

Measuring Participation in Daily Life for Children and Youth Who Need or Use Power Mobility

What is this research about?

More children and youth than ever before are using power mobility devices such as power wheelchairs, ride-on toy cars, standers and scooters, to move about and participate in activities they need and want to do in daily life. Although we know independent mobility is important, we have little information about how children and youth use power mobility devices to accomplish meaningful activities in daily life, and if this intervention is effective for improving their participation at home, school or in the community.

Why is this research necessary?

Measuring participation in daily life is complex, with many factors influencing its outcome. Before we can evaluate the effectiveness of power mobility use on participation, we first need to be confident that the research methodologies are appropriate and measurement tools are suitable for our population.

There is little empirical research evidence about the impact of power mobility use on children's and youth's participation in daily life. We assume providing a means for independent mobility will increase participation in such as learning at school, helping out at home, playing with friends, or attending community events. However, most research on this topic is descriptive, only suggesting that power mobility can make a difference for young people and their families.

What are we hoping to accomplish?

Our research explores how to measure participation in daily life for children and youth who need or use power mobility. This involves 3 distinct Phases:

- Phase 1: Reaching consensus on elements of participation important to measure (link to summary)
- Phase 2: A case series exploring children and youth's use of sit to stand power wheelchairs and measuring their participation in daily life
- Phase 3: A feasibility study measuring children and youth's participation in daily life and power wheelchair use

*** Phase 3 is in collaboration with staff from Centre for Child Development in Surrey and Queen Alexandra Health Centre for Children in Victoria, as well as therapists in child development centres and school districts across the province of British Columbia*

What is the significance of this research?

Funding for power mobility devices is limited, and this type of assistive technology is expensive. There is increasing demand to demonstrate that this therapeutic intervention is effective. Our findings will identify appropriate research methodologies and measurement tools, building a foundation for future research. Our research will also advance understanding of how children and youth use power mobility to participate in daily life.

This study is part of the PhD thesis requirements for Debbie Field M.HSc.OT, PhD Candidate, Graduate Programs in Rehabilitation Sciences, UBC and is funded by the Canadian Institutes of Health Research. The results will be published in a thesis, which is a public document.

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