

Report of Findings - 2014 College of Health Science Faculty-in-Aid Grant

**Expansion of the Communication Function Classification System (CFCS)
to Adults and Adolescents with Cerebral Palsy**

Mary Jo Cooley Hidecker

Participants

94 adults and adolescents with a diagnosis of cerebral palsy, were recruited from cerebral palsy clinics at the University of Michigan (n=40), McMaster University (n=24), and University of New Mexico (n=30). 49 participants were female. 27 participants were adolescents (i.e., under 20 years old) and 76 participants had bilateral limb distribution. (This grant money was primarily used to collect data from McMaster.

Methods

After consenting and assenting as appropriate, a research staff member used the interview version of the CFCS to obtain a list of communication methods and the CFCS level from the person with CP or his/her proxy. An investigator and another clinic professional independently determined the person's CFCS level, including communication methods. The investigator also completed the Rotterdam Transition Profile. From participant's medical records, the research staff member recorded demographics, GMFCS, and MACS. A weighted kappa (κ) was calculated to determine the inter-rater reliability between professionals and between professionals and the person with cerebral palsy.

Results

The inter-rater reliability was *very good* ($\kappa = .82$) between the two professionals and was *good* ($\kappa = .63$) between the professional and the person with cerebral palsy or his/her family member. It is also notable to acknowledge that the individuals with cerebral palsy tended to classify themselves as more functional as compared to the professionals' classification.

Limitations

None of the participants were recruited from community clinics as they were all recruited from university clinics. Furthermore, 84 of 94 participants had spastic cerebral palsy, resulting in a poor representation of other types of cerebral palsy.

Conclusions

The CFCS was acceptable to professionals and was acceptable for adolescents and adults with cerebral palsy. The CFCS can be used in clinical practice and in clinical research with adolescents and adults.

Future Research & Dissemination

A manuscript on CFCS inter-rater reliability will be submitted to *Developmental Medicine & Child Neurology* by the end of 2015.

One future direction is to create a functional profile for the individuals with cerebral palsy by incorporating the CFCS with the Gross Motor Function Classification System (GMFCS) and the Manual Ability Classification System (MACS). The GMFCS classifies an individual's mobility while the MACS classifies his/her manual ability. Ultimately this could improve communication among professionals and the individuals with cerebral palsy. Then, we will compare the CFCS, GMFCS, and MACS levels with the Modified Rotterdam Transition Profile. By comparing these classification systems with the Modified Rotterdam Transition Profile, we hope to determine how a person's gross motor, manual, and communication abilities affect his/her transition into adulthood.