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Effect Of Reggio Emilia Approach On Development Of Cognitive Skills Among Preschool Children

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Abstract: The study planned to investigate the effect of Reggio Emilia Approach on the development of Cognitive Skills among preschool children. Quazi single group design was adopted for the present investigation to involve the preschool children in the study. The UKG students studying in JSS Primary School, Suttur, Nanjanagud Taluk, Mysore considered as population. A sample of UKG students has been utilized as subjects to teach cognitive skills as a component of arithmetic readiness by using Reggio Emilia Approach. This approach is based on the principles of student-teacher-parent role in learning and it emphasis on self-learning, experimental learning in relationship with environments. Totally 20 subjects were randomly selected to give treatment after administering pre test to them. The self prepared Arithmetic Readiness Scale was employed for this research. A 33-item items scale having internal consistency 0.90 measured through test and re test method with 30 days gap. The obtained data was analyzed descriptively and inferentially by computing paired 't' test and also independent 't' test. The level of sig. was fixed at 0.05 level confidence. The results were get with the help of SPSS Package and MS Excel. The results indicate that the Reggio Emilia Approach is effective in promoting cognitive development in both boys and girls. The lack of significant gender differences highlights the inclusive nature of this approach. These findings support the implementation of the Reggio Emilia Approach in early childhood education to foster cognitive growth and create a positive and equitable learning environment for all children.

Index Terms - Effect, Reggio Emilia Approach, Cognitive Skills, Preschool, Children

I. INTRODUCTION

The goal of early childhood education is to provide a safe and nurturing environment where children can develop their cognitive, social, emotional, and physical skills. Research has shown that early childhood education can have a positive impact on a child's future academic success, social and emotional well-being, and overall development. It also has been found that early education can help to narrow the achievement gap between children from different socio-economic backgrounds.

Early childhood education plays a crucial role in a child's overall development and future success. Children who attend early childhood education programs are more likely to do well in school and have better reading and math skills than those who do not. Early childhood education programs provide children with opportunities to interact with their peers and develop important social and emotional skills such as communication, cooperation, and empathy. Children who attend early childhood education programs are better prepared for the academic and social demands of primary school. Overall, investing in early childhood education is an investment in the future, as it lays the foundation for a child's future success and well-being.

The Reggio Emilia Approach is an educational philosophy and pedagogy that emphasizes the role of the child as a active and curious learner. It is based on the idea that children have a natural desire to learn and that they should be provided with a stimulating environment that promotes their curiosity and self-expression. The approach is characterized by a focus on project-based learning, collaboration, and the use of natural materials. It is particularly well-suited for pre-school education and is widely used in early childhood education programs around the world.

Arithmetic readiness refers to the ability of pre-school children to understand and work with basic mathematical concepts, such as numbers, counting, and simple operations. It is considered an important aspect of a child's overall cognitive development, as it lays the foundation for later success in mathematics.

Research has shown that children who have a good understanding of basic mathematical concepts before starting formal schooling are more likely to perform well in math throughout their school years. Additionally, arithmetic readiness can also help the children to develop important skills such as problem-solving, critical thinking, and attention to detail. Arithmetic readiness is an important aspect of pre-school education as it helps children develop the foundation for success in math in the future and also support their overall cognitive development.

The Reggio Emilia approach is designed to support the cognitive development of pre-school children through a combination of hands-on learning, exploration, and collaboration. It emphasizes the importance of children as active and curious learners, who are capable of constructing their own understanding of the world around them. The Reggio Emilia approach has a significant positive impact on the cognitive development of preschool children. Through its emphasis on active learning, project-based investigations, integration of the arts, and documentation, this approach enhances cognitive skills such as critical thinking, problem-solving, creativity, and metacognition. The cited studies by Dahlberg, Moss, and Pence (2017); New (2019); Edwards, Gandini, and Forman (2012); and Gandini, Hill, Cadwell, and Schwall (2015) provide evidence for the effectiveness of the Reggio Emilia approach in promoting cognitive skills among young learners.

II. SIGNIFICANCE OF THE STUDY

The study on the effect of the Reggio Emilia Approach on the development of cognitive skills among preschool children holds significant importance for several reasons. The Reggio Emilia Approach is a unique educational philosophy that prioritizes child-led, experiential learning. Investigating its impact on cognitive skills provides valuable insights into effective teaching strategies that can be incorporated into early childhood education. This study contributes to advancing educational practices by providing evidence-based approaches that support the cognitive development of preschool children. The Reggio Emilia approach has gained international recognition and admiration for its emphasis on creativity, critical thinking, and problem-solving. Conducting a study on its effect on cognitive skills adds empirical validation to the approach's effectiveness. The findings from this research help solidify the Reggio Emilia approach as a viable and successful educational method. Parents and teachers play crucial roles in supporting a child's cognitive development. Understanding the impact of the Reggio Emilia approach on cognitive skills can enhance parent-teacher engagement and collaboration. This study's findings can empower parents and educators to implement effective strategies that promote cognitive development within the Reggio Emilia framework, fostering a shared commitment to the child's learning journey.

