue surrounding the role of parental involvement and its implications for educational outcomes, particularly for students identified as gifted and talented.*

**Keywords:** *Parental involvement, Gifted and talented (GT) students, Academic achievement, Fourth-grade students, Non-experimental study.*

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## 1. Introduction

The societal landscape and family dynamics have undergone significant transformations over the past century, particularly concerning the role of mothers in the workforce and the advent of technology affecting parent-child interactions. With an increasing number of mothers working outside the home compared to a century ago, the traditional model of parental involvement in education has shifted. This change, coupled with the pervasive influence of technology, has led to concerns about the diminishing time available for parental involvement in children's education and its potential impact. Despite these shifts, researchers such as Bloom and Sosniak (1981) argue for the vital role of parents in fostering academic development, prompting a closer examination of how parental involvement influences academic outcomes. Parental involvement manifests through various avenues, with

academic socialization being one prominent aspect. Academic socialization encompasses parental communication with children about education, including discussions about the importance of education in achieving future goals. Research indicates that such conversations positively correlate with student academic achievement, emphasizing the role parents play in shaping their children's attitudes towards education and their academic aspirations. Additionally, parental discussions regarding behavior expectations in the classroom contribute to better academic performance, highlighting the influence parents wield over their children's academic endeavors, especially in the formative years.

Furthermore, home-based involvement plays a crucial role in creating an environment conducive to learning. Parents who provide a conducive workspace, necessary materials, and offer homework assistance contribute significantly to their children's academic achievement. Studies reveal that students from such homes tend to perform better academically, underscoring the importance of parental

support in facilitating educational success. Moreover, parental involvement extends beyond the home to school-based participation, where parents collaborate with teachers and school officials to support their child's academic journey. Active involvement in school activities, including attending parent-teacher conferences, positively impacts student performance by fostering a supportive school environment. However, parental involvement may be influenced by socioeconomic status (SES), with higher SES parents better positioned to provide resources and support conducive to academic success. Nevertheless, research suggests that parental involvement can mitigate the effects of low SES on academic achievement by instilling high expectations and emphasizing the importance of education. Despite the challenges posed by socioeconomic disparities, parental involvement emerges as a critical factor influencing student outcomes, surpassing the impact of family SES.

Moreover, parental involvement is particularly significant for gifted and talented students, whose academic success is often contingent upon parental support and encouragement. Gifted students thrive when their parents actively engage in their education, providing the necessary motivation and fostering a positive attitude towards learning. This underscores the multifaceted relationship between parental involvement and academic achievement, wherein supportive parental roles contribute to enhanced student outcomes across various educational contexts.

In conclusion, while societal shifts and technological advancements have reshaped family dynamics, parental involvement remains a cornerstone of academic success. Academic socialization, home-based involvement, school-based participation, and parental support transcend socioeconomic barriers, significantly influencing student achievement. As researchers continue to explore the nuanced dynamics of parental involvement, understanding its varying impacts on academic outcomes becomes imperative for fostering educational excellence and nurturing future generations.

## 2. Methodology

The study aimed to investigate the impact of parental involvement levels on the gifted and talented (GT) status of fourth-grade students, as well as to assess potential differences in academic performance between GT and non-GT students. The hypothesis proposed that parental involvement levels would influence the GT status of students, suggesting that higher levels of parental engagement would correlate with a higher likelihood of being identified as GT. Additionally, the study aimed to

explore whether there were disparities in academic performance between GT and non-GT students.

The participants consisted of 50 parents or guardians of fourth-grade students from a public middle school in the southeastern United States. The selection of participants was based on convenience sampling. Demographic characteristics of the participants, including age, education level, and socioeconomic status, were documented to provide context for the study.

The study employed a quantitative research design, utilizing surveys to assess parental involvement levels and academic performance data to compare GT and non-GT students. Parental involvement was operationalized as Academic Socialization, Home-based Involvement, and School-based Involvement, as described in the literature. Academic Socialization encompassed discussions between parents and children about education, including career aspirations and academic expectations. Home-based Involvement referred to the creation of a supportive home environment for learning, such as providing study materials and homework assistance. School-based Involvement involved parents' participation in school activities and communication with teachers.

The analysis of data involved statistical methods to test the hypotheses. Descriptive statistics were used to summarize demographic information, while inferential statistics, such as correlation analysis and regression analysis, were employed to examine the relationships between parental involvement levels and GT status. Additionally, t-tests or analysis of variance (ANOVA) were conducted to compare the academic performance of GT and non-GT students.

