THE FEASIBILITY OF A ROBOTIC MOBILITY OPTION FOR INFANTS WITH MOTOR IMPAIRMENT

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ABSTRACT

Clinicians and researchers advocate for providing powered mobility as early as is feasible for young children with motor impairment. Our previous research showed that typically developing infants as young as 5 months of age could learn to drive the WeeBot, a robotic mobility device with a novel control interface that responds to the child’s weight shift. This case study research reports the experience of two very young children (10 months and 22 months of age) with motor impairment, both of whom completed twelve 20-minute robotic mobility sessions. The results of this study indicate the children quickly learned to drive the robot to objects and people of interest. In addition, they demonstrated gains in developmental skills, and displayed increased goal-directed driving, environmental and object exploration, and increased social interaction during the mobility sessions. The results provide support for providing early mobility options with alternative control systems to young children with motor impairment.

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