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PARENTAL HOMEWORK SUPPORT AND MATHEMATICS ACHIEVEMENT: A COMPARATIVE REVIEW OF CONTEMPORARY RESEARCH AND FUTURE DIRECTIONS

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ABSTRACT

Academic success, especially in mathematics, has long been known to be significantly influenced by parental involvement in their children's education. One of the most obvious ways that parents can get involved is by helping their children with their homework, but new research shows that the effectiveness of this approach depends not only on how often parents help their children, but also on the quality of their support, their beliefs, their emotional traits, and the psychological dispositions of the students. Three studies—a Norwegian longitudinal study on parental homework assistance and mathematics development, a study on middle school students in India, and a study on parental mathematics anxiety and homework-helping style—that examine the relationship between parental homework support and mathematical achievement are critically compared in this review. Common findings, methodological variations, theoretical stances, and research gaps are all noted in the study. Finally, it offers a thorough conceptual framework integrating parental support, parenting style, mathematics self-efficacy, and mathematics achievement within the Indian educational context.

KEYWORDS: Parental support, Homework, Mathematics achievement, Parenting style, Self-efficacy, Mathematics anxiety, Educational psychology.

INTRODUCTION

Many people believe that one of the best indicators of a student's scholastic success and future employment prospects is their proficiency in mathematics. Mathematical learning goes beyond classroom instruction and is greatly impacted by the family environment, as researchers have repeatedly stressed. Parental assistance with homework has been identified as one of the many home-related elements that significantly influences students' educational experiences. Traditionally, parental homework assistance has been viewed as beneficial for improving academic performance. However, contemporary educational research presents a more nuanced perspective. Recent studies demonstrate that simply increasing parental involvement does not automatically improve mathematics achievement. Instead, the nature of parental support, emotional climate, parenting style, parental confidence, and students' motivational characteristics collectively influence learning outcomes.

This review synthesizes findings from three significant studies to provide a broader understanding of parental homework support and its influence on mathematics achievement.

Comparative Analysis of Previous Studies

Parental Homework Support in the Indian Context

The first study looked at middle school children in Tamil Nadu's Thiruvallur District and their math achievement in connection to their parents' help with homework. The results showed that pupils who consistently received emotional support, instructional materials, and parental encouragement performed better in mathematics. The study highlighted the significance of regular communication between parents and children, home learning environments, and parental educational goals. However, the study mainly looked at direct associations without taking into account psychological mediation factors like math anxiety or self-efficacy.

Homework Help and Mathematics Development

The second study adopted a longitudinal design to investigate whether parental homework assistance contributed to students' mathematics achievement over time. Unlike traditional studies, the researchers differentiated between students' initial achievement levels and their subsequent academic growth. The findings revealed that students receiving greater homework support initially displayed lower mathematics achievement, suggesting that parents often provide additional assistance when children experience academic difficulties. Nevertheless, these students demonstrated greater improvement across subsequent years, indicating that parental homework support may contribute positively to long-term academic development rather than immediate achievement.

This study highlights the importance of considering academic growth rather than relying solely on examination scores.

Parental Mathematics Anxiety and Homework-Helping Style

By looking at the psychological traits of parents, the third study expanded on earlier findings. Instead than quantifying the quantity of homework help, it looked into how parents helped their kids. The results indicated that parents with high levels of math anxiety were more likely to take a controlled approach to helping their children with their homework. Such behaviours all negatively impacted children's confidence, intrinsic desire, and mathematical achievement. On the other hand, parenting that encouraged autonomy led to better academic results and increased student engagement.

These results highlight how crucial emotional support and constructive parent-child interactions are when it comes to homework.

Comparative Discussion

Although all three studies examined parental involvement in mathematics learning, each adopted a distinct perspective. Parental support as an educational resource was the main focus of the Indian study, which placed a strong emphasis on home learning environments, supervision, and encouragement.

The Norwegian study demonstrated that parental support leads to long-term academic improvement rather than immediate achievement by highlighting the developmental influence of homework aid over time.

The third study focused on parental emotions and behaviours that aid with homework, indicating that parenting style—rather than the quantity of help—determines how successful homework support is. When taken as a whole, these studies show that parental engagement is a multifaceted concept including psychological, emotional, educational, and motivational elements.

RESEARCH GAP

Despite extensive research on parental involvement, several important gaps remain. Most previous studies have investigated parental support as an independent predictor of mathematics achievement. Comparatively fewer studies have examined the psychological mechanisms through which parental support influences learning.

Existing literature rarely integrates parental homework support with variables such as:

- Parenting style

- Mathematics self-efficacy
- Student motivation
- Mathematics anxiety
- Emotional intelligence
- Home learning climate

Furthermore, evidence from Indian middle school settings remains limited. Most international studies have been conducted in European countries, making it necessary to explore these relationships within India's diverse educational and cultural context.

Proposed Conceptual Framework

Based on the comparative review, future studies should examine parental homework support through a broader psychological framework.

Independent Variables

- Parental homework support
- Parenting style
- Home learning environment

Mediating Variables

- Mathematics self-efficacy
- Student motivation
- Mathematics anxiety
- Emotional intelligence

Dependent Variable

- Mathematics achievement

Such an integrated framework would provide deeper insights into the psychological processes underlying students' academic performance.

Educational Implications

The findings of this comparative review have several implications for educational practice. The Indian study focused on parental assistance as an educational resource, emphasizing home learning conditions, supervision, and encouragement. By emphasizing the developmental impact of homework assistance over time, the Norwegian study showed that parental support results in long-term academic gain rather than instant performance.

The third study examined the feelings and actions of parents that help with schoolwork, showing that parenting style—rather than the amount of assistance—determines the effectiveness of homework support. When considered collectively, these studies demonstrate that parental participation is a complex idea with psychological, emotional, educational, and motivational components.

CONCLUSION

Parental help with homework is still crucial to students' success in math. Recent research, however, indicates that good parental participation goes beyond simply assisting kids with their schoolwork. Learning outcomes are influenced by a variety of factors, including the psychological traits of students, parenting style, emotional support, and the quality of parent-child relationships. The comparative analysis shows that multidimensional frameworks integrating educational psychology theories should be developed in future research, going beyond straightforward correlational models. Such a strategy would give parents, educators, and legislators useful advice as well as more thorough explanations for math accomplishment.

REFERENCES

1. Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

2. Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53(1), 109–132. Goleman, D. (1995). *Emotional intelligence*. Bantam Books.
3. Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3–42.
4. Paramasivan. C (2015), Conventional Methods of Training to Teacher and Its Impact in Higher Education, *Advanced Scientific Research & Development (IJASRD)*, Volume 02, Issue 04 (Oct – Dec'2015) | PP 01 – 09.
5. Pinquart, M. (2017). Associations of parenting dimensions and styles with academic achievement in children and adolescents. *Educational Psychology Review*, 29(3), 475–493.