

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:<https://orca.cardiff.ac.uk/id/eprint/66256/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Pickering, Dawn , Horrocks, Lyn, Visser, Karen and Todd, Gabriela 2015. Analysing mosaic data by a 'Wheel of Participation' to explore physical activities and cycling with children and youth with cerebral palsy. *International Journal of Developmental Disabilities* 61 (1) , pp. 41-48. 10.1179/2047387714Y.0000000038

Publishers page: <http://dx.doi.org/10.1179/2047387714Y.0000000038>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



DOI: <http://dx.doi.org/10.1179/2047387714Y.0000000038> Online October 2014

## **Analysing mosaic data by a 'Wheel of Participation' to explore physical activities and cycling with children and youth with cerebral palsy**

[Dawn M. Pickering](#); [Lyn M. Horrocks](#); [Karen S. Visser](#); [Gabriela L. Todd](#)

### **Abstract**

Children and youth with Cerebral Palsy (CP) have limited opportunities for participation. These qualitative results are part of a mixed methods study exploring the effects of participation in physical activities including adapted cycling.

### **Objectives:**

The first aim was to explore physical activity participation of children and youth with CP. The second aim was to introduce information about adapted cycling and explore if they would participate in the future.

### **Methods:**

Mosaic methods were adapted and this involved the use of puppetry, pictures and drawing and they also kept a written diary.

### **Results:**

18 participants were recruited aged 2–13, 11 male, 7 female resulting in 17 interviews and 15 diaries. The participants had a range of communication abilities, 10 spoke verbally, 3 were nonverbal, 2 used Makaton signing and 3 had dysarthria. The data were managed in NVIVO and analysed with coding using a template approach. The themes which emerged revealed some barriers and encouragers of physical activity participation represented by a 'Wheel of Participation'. The interview and diary data enabled their voices to be heard as their 'Mosaic' was built up through this iterative analytic process. 11 of the 18 children actually tried adapted cycling following the provision of written information.

### **Conclusion:**

This change behaviour was positive and further research should explore habitual participation in physical activities such as adapted cycling. By hearing their perspectives about participation in physical activities and cycling, the experiences described suggest there are now some enjoyable opportunities for participation for children and youth with CP.

**Keywords:** [Mosaic methods](#), [physical activity](#), [participation and cerebral palsy](#)