The Effects of Proprioceptive Input on Participation in Functional Activities: Parents' Perspectives

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Purpose

The purpose of this study was to obtain primary caregivers' perspectives on a home exercise program (HEP) that provides proprioceptive input for children ages 2-5 with developmental delay and the impact it has on participation in functional activities. The HEP included activities that provided the sensory input needed to allow children to engage more with their environment and improve performance during daily tasks. This study expands the current knowledge in the field of occupational therapy regarding incorporating proprioceptive input into everyday life and the positive impact that it can have on children with developmental delays.

Methods

Recruited participants include caregivers with children ages 2-5 who have a developmental delay, a documented sensory deficit, and receive occupational therapy services at various participating pediatric therapy clinics. The caregivers were required to complete a pre-survey, facilitate the provided proprioceptive home program for 5 minutes a day for two weeks, and complete a post-survey to determine if any improvements were noted.

https://www.growinghandsonkids.com/sensory-processing-play-laundry-basket-push-game.html

Results

Of the 24 eligible participants, 14 completed the full program and provided adequate pre- and post- surveys. Results indicate that 12 participants (85.7%) reported improvements in their child's ability to actively and willingly participate in hand washing, brushing teeth, dressing, sitting down for mealtime, bathing, and laying down for bed after the HEP was performed. The caregivers also reported a decrease in the number of times their child's attention needed redirecting during a task after completing the HEP.

Table II – Functional Activity Performance

Activity	Pre-test (%)	Post-test (%)
Grooming	40.91	61.54
Getting Dressed	13.64	38.46
Meal Time	18.18	38.46
Bath Time	9.09	53.85
Laying Down for Bed	18.18	46.15

Implications for OT

The results expand the current knowledge on the impact of proprioceptive exercise on children's performance of daily activities. The findings support further research on incorporating proprioceptive input into everyday life to help children with developmental delays complete daily life activities.

Limitations

Limitations include a small sample size, a short length of time for program administration, and biased data collection from the child's caregiver. A larger sample size would give more reliable results with greater statistical power. The data collected was obtained through the parent perspective and could affect the study's validity due to its subjective nature. During the study, a global pandemic and hurricane occurred, which could have affected the home exercise program participation.

Primary References

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