III. PROBLEM OF THE RESEARCH

The study planned to investigate the effect of Reggio Emilia Approach on development of Cognitive Skills among preschool children.

IV. OBJECTIVE

The objective of the study is to know the effect of Reggio Emilia Approach on the development of Cognitive Skills of preschool children who taught through Reggio Emilia Approach.

V. HYPOTHESES

1. Cognitive skills of the preschool children was higher as a result of learning through Reggio Emilia approach.
2. There is no significant difference in the Cognitive Skills between boys and girls while learning through Reggio Emilia Approach.

VI. METHODOLOGY

Quazi single group design was adopted for the present investigation to involve the preschool children in the study. The UKG students studying in JSS Primary School, Suttur, Nanjanagud Taluk, Mysore considered as population. A sample of UKG students has been utilized as subjects to teach cognitive skills as a component of arithmetic readiness by using Reggio Emilia Approach. This approach is based on the principles of student-teacher-parent role in learning and it emphasis on self-learning, experimental learning in relationship with environments. Totally 20 subjects were randomly selected to give treatment after administering pre test to them. The self prepared Arithmetic Readiness Scale was employed for this research. A 33-item items scale having internal consistency 0.90 measured through test and re test method with 30 days gap. The obtained data was analyzed descriptively and inferentially by computing paired 't' test and also independent 't' test. The level of sig. was fixed at 0.05 level confidence. The results were getting with the help of SPSS Package and MS Excel.

VII. ANALYSIS AND INTERPRETATION OF DATA

Table-1: shows paired 't' test results on effect of Reggio Emilia Approach on Cognitive Skills scores of preschool children between pre test and post test scores of experimental group (N=20, df-19).

Cognitive Skills	Reggio Emilia Approach Group				
	Mean	Standard Deviation	Obtained 't' Value	Table Value of 't'	Sig.
Pre Test scores	8.550	1.145	2.49	2.09	*
Post Test scores	9.700	2.105			

* Significant at 0.05 level of Confidence

Table-1 shows results related to paired 't' test technique on effect of Reggio Emilia Approach on Cognitive Skills scores of preschool children between pre test and post test of experimental group (N=20, df-19).

The obtained value of 2.49 is greater than the table value of 2.09 with regard to cognitive skills scores of pre and post test scores of preschool children. This indicates that the difference between the pre-test scores and the post test scores is statistically significant at the 0.05 level of confidence. This suggests that the Reggio Emilia Approach had a significant effect on the cognitive skills of the preschool children, as measured by the pre-test and post test scores.

The table concludes that the Reggio Emilia Approach had a significant positive effect on the development of cognitive skills of the preschool children, as evidenced by the significant difference between the pre-test and post test scores.

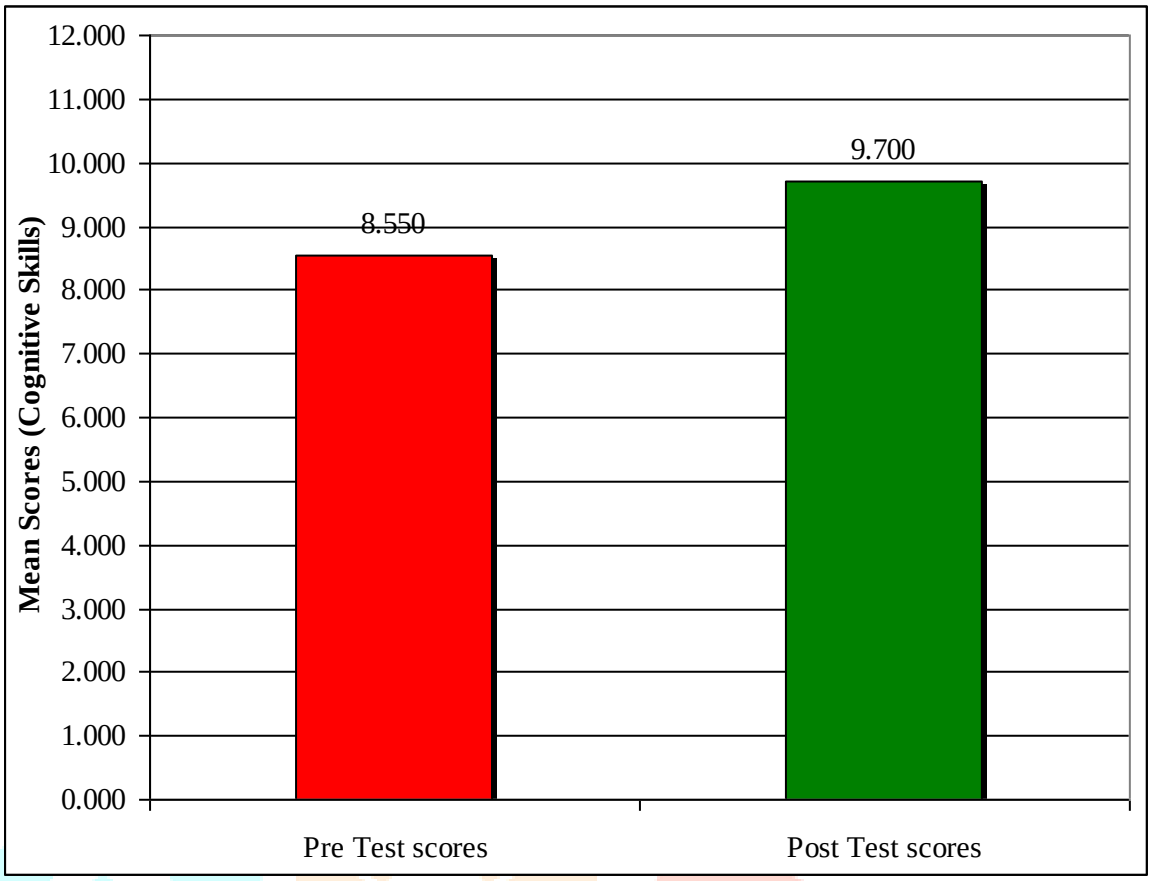

Fig.1: shows the comparison of Cognitive Skills scores of pre test and post test of preschool children.

Table-2 Comparison of Cognitive Skills scores between preschool boys and girls after the intervention of Reggio Emilia Approach by using Independent 't' test (N=20, df=18).

Gender	N	Mean	Standard Deviation	Obtained 't' Value	Table Value of 't'	Sig.
Boys	12	9.080	2.193	1.773	2.10	NS
Girls	8	10.625	1.685			

NS=Not Significant

Based on the provided Table-2, which presents the comparison of Cognitive Skills scores of preschool children after the intervention of the Reggio Emilia Approach using an Independent 't' test. The table indicates that there was no significant difference in the cognitive skills scores between boys and girls who received the Reggio Emilia Approach intervention. The obtained 't' value of 1.773 is less than the table value of 2.10 (at a significance level of 0.05 with df=18). This means that the difference in cognitive skills scores between boys and girls is not statistically significant. Therefore, it can be concluded that both boys and girls showed similar development in cognitive skills through the Reggio Emilia Approach intervention.

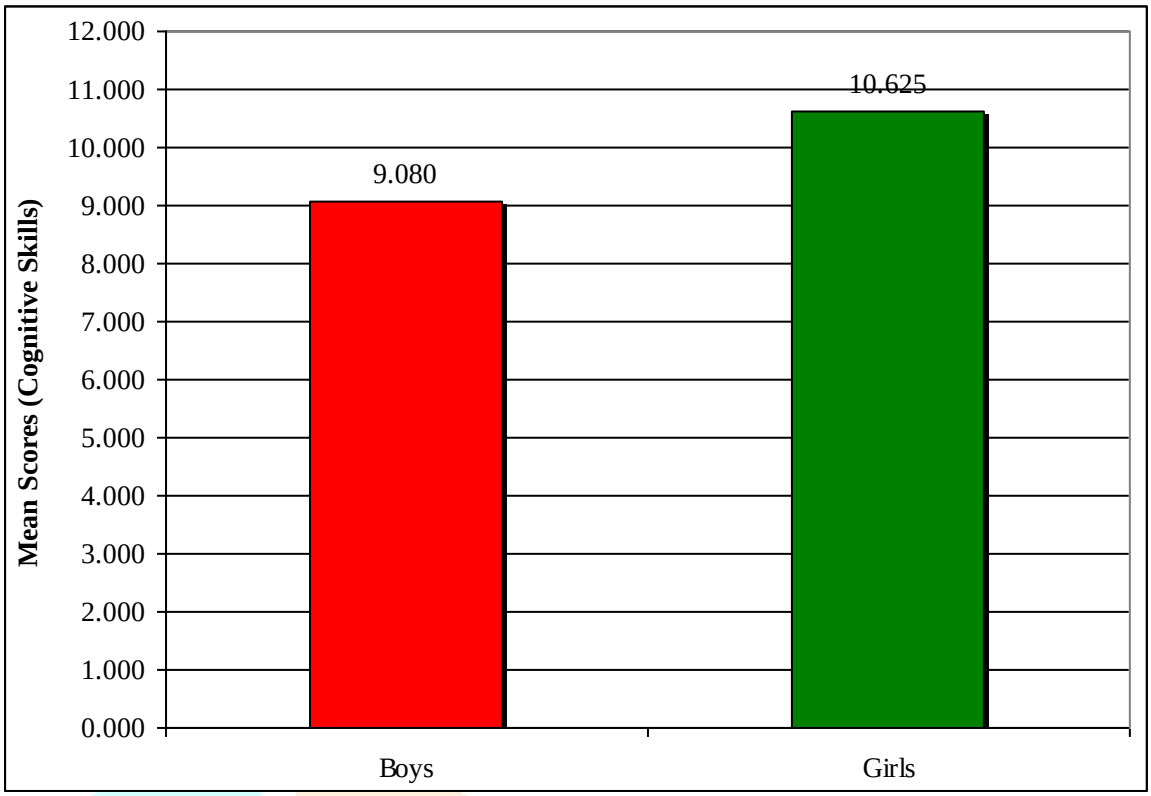

Fig.2: Comparison of Cognitive Skills scores between preschool boys and girls after the intervention of Reggio Emilia Approach

VIII. FINDINGS AND DISCUSSION

The paired 't' test results indicate that the Reggio Emilia Approach had a significant positive effect on the development of cognitive skills in the preschool children. The obtained value of 2.49, which is greater than the table value of 2.09, suggests that the difference between the pre-test and post-test scores is statistically significant at the 0.05 level of confidence. This implies that the Reggio Emilia Approach led to a significant improvement in the cognitive skills of the preschool children, as measured by the pre-test and post-test scores.

The independent 't' test results indicate that there was no significant difference in the cognitive scores between boys and girls who received the Reggio Emilia Approach intervention. The obtained 't' value of 1.773 is less than the table value of 2.10, indicating that the difference in cognitive scores between boys and girls is not statistically significant. Therefore, it can be concluded that both preschool boys and girls showed similar development in cognitive skills through the Reggio Emilia Approach intervention.

Overall, the Reggio Emilia Approach had a significant positive effect on the development of cognitive skills in the preschool children, as evidenced by the significant difference between the pre-test and post-test scores. Additionally, there were no significant gender differences in the cognitive scores among the children who received the intervention.

IX. CONCLUSION

The results indicate that the Reggio Emilia Approach is effective in promoting cognitive development in both boys and girls. The lack of significant gender differences highlights the inclusive nature of this approach. These findings support the implementation of the Reggio Emilia Approach in early childhood education to foster cognitive growth and create a positive and equitable learning environment for all children.

X. EDUCATIONAL IMPLICATIONS

In the light of the findings and conclusion of the study, the following implications and suggestions are made by the researcher:

1. The Reggio Emilia Approach is known for creating a positive and nurturing educational environment. The significant improvement in cognitive skills suggests that this approach fosters a supportive atmosphere that encourages children's active engagement and motivation, leading to positive learning outcomes.
2. The significant improvement in cognitive skills observed in both boys and girls indicates that the Reggio Emilia Approach is effective in promoting cognitive development in preschool children. This finding supports the use of this approach in early childhood education to enhance cognitive abilities.
3. Policy makers should consider integrating the Reggio Emilia Approach into early childhood education policies and curriculum frameworks. The approach has shown to be effective in promoting cognitive development in preschool children, indicating its potential for improving educational outcomes.

REFERENCES

Dahlberg, G., Moss, P., & Pence, A. (2017), *Beyond Quality in Early Childhood Education and Care: Languages of Evaluation*, 4th ed., Routledge.

Edwards, C., Gandini, L., & Forman, G. (2012), *The Hundred Languages of Children: The Reggio Emilia experience in Transformation*, 3rd ed., Praeger.

Gandini, L., Hill, L., Cadwell, L., & Schwall, C. (2015), In the Spirit of the Studio: *Learning from the Atelier of Reggio Emilia*, Teachers College Press.

New, R.S. (2019), *The Reggio Emilia approach: Transforming early Childhood Education*, Routledge.

Koul, Lokesh (1984), *Methodology of Educational Research*, Vikas Publishing House Private Ltd.

Mangal, S.K. (2016), *Essentials of Educational Psychology*, Delhi: PHI Learning Private Limited.