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### A Guide for Supplemental Education on Seating and Positioning for Parents and Caregivers of Individuals with Cerebral Palsy

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# A Guide for Supplemental Education on Seating and Positioning for Parents and Caregivers of Individuals with Cerebral Palsy

## Grace Johnson, OTS; Dr. Jan Greer, Ph.D, OTR; Franchesca Cox, OTR, DMI

## BACKGROUND

- Improper seating and positioning is the result of a lack of education and training.
- Secondary complications due to incorrect seating and positioning can include pain and discomfort, create poor posture, reduce balance, lead to difficulty propelling themselves, and the development of pressure sores
- Educating caregivers and families from an occupational therapy viewpoint will allow for greater involvement in occupations such as participation, functional mobility, and leisure activities.

(American Occupational Therapy Association, 2021)

## PROBLEM

- Many children diagnosed with CP are improperly seated and positioned, which can lead to reduced play, difficulty with feeding, improper bone development and growth, impaired speech, decreased reaching ability, deficits in toy manipulation and handwriting, and exclusion from interacting with peers.
- Improper seating and positioning can be the direct result of a lack of education and training.

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## **METHODS**

Participants: Caregivers and parents of children with Cerebral Palsy

Setting: TheraHappy, private practice outpatient pediatric clinic in Houston, Texas.

Needs Assessment: Informal pre-educational program survey distributed to caregivers and parents of children with Cerebral Palsy that are actively receiving therapy services at TheraHappy. Ten surveys were completed

### **Implemented Project:**

Presented the website to the parents and caregivers that completed the pre-educational program survey and went through the modules with each of them.

## **PURPOSE**

To create an educational program that educates caregivers and families on the importance of proper seating and positioning during play, feeding, bone development and growth, speech, reaching, toy manipulation, handwriting and interacting with peers.

### **Outcome objectives:**

- Observe seating and positioning, conduct written surveys, and complete needs assessments to identify gaps to understand factors inhibiting proper seating and positioning.
- Develop a website and guide focusing on the importance of proper seating and positioning.
- Implement a six to eight module program about seating and positioning and deliver to caregivers and families of children with CP.
- Create, administer, and analyze data from pre and post program surveys to ensure all modules addressed the needs and are educational in nature.

## Doctor of Occupational Therapy Program

## **Bone Development/Growth:**

- Secondary Complications
- Optimal Seating Position

### **Reaching/Toy Manipulation:**

- Supine Positioning
- Head/Body
- Shoulders/Arms, Legs/Feet

### **Results:**

- The results of the project align with the literature review and display the lack of educational material on proper seating and positioning.
- The results of the project were shown to be positive and consistent by the pre and post educational program surveys. No negative results were found during the educational program.
- All participants provided positive feedback that the educational program and website increased their knowledge on seating and positioning.

**Theoretical Framework:** Person-Environment-Occupation-Performance Model (PEOP)

## **Future Directions**

- Future research and projects should include studying how child development and social inclusion can be improved for children in wheelchairs related to proper seating and positioning.
- Future projects should include studying the longer-term effects education on seating and positioning can have on a child to understand how effective the program is.
- Conducting this project with a different geographic population would also be beneficial to understand if the project has the same effect.

### **References:**

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PROGRAM

## **Modules:**

## **Play:**

- Prone Positioning
- Tall Kneeling

## **Equipment:**

- Finding The Right Fit

### Feeding/Speech:

- Seated Position With Adult

### **Therapy Options:**

- Occupational Therapy
- Physical Therapy
- Aquatic Therapy
- Hippo Therapy
- DMI (Dynamic Movement Intervention Therapy
- MNRI (Masgutova Neurosensorimotor Reflex Integration) Therapy

