

# ***The Mediating Role of Gender in the Relationship Between Parental Involvement and Children's Academic Achievement***

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**Abstract:** This study examined parental involvement and its impact on the academic achievement of primary school students in Chinese families, focusing on the influence of child gender. Five family groups from Shandong Province, each with boys and girls aged 7 to 12 enrolled in primary school, participated to assess the moderating effect of gender. One-on-one semi-structured interviews with the parents revealed that parental involvement had a greater impact on children's academic performance, and that children of parents who were able to secure sufficient and high-quality involvement performed well on two consecutive years of academic ratings. In addition, in-depth analyses of the interview data show that the gender of the child and parental expectation greatly influence the length and type of parental involvement, which in turn affects the child's academic achievement. However, gender is not the only influence, participants in this research widely indicated that their children's personality traits and grades were the main factors influencing their determination of participation styles, duration, and adjustment strategies.

**Keywords:** Gender, Gender expectation, Parental involvement, Academic achievement

## **1. Introduction**

In the process of children's education, family is widely recognized as an important factor and component in promoting growth. Studies have shown that parental involvement in children's education has a direct impact on children's learning skills and competencies. Active involvement of parents in their children's education significantly enhances their psycho-social competencies, learning capabilities, and social adaptability, all of which correlate with improved educational achievements [1].

However, previous research has primarily examined the link between parental involvement in children's education and their achievement, with limited focus on the influence of children's gender on this involvement. This study will invite five families, one boy and one girl from the same family, for one-on-one semi-structured interviews. The findings may offer new insights into the relationship between parental involvement and children's academic success, potentially aiding in the reduction of gender stereotypes.

This research will delve deeper into the impact of parental involvement on the academic achievement of primary school students, with a particular focus on the mediating effect of children's gender on parental involvement within the Chinese educational framework. It will assess the

relationship between parental involvement and children's academic achievement while also exploring how the gender of the child shapes parental involvement in primary education.

## **2. Literature Review**

### **2.1. The Role of Parental Involvement in Children's Academic Achievement**

According to family systems theory, parents are crucial in their children's development. Research indicates that parental involvement significantly affects academic achievement. Assisting with homework, a common form of involvement, positively influences elementary school children's academic adjustment [2]. In addition, parental involvement also benefits children in terms of academic beliefs, motivation, and even social domains [3]. Motivation has been widely mentioned by scholars as contributing to a child's high level of activity and motivation to fully engage in learning activities. It is important to highlight that both theoretical and empirical research underscores the significance of quality over quantity in the context of parental support for their children [4].

### **2.2. The Moderating Role of the Child's Gender**

Research has shown that parental involvement differs between boys and girls. Research from the 1990s indicated that parental involvement in their daughters' education surpassed that of their sons [5]. In contrast, some scholars have pointed out that there are also gender differences in the way of participation. For example, parents are more likely to help their sons than their daughters with homework [6]. However, regarding academic performance, the findings of the present research exhibit inconsistencies. In particular, certain researchers contend that the influence of parental engagement on students' academic success is uniform across genders [7]. However, some studies have shown that even the same parenting behaviors can result in different academic achievements depending on the gender of the child [8].

The influence of parental involvement on children's academic success is acknowledged, most research has been conducted in Western contexts, with limited studies in the Chinese cultural setting. Even those that focus on China often emphasize parental expectations regarding specific skills, like reading. Furthermore, the role of gender as a moderating factor in parental involvement remains inconsistent, revealing divergent perspectives.

## **3. Methodology**

### **3.1. Participants**

Purposive sampling was used to ensure that information and data were obtained that were as relevant to the study as possible. Participants were chosen according to particular research themes and demographic characteristics, including having both parents originating from Linyi City in Shandong Province, possessing at least a bachelor's degree, earning an income exceeding the local per capita income level, and having both a son and a daughter enrolled in primary education. A total of eight groups of families were invited to participate in this study, but three groups of families withdrew from the study for personal information security reasons. Therefore, five groups of families finally participated and completed the interviews.

