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Dressing Skills for Children with Cerebral Palsy [Research plan]

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Dressing Skills for Children with Cerebral Palsy

By: Diana Mellin, OTD/s, Jenna Oberg, MOT/s, Amber Torgerson, MOT/s, and Charlene Yuson, MOT/s

BACKGROUND

Cerebral palsy (CP) is the most common physical dysfunction in children. Because there is damage to their cortex and corticospinal tracts, children who have cerebral palsy have difficulty in precise grasping and fine motor control, affecting their activities of daily living and quality of life (Ouyang et al., 2020).

PROBLEM

Occupational therapists lack therapeutic interventions that are most effective in children with cerebral palsy.

PURPOSE

To develop an OT intervention using threading techniques that will help children with cerebral palsy dress independently without using adaptive clothing

Outcome objectives:

- (a) Determine if there is any progression related to independence and dressing.
- (a) Assess what adaptive clothing the child is using, which skills each child possesses and which skills need to be worked on.

RESEARCH QUESTIONS

1. Do threading techniques make a difference in skill development?
2. Does gaining fine motor skills from threading techniques for dressing translate to using those skills?

METHODS

This study utilized a Quasi-experimental design with the subjects as their own control. A pre and post test will be administered for each child of what skills they have and what skills they used to dress independently.

Recruitment Strategy

1. Inclusion criteria
 - Children aged 5-14 years old
 - Diagnosed with any type of CP (spastic, dyskinetic, ataxia, mixed)
 - Use any form of adaptive clothing
 - Mild to moderate CP
2. Exclusion criteria
 - Children who use threading techniques
 - Outside the age range
 - Severe CP
 - Any medical diagnoses unrelated to CP
3. Recruitment
 - From outpatient clinic specializing in CP patients (1 CP Place in Plano, TX)
 - Ask who would be willing to participate in the study



RESEARCH DESIGN

TREATMENT TEMPLATE COMPONENTS

General Program Goals:

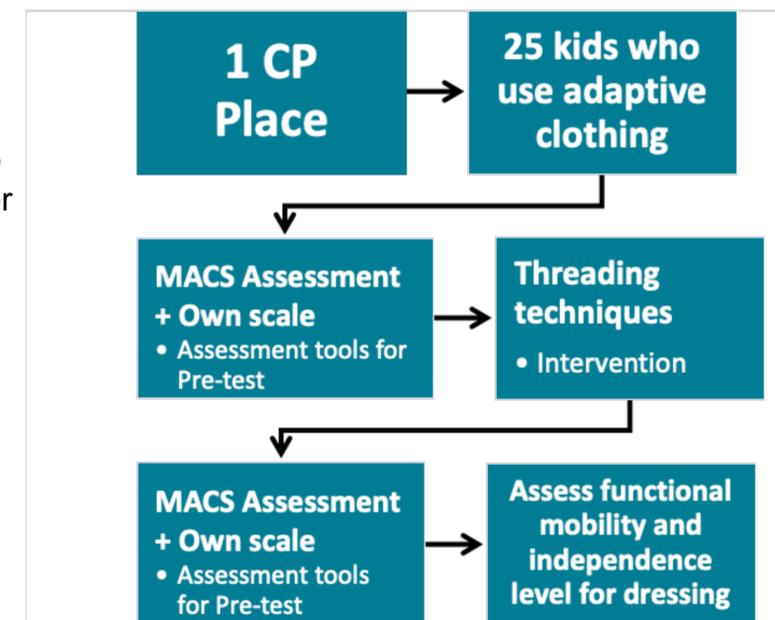
1. Children who have cerebral palsy can acquire motor skills through threading techniques along with occupational therapy.
2. Children translate these skills into dressing independently and other ADLs.

Occupation-Based Theory

Biomechanical FOR

- Focus: deficits that limit occupational performance
- Assumes clients can acquire motor skills
- Connection to study
 - Motor skills required for dressing
 - Threading techniques enhance fine motor skills for bilateral coordination

Intervention Plan:



Statistical Tests Used:

1. MANOVA Test
2. Mann-Whitney U Test

CONCLUSION

Our study is beneficial to the CP population because it specifically addresses these issues of dressing, which promotes precision control of limbs and hands. Threading techniques can help improve on muscle coordination and abnormal reflexes that often come with the diagnosis of cerebral palsy. An important function of child development is the ability to learn to manage one's own body, as well as their clothing as independently as possible. It is our intention to do a trial and expand our knowledge on techniques to help create a positive impact on this population.

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