

Effectiveness of occupational therapy home program intervention for children with cerebral palsy: a double blind randomised controlled trial

Iona Novak^{1,2}, Anne Cusick³, Natasha Lannin⁴

¹*Cerebral Palsy Institute, Sydney NSW, Australia,* ²*University of Notre Dame, Sydney NSW, Australia,*

³*University of Western Sydney, Sydney NSW, Australia,* ⁴*Rehabilitation Studies Unit, University of Sydney, Sydney NSW, Australia*

Background: Home programs are widely used by occupational therapists, as a major strategy for addressing the health and development needs of children. Both experts and parents believe home programs are essential because they involve families in intervention and children with disabilities require repeated practise opportunities to gain skills. Despite wide-spread clinical use, there is no high quality research evidence that proves that home program intervention is effective. **Study Aim:** The aim of this research was to empirically evaluate the effectiveness of home program intervention for school-aged children with cerebral palsy. **Method:** A double blind randomised controlled trial design was used. Children were randomised to three groups: (1) home program intervention for eight weeks; (2) home program intervention for four weeks; and (3) a control group, who did not receive home program intervention. The primary end-point was change in performance of functional activities and satisfaction with function as measured by the Canadian Occupational Performance Measure (COPM), at eight weeks. Analysis was conducted using multiple linear regression modelling. **Results:** Home programs lead to statistically significant and clinical meaningful improvements in performance of functional activities (8-week group effect size 1.4 [95% CI 0.6 to 2.2]; 4-week group effect size 2.4 [95% CI 0.7 to 4.2]) and satisfaction with function (8-week group effect size 1.5 [95% CI 0.3 to 2.6]; 4-week group effect size of 2.5 [95% CI 0.8 to 4.3]). **Conclusion:** This study presents new knowledge about home program efficacy. Until this study, there was little research evidence to demonstrate the therapeutic value of home programs. Findings inform clinical practice decisions by both parents and professionals regarding the use of home program intervention for children with cerebral palsy. **Learning Outcomes:** Gain an understanding of the evidence base for home program intervention with children.