### **3.2. Procedure**

This study employed one-on-one semi-structured interviews to facilitate flexible, in-depth interactions focused on research questions. To enhance clarity, two participants underwent pre-interviews, leading to revisions of individual questions. The interview outline, aligned with

research questions, guided participants in reflecting on their involvement in children's education, experiences, and emotions. Before the interview, participants filled out a personal information sheet detailing age, duration of involvement, and primary modes of engagement, along with responses regarding the child's age, grade, and learning, primarily evaluated through grades rather than specific scores.

### 3.3. Analysis Strategy

This study primarily employed interviews for data collection, utilizing descriptive analysis for presentation. Bar charts illustrated aspects like children's age, gender, and grades, while other data was conveyed through interview excerpts.

## 4. Results

Based on the integration of the interview data, the gender and grade level of the children in the five families in question are shown in Figure 1:

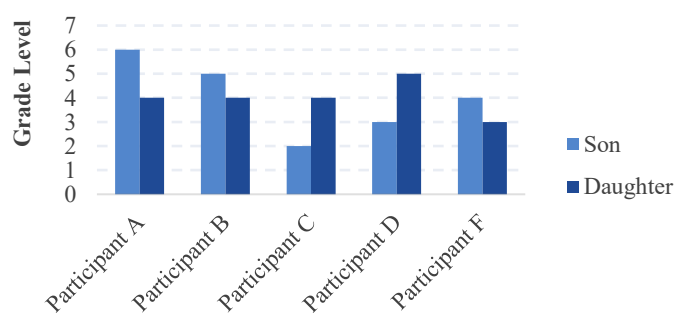


Figure 1: Children's gender and grade level

### 4.1. The Impact of Parental Involvement on Children's Academic Performance

Analysing the data from the interviews, it was found that parental involvement has a significant and multifaceted impact on children's academic performance. Firstly, in terms of academic counselling, high-quality parental involvement provides support and assistance to children, which helps them to grasp the knowledge in time and solve the part they have doubts about, so as to improve their academic performance. For example, Participant E said, *'I will check my child's homework and answer questions to understand his/her learning status and help him/her to solve any difficulties in time.'* In addition, two parents, including Participant D and E, also mentioned the habit of accompanying their children to read extracurricular books, and the academic performance of the two children of these two parents was excellent in two consecutive school years. In contrast, statistical results indicate that only one of the five interviewed families (Participant A) had parents too busy to engage in their children's education, resulting in the younger brother's relatively poor grades, with average ratings in the final assessments for two consecutive years.

Secondly, children who have regular parental presence and attention reap the benefits of positive emotional experiences and emotional support. This could not directly affect the children's academic achievement, but this favourable state and emotional experience could help children show better self-confidence in learning. The interview data indicates that children receiving emotional support alongside academic assistance showed improved performance. Three out of five participants noted their involvement, with two older participants demonstrating notable strengths in emotional stability, problem-solving, and academic success, achieving excellent results in the past two semesters.

It is essential to clarify that, based on the interview findings, some families exhibit a situation where, despite the parental support and guidance provided to both children being largely equivalent (as indicated by participant feedback), a noticeable disparity persists in the performance, habits, and academic outcomes of the two children. For example, according to Table 1, Participant B's children are close in age, so she said, *'Since there is not much age difference between the two children, they are basically tutored together every day. But my son is not very serious, he doesn't write well, scribbles in books, has no patience, and doesn't write notes in time for class. But my daughter is just very serious and focused, and the quality of her homework writing is very high.'* This phenomenon shows, to some extent, that even if parents endeavour to create equal educational conditions for their children, the combination of the children's own idiosyncrasies as well as a variety of other factors can still lead to significant differences in their learning performance and academic achievement.

#### 4.2. Moderating Role of Children's Gender

According to the results of the interviews, one in five parents invest time in homework help, but specifically, gender influences parental involvement to some extent, in terms of mode, level, and planning.

