Sports and recreational choices for non-ambulant disabled children

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Aim of talk

• To share what recreational opportunities there are for disabled children based upon my PhD, where I have explored this with 9-16 year old children and young people with cerebral palsy and their families.

• To explore how you might adapt activities you are involved in or consider volunteering.
What do you enjoy doing in your leisure time?

• Sports
• Music
• Arts
• Drama
PhD study – ‘VOCAL’

• Voices of children and young people with cerebral palsy about their participation in recreational activities- walking and talking difficulties.
Background: Cerebral Palsy

• Cerebral Palsy- non progressive neurological condition affecting motor and sensory control

• Gross Motor Function Classification System (GMFCS)- 5 levels of ability

• Rosenbaum and Gorter (2015) have proposed 6 ‘F’ attributes for rehabilitation:
  • Fitness, Family, Friendships, Function, Fun and the Future

• Seeking to explore their views, experiences and choices about meaningful participation in recreational activities- it is known they have less choices

• Little known yet about their emotional wellbeing.
GMFCS E & R Descriptors and Illustrations for Children between their 6th and 12th birthday

GMFCS Level I
Children walk at home, school, outdoors and in the community. They can climb stairs without the use of a railing. Children perform gross motor skills such as running and jumping, but speed, balance and coordination are limited.

GMFCS Level II
Children walk in most settings and climb stairs holding onto a railing. They may experience difficulty walking long distances and balancing on uneven terrain, inclines, in crowded areas or confined spaces. Children may walk with physical assistance, a hand-held mobility device or used wheeled mobility over long distances. Children have only minimal ability to perform gross motor skills such as running and jumping.

GMFCS Level III
Children walk using a hand-held mobility device in most indoor settings. They may climb stairs holding onto a railing with supervision or assistance. Children use wheeled mobility when traveling long distances and may self-propel for shorter distances.

GMFCS Level IV
Children use methods of mobility that require physical assistance or powered mobility in most settings. They may walk for short distances at home with physical assistance or use powered mobility or a body support walker when positioned. At school, outdoors and in the community children are transported in a manual wheelchair or use powered mobility.

GMFCS Level V
Children are transported in a manual wheelchair in all settings. Children are limited in their ability to maintain antigravity head and trunk postures and control leg and arm movements.

Palisano et al, 1997; Reid et al, 2011
Justification of inclusion criteria

• Levels III-V of the Gross Motor Function Classification System (GMFCS) - natural decline

• Children and young people (CYP) with cerebral palsy aged 9-16 years

Figure 1: Predicted Gross Motor Function Measure (GMFM-66) motor scores as a function of age by Gross Motor Function Classification level. *GMFCS levels with significant average peak and decline. Dashed lines illustrate age and score at peak GMFM-66.

Hanna et al., 2008
Adapted cycling

https://www.youtube.com/watch?v=Zd5WTK6Gjl
Pedal Power, Cardiff
Children’s book

Where Can I Ride my Trike?

Written by
Dawn
Pickering
Illustrated by Hannah Pickering
Recumbent bike

• [http://www.londonrecumbents.co.uk/](http://www.londonrecumbents.co.uk/)
Swimming

- https://www.disabilitysportwales.com/cardiff/
Adapted Surfing

• https://www.youtube.com/watch?v=il9wB7siD-Y
Adapted Trampolining

https://www.disabilitysportwales.com/clubs/rebounders-trampolining-club/
RaceRunning: a cerebral palsy sport

• http://www.racerunning.org/FrontPage/?id=15
Race Running

About our Club

Cardiff Race-Running (CRR) is the club of choice for race-running enthusiasts. We welcome all abilities and experience levels and organise monthly training sessions and races throughout the year. Our aim is to provide a supportive and enjoyable environment for people of all abilities to train and compete, with a focus on accessible and inclusive activity. Whether you are a seasoned runner or just starting out, we have a team and environment for you.

Join us at Wales’ first Race-Running club.
Activity that’s new, fun, friendly and has amazing benefits.

What is it?
Training to walk, run and race with the support of a wheeled frame.

Who is it for?
Anyone who has difficulty with movement, balance and walking but is allowed to bear weight.

When?
Friday nights are Race-Running nights, meet 5-7pm (term time only).

Where?
Cardiff International Sports Stadium
Lockwih Road, Cardiff CF11 4AZ

How much?
Under 16s £1.00 · Over 16s £3.00

Our Phone: 07803 770 962
Our Email: gabriella.todd@yahoo.co.uk

Race-Running
Sport in Movement

For years I’ve sat on the sidelines watching others take off. Now I can have it too.
Race-runner Joe

The world of race-running is a limitless space. It takes away disability, replacing it with ability.
Race-runner Hannah
Katie (pseudonym) aged 21 years Pilot Interview 2015

• ‘I was introduced to a cerebral palsy specific sport called RaceRunning...it was just so freeing....it was just amazing!........ My activities were very short and staggered, I would never really raise my heart rate or get into an easy motor pattern. .... Gravity and my CP is what made my walking pattern so disjointed- