



EFFECT OF ENVIRONMENTAL ENRICHMENT ON MOTOR PROFICIENCY IN INSTITUTIONALIZED AND NON-INSTITUTIONALIZED CHILDREN AMONG 4 - 8 YEARS– AN EXPERIMENTAL STUDY

Dr. Roohina Shaikh¹ MPT; Dr. Sanjiv Kumar² MPT, PhD ; Dr. Vinuta Deshpande³ MPT, PhD

BACKGROUND

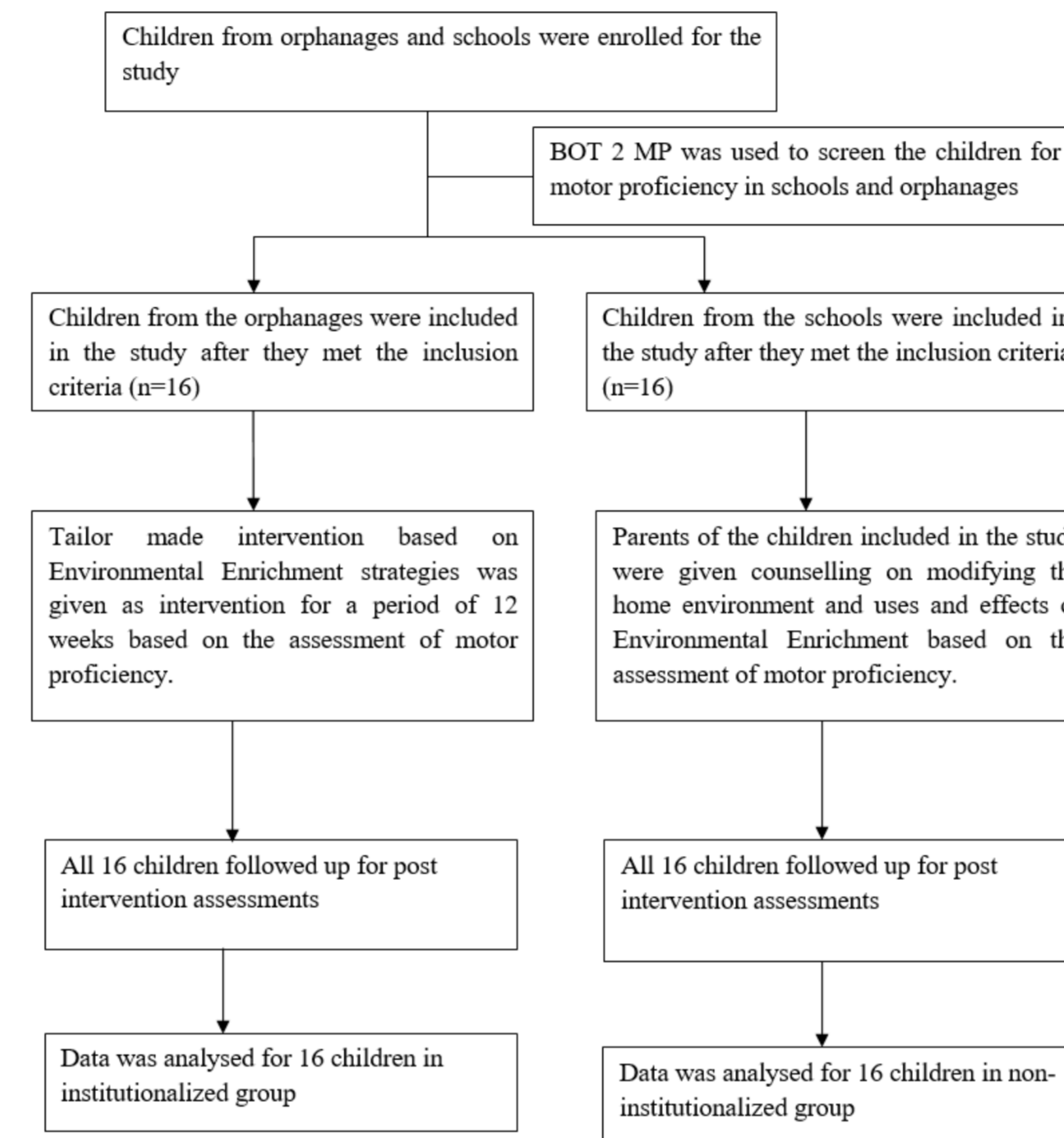
- In India's best run orphanages, the need for social support is often neglected due to immense pressure to meet other children's physical needs.¹
- Institutionalized children are at higher risk for issues like stunted physical growth, attachment challenges, delayed cognitive development, and atypical hypothalamic-pituitary-adrenal axis activity.² The motor developmental delay is associated with early deprivation of the environment.³
- Early stimulation in the form of Environmental Enrichment (EE) can modulate brain development pathways and can cause long-term changes in the neural circuits that underlie permanent changes in brain structure and function.³
- EE have been shown to improve neuroplasticity and promote memory and motor control in animal studies, but the effect is less known in humans.⁴
- Research on assessing the motor proficiency of children living in institutions is limited, so the need for the study is to improve the motor proficiency of institutionalized children and non-institutionalized children using EE strategies.

OBJECTIVES

To compare the effect of EE on motor proficiency in institutionalized and non-institutionalized children among 4-8 years using BOT 2 MP.

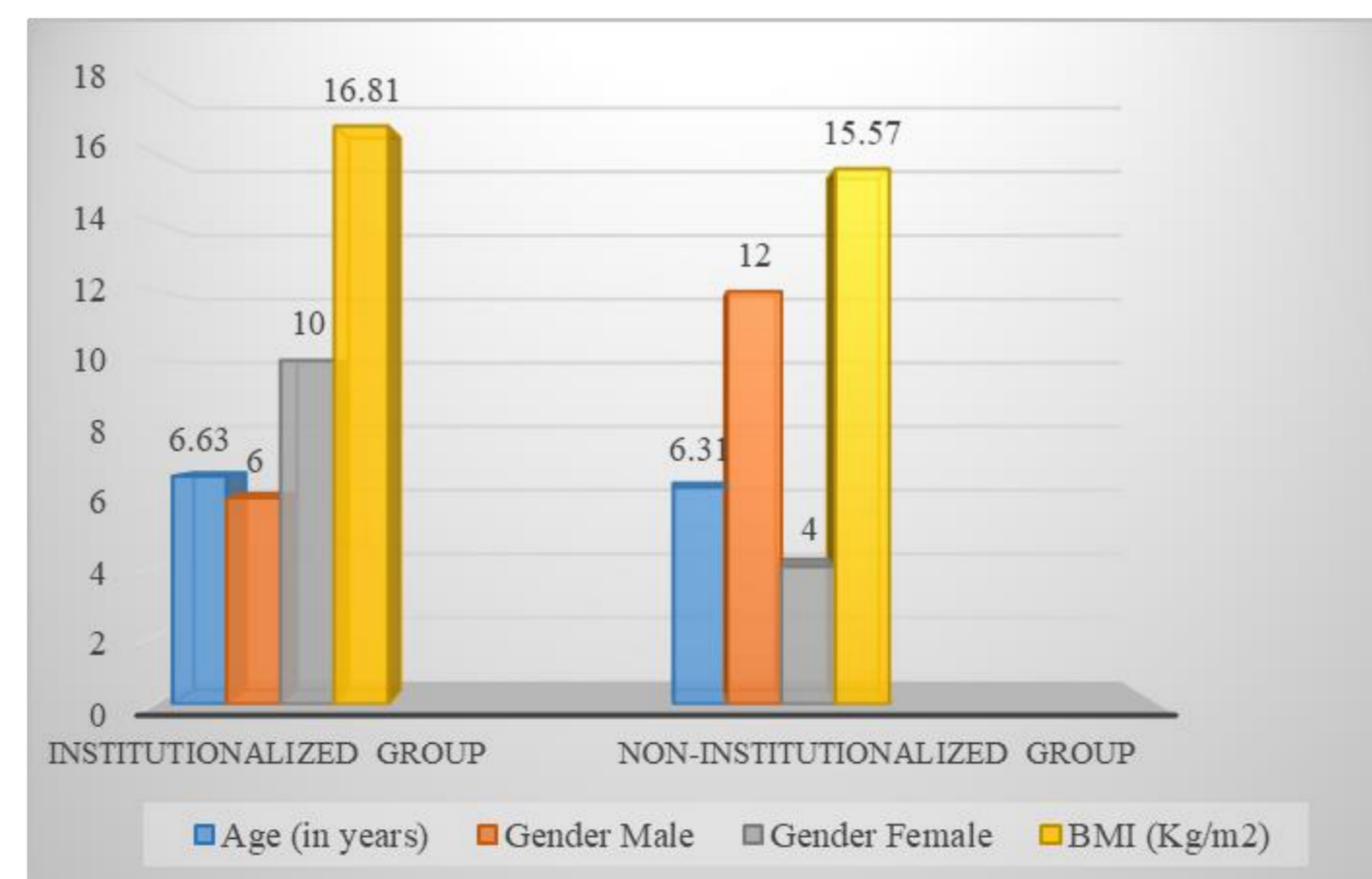
METHODS

The Institutional Ethical Committee gave the ethical certificate for the proposed study. Before the enrolment of the subjects into the study they were segregated based on the inclusion and exclusion benchmark. The aim and procedure were elucidated to the caregivers and parents and a written informed assent was taken for the same from the care-giver/parent.