In terms of parental involvement, parents of boys often engage in activities like homework assistance and sports or science exploration to support their children's development and foster rational thinking. For instance, Participant E's son attended a modeling class, while Participant B's son took a programming class. Conversely, mothers across the four family groups primarily managed educational activities, with half reporting that they found it more natural to communicate with their daughters and share experiences, resulting in less interaction with their sons in this context. As Participant C said, *'Since I am basically the one who educates my children, I think it is more appropriate for fathers to communicate with their sons in terms of emotions, and I have more emotional communication, experience sharing with my daughters. For my son I generally chat and communicate less.'* It can be seen that the gender of the child plays a role in influencing the way in which parents are involved to a certain extent, as well as influencing the resources provided by the parents.

In terms of the length of involvement invested, although overall, almost all of the participants were aware of and did involve in their children's education or life activities. Specifically, the length of involvement for several participants is tallied below in Figure 2

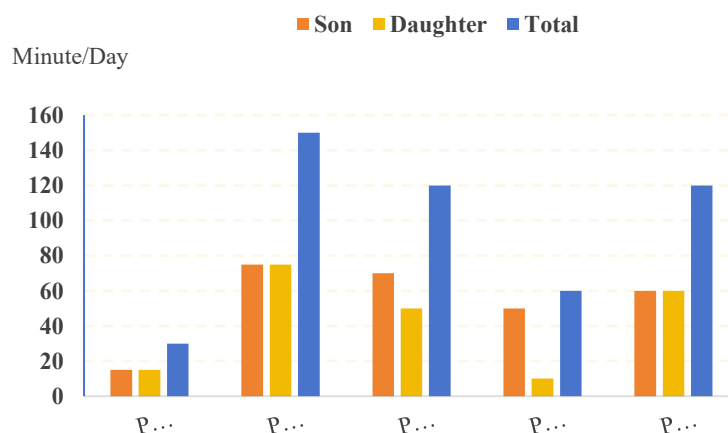


Figure 2: Length of parental involvement

In contrast, Participant D presented a large difference in the length of participation. According to Table 2, it can be seen that Participant D spends almost five times as much time on her son's

educational activities as she does on her daughter's, who said in the interview, *'Because my daughter is older and has better grades than my son, I usually don't care about her unless she doesn't know something.'* Outside of this, there was a more pronounced difference in Participant C. Based on Figure 2, it can be seen that there was also a difference in the length of participation between boys and girls for this parent, but not by much. Through further questioning it was learned that *'it's because I feel daughters are easier to communicate with, whereas sons are trickier.'* Overall, in terms of length of involvement, the gender, ability and age of the child all influence the length of parental involvement to some extent.

In conclusion, regarding expectations, the interview summaries indicate that over fifty percent of families have registered their children in extracurricular activities, encompassing English, dance, art, programming, and modeling. Respondents noted that this decision was influenced not only by their children's interests but also by perceptions of gender appropriateness for these activities, aligning with their long-term aspirations for their children. For example, although the girls in four of the five families were enrolled in dance classes, Participant B said, *'My daughter likes dancing, and our expectation for her is that she will become a dance teacher in the future.'* At the same time, she added *'Our expectation for my son is that he will study medicine, so we enrolled him in a programming class in the hope of improving his logical thinking skills.'* However, all participants indicated in their interviews that parental involvement was very important, regardless of whether or not they were fully involved in their child's educational activities.

## 5. Discussion

### 5.1. Parental Involvement Affects Children's Learning Styles, Academic Motivation

Consistent with existing research and expectations, children's academic achievement is indeed related to parental involvement. Specifically one of the most frequently mentioned types of involvement in interviews, homework help, has been shown to promote children's academic success and motivation [9]. To a certain extent this type of involvement is more important than the direct enhancement of children's academic performance as it serves as achievement-related motivation [10], which has been interpreted as a type of behaviour exhibited by children when completing learning tasks, such as effort, determination [11]. Such qualities and psychology can help them face difficulties and persevere in their progress.