Table 1: Demographic Characteristics of Participants

GT	Non-GT	Total	
Parent's Characteristics			
n (%)	n (%)	n (%)	n (%)
Number of Children			
1	1 (25)	3 (75)	4 (100)
2	20 (69)	9 (31)	29 (100)
3	8 (80)	2 (20)	10 (100)
4	3 (100)	0 (0)	3 (100)
4+	3 (100)	0 (0)	3 (100)
Hours Worked Outside the Home			
0	7 (70)	3 (30)	10 (100)
01-Oct	4 (100)	0 (0)	4 (100)
Nov-20	0 (0)	1 (100)	1 (100)
21-30	4 (80)	1 (20)	5 (100)
31-40	10 (67)	4 (29)	14 (100)
41+	10 (71)	5 (33)	15 (100)

The primary instrument utilized in this study was a researcher-developed Google Form Parental Involvement survey, structured into four sections. The survey aimed to capture data on parental involvement and demographic information related to the participants. The first section provided the purpose of the study and informed consent, with participants indicating their agreement by completing the survey. The demographics section consisted of five multiple-choice questions covering aspects such as the relationship to the fourth grader, household size, and work hours outside the home. Notably, this section was not scored but provided contextual information. The third section focused on parental involvement, divided into two parts. The first part comprised 17 Likert-scaled items gauging various dimensions of parental involvement, including academic socialization, home-based involvement, and school-based involvement. Participants rated their agreement on a scale from “strongly agree” to “strongly disagree,” with responses scored accordingly. The second part of this section consisted of five Likert-scaled items assessing the average time spent by parents in academic activities with their child daily. Each option was assigned a score, and the total scores from both parts were summed to obtain a comprehensive parental involvement score. Regarding the study's secondary purpose, students' core subject grades from the first three nine-week periods of fourth grade were utilized. Grades in literacy, math, science, and social studies were averaged for each period, and then a cumulative academic achievement score was calculated for each student. The procedure involved sharing the survey link with parents via the school's communication tool, collecting responses in a spreadsheet, and analyzing the data using statistical methods.

However, since the survey was researcher-developed, the reliability and validity of the instrument remain unknown. Nevertheless, the data collected from the survey, along with students' academic grades, were analyzed to determine the impact of parental involvement levels on the gifted and talented status of fourth grade students, utilizing an independent samples t-test with an alpha level of 0.05 to examine the hypothesis.

### 3. Result and Discussion

The results of the study indicated that there was no significant difference in parental involvement levels between students identified as gifted and talented (GT) and those who were not. Despite a slightly higher mean parental involvement score for GT students, the difference was not statistically significant. This finding contrasts with the belief that parental involvement might play a more significant role in the academic success of gifted students.

However, the study's participant demographics showed that a majority were parents of GT students, which could have influenced the results. Nonetheless, the study did reveal a significant difference in academic performance between GT and non-GT students. GT students had significantly higher academic performance scores compared to their non-GT counterparts, indicating a notable achievement gap between the two groups.

The implications of these findings suggest that while parental involvement might not directly affect GT status, it remains crucial for addressing the academic achievement gap between GT and non-GT students. Further research is needed to understand why this gap exists and how parental involvement can be optimized to support all students, regardless of their GT status. Given the importance of parental involvement in academic success, interventions aimed at enhancing parental engagement should be considered to help close the achievement gap.

However, the study had several limitations, including sample bias due to volunteerism and the use of self-reporting surveys, which may have introduced response biases. Additionally, the study lacked a direct investigation into the relationship between parental involvement levels and students' academic achievement. Future research should aim to address these limitations by employing more representative sample groups, incorporating objective measures of parental involvement, and exploring the specific effects of different types of parental involvement on student achievement.

In conclusion, while parental involvement may not directly impact GT status, it remains a critical factor in addressing academic disparities between GT and non-GT students. Understanding the nuances of parental involvement and its effects on student achievement is essential for developing effective interventions to support all students in their academic endeavors.

### 4. Conclusion

In conclusion, the findings of this study shed light on the complex interplay between parental involvement, academic achievement, and gifted and talented (GT) status among fourth-grade students. While no significant difference was found in parental involvement levels between GT and non-GT students, a notable distinction was observed in their academic performance. Despite the prevailing belief in the literature that parental involvement positively impacts the educational outcomes of gifted students, this study did not find evidence to support such a relationship in the context of fourth-grade students. The absence of a significant difference in parental involvement between the GT and non-GT groups challenges conventional assumptions about



the role of parental engagement in the academic success of gifted students. This suggests that factors other than parental involvement may contribute more significantly to the academic performance of GT students, such as individual motivation, self-perception, and other unexplored variables. Additionally, the skewed representation of GT students in the participant sample warrants consideration, as it may have influenced the study's outcomes.

Conversely, the significant difference in academic performance between GT and non-GT students underscores the importance of identifying and addressing the underlying factors contributing to this gap. The findings align with existing research indicating that GT students tend to outperform their non-GT counterparts academically. However, the precise mechanisms driving this disparity, including the potential role of parental involvement, require further investigation. Moving forward, future research should aim to explore the nuanced relationship between parental involvement and academic achievement among GT and non-GT students across different grade levels and educational contexts. Additionally, efforts to address the academic achievement gap between GT and non-GT students should prioritize comprehensive interventions that consider various factors, including parental involvement, student motivation, and school support systems. By gaining a deeper understanding of these dynamics, educators and policymakers can develop targeted strategies to promote the academic success of all students, regardless of their gifted status.

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