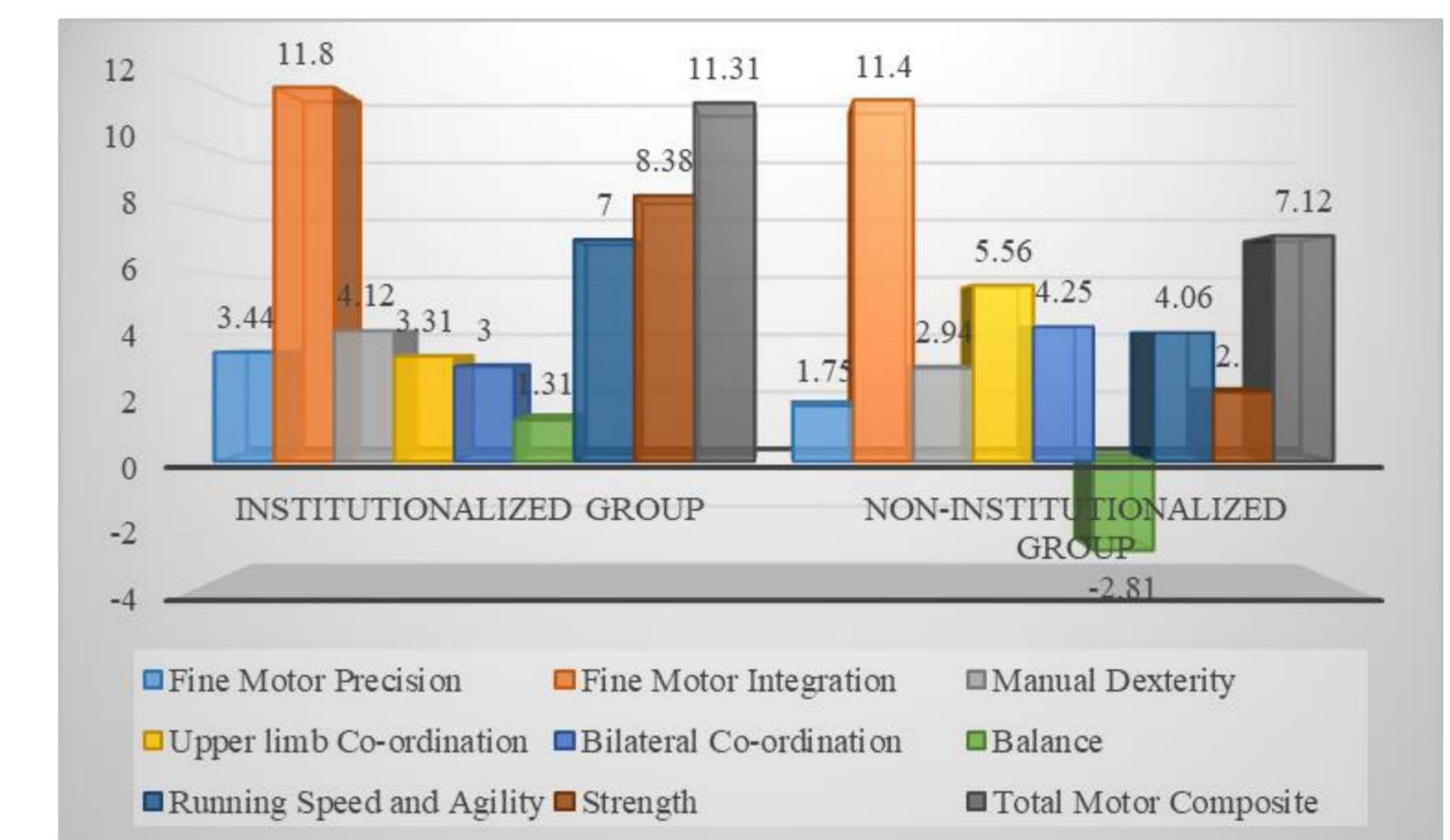
RESULTS

Mathematical evaluation was performed manually and also by using R i386.3.5.1. Statistical software so as to authenticate the results.



Demographic profile of the groups

Between Group Analysis of difference of pre and post mean scores of institutionalized and non-institutionalized groups



CONCLUSION

The present study concludes that 12 weeks of showed better improvement in enhancing motor proficiency than parental counselling. However, EE has profound improvement in betterment of motor proficiency in terms of Balance, Strength and Total Motor Composite.

REFERENCES

1. Taneja V, Sriram S, Beri RS, Sreenivas V, Aggarwal R, Kaur R. 'Not by bread alone': impact of a structured 90-minute play session on development of children in an orphanage. Child: Care, Health and Development. 2002 Jan;28(1):95-100.
2. Blizzard RM, Bulatovic A. 12 Psychosocial short stature: a syndrome with many variables. Baillière's clinical endocrinology and metabolism. 1992 Jul 1;6(3):687-712.
3. Purohit SP, Pradhan B, Nagendra HR. Effect of yoga on EUROFIT physical fitness parameters on adolescents dwelling in an orphan home: A randomized control study. Vulnerable Children and Youth Studies. 2016 Jan 2;11(1):33-46.
4. Black MM, Fernandez-Rao S, Hurley KM, Tilton N, Balakrishna N, Harding KB
5. Morgan C, Novak I, Dale RC, Guzzetta A, Badawi N. GAME (Goals-Activity-Motor Enrichment): protocol of a single blind randomised controlled trial of motor training, parent education and environmental enrichment for infants at high risk of cerebral palsy. BMC neurology. 2014 Dec;14(1):203.