In addition, parental expectations play a role in promoting children's academic achievement. Parental expectations have been defined as parents' realistic beliefs about their children's future achievements [12]. It has been shown to exhibit a positive correlation in promoting children's academic achievement [13]. For example, ninth graders with higher parental expectations had higher GPAs [14]. Consistent with previous research, career plans and expectations based on the child's gender and interests lead to purposeful choices in the selection of content and the provision of resources when engaging in their children's educational activities. Therefore, it is also seen as a basis for the child's academic achievement [15].

### 5.2. The Moderating Role of Children's Gender

The study found that the gender of the child did have a moderating effect on parental involvement and academic achievement. Interview data showed that some parents chose their involvement according to the gender of their child, and the amount of time they devoted to it varied. For boys, they tend to choose ways such as homework help and story telling. However, for girls, parents may also carry out additional psychological communication. Contrary to existing research, which indicated that parents would tend to be more involved in girls' educational activities and that girls would receive more help and support [16], it was in fact found that girls did not gain any advantage because of their gender. On

the contrary, in China, in this study, when the girl was the older sister (i.e., the other child was the younger brother), and especially when the girl had better grades, the support, help and parental support she received was minimal by her parents [17].

Moreover, it is worth noting that there is controversy as to whether children of different genders receiving the same parenting style will create the same academic outcomes. Some studies have indicated that the same engagement approach produces similar outcomes for boys and girls [18], but some scholars have argued that outcomes may differ by gender [19]. All three groups of participants in this study indicated that boys and girls were co-educated, but the results showed that the children's academic achievement was not identical across the three groups of families, which means that although parental involvement does have an impact on children's academic achievement, the child's gender, as well as his or her own personality and qualities, may also have an impact on the way and length of parental involvement.

## 6. Conclusion

This study has consistently demonstrated that parental involvement has a definite impact on children's academic achievement. The children who experienced consistent parental involvement over an extended period tended to achieve excellent academic results. In contrast, children from families lacking long-term, high-quality, and continuous parental involvement showed more variability and larger gaps in their academic achievement. In addition to academic achievement, studies have found that sustained parental involvement leads to children demonstrating greater motivation and greater resilience in the face of academic challenges.

Moreover, gender was found to significantly influence parental involvement, where boys benefited more from homework counseling and storytelling, while girls had stronger emotional engagement. It is worth noting that in this study, when the structure of family members in a family is an older sister and younger brother relationship, especially when the older sister is a higher achiever, the parental involvement she receives is often very limited compared to her younger brother, and sometimes almost ignored.

The role of parental expectations was also uncovered, with children subject to parental expectations and planning differing significantly in learning resources and activities, and parents choosing appropriate activities as their main mode of engagement. It is important to note that even within the same family and with similar levels of parental support, children's academic outcomes varied, indicating that parental involvement is significant but does not ensure identical results. In further research, longitudinal studies will be considered, which can systematically reveal the long-term continuous effects of parental involvement on children's academic achievement.

## References

- [1] Silinskas, G., Kiuru, N., Aunola, K., Lerkkanen, M.-K., & Nurmi, J.-E. (2015). *The Developmental Dynamics of Children's Academic Performance and Mothers' Homework-Related Affect and Practices*. *Developmental Psychology*, 51(4), 419–433.
- [2] Wei, J., Pomerantz, E. M., Ng, F. F.-Y., Yu, Y., Wang, M., & Wang, Q. (2022). *Do the effects of parents' involvement in youth's academic adjustment vary with youth's developmental phase? A longitudinal investigation in China*. *Contemporary Educational Psychology*, 71, 102118-.
- [3] Barger, M. M., Kim, E. M., Kuncel, N. R., & Pomerantz, E. M. (2019). *The Relation Between Parents' Involvement in Children's Schooling and Children's Adjustment: A Meta-Analysis*. *Psychological Bulletin*, 145(9), 855–890.
- [4] Pomerantz, E. M., Elizabeth A. Moorman, & Scott D. Litwack. (2007). *The How, Whom, and Why of Parents' Involvement in Children's Academic Lives: More Is Not Always Better*. *Review of Educational Research*, 77(3), 373–410.
- [5] Keith, P. B., & Lichtman, M. V. (1994). *Does Parental Involvement Influence the Academic Achievement of Mexican-American Eighth Graders? Results From the National Education Longitudinal Study*. *School Psychology Quarterly*, 9(4), 256–273.

- [6] Cooper, H., Lindsay, J. J., & Nye, B. (2000). *Homework in the Home: How Student, Family, and Parenting-Style Differences Relate to the Homework Process*. *Contemporary Educational Psychology*, 25(4), 464–487.
- [7] Hong, S., Yoo, S.-K., You, S., & Wu, C.-C. (2010). *The Reciprocal Relationship Between Parental Involvement and Mathematics Achievement: Autoregressive Cross-Lagged Modeling*. *The Journal of Experimental Education*, 78(4), 419–439.
- [8] Brown, T. L., Linver, M. R., Evans, M., & DeGennaro, D. (2009). *African-American Parents' Racial and Ethnic Socialization and Adolescent Academic Grades: Teasing Out the Role of Gender*. *Journal of Youth and Adolescence*, 38(2), 214–227.
- [9] Silinskas, G., & Kikas, E. (2019). *Parental Involvement in Math Homework: Links to Children's Performance and Motivation*. *Scandinavian Journal of Educational Research*, 63(1), 17–37.
- [10] Patall, E. A., Cooper, H., & Robinson, J. C. (2008). *Parent Involvement in Homework: A Research Synthesis*. *Review of Educational Research*, 78(4), 1039–1101.
- [11] Silinskas, G., Kiuru, N., Aunola, K., Lerkkanen, M.-K., & Nurmi, J.-E. (2015). *The Developmental Dynamics of Children's Academic Performance and Mothers' Homework-Related Affect and Practices*. *Developmental Psychology*, 51(4), 419–433.
- [12] Yamamoto, Y., & Holloway, S. D. (2010). *Parental Expectations and Children's Academic Performance in Sociocultural Context*. *Educational Psychology Review*, 22(3), 189–214.
- [13] Rimkute, L., Hirvonen, R., Tolvanen, A., Aunola, K., & Nurmi, J.-E. (2012). *Parents' Role in Adolescents' Educational Expectations*. *Scandinavian Journal of Educational Research*, 56(6), 571–590.
- [14] Chen, W.-B., & Gregory, A. (2009). *Parental Involvement as a Protective Factor During the Transition to High School*. *The Journal of Educational Research (Washington, D.C.)*, 103(1), 53–62.
- [15] Guo, X., Lv, B., Zhou, H., Liu, C., Liu, J., Jiang, K., & Luo, L. (2018). *Gender Differences in How Family Income and Parental Education Relate to Reading Achievement in China: The Mediating Role of Parental Expectation and Parental Involvement*. *Frontiers in Psychology*, 9, 783–783.
- [16] Dumont, H., Trautwein, U., Lüdtke, O., Neumann, M., Niggli, A., & Schnyder, I. (2012). *Does parental homework involvement mediate the relationship between family background and educational outcomes?* *Contemporary Educational Psychology*, 37(1), 55–69.
- [17] Silinskas, G., Lerkkanen, M.-K., Tolvanen, A., Niemi, P., Poikkeus, A.-M., & Nurmi, J.-E. (2012). *The frequency of parents' reading-related activities at home and children's reading skills during kindergarten and Grade 1*. *Journal of Applied Developmental Psychology*, 33(6), 302–310.
- [18] Silinskas, G., Niemi, P., Lerkkanen, M.-K., & Nurmi, J.-E. (2013). *Children's poor academic performance evokes parental homework assistance—but does it help?* *International Journal of Behavioral Development*, 37(1), 44–56.
- [19] Brown, T. L., Linver, M. R., Evans, M., & DeGennaro, D. (2009). *African-American Parents' Racial and Ethnic Socialization and Adolescent Academic Grades: Teasing Out the Role of Gender*. *Journal of Youth and Adolescence*, 38(2), 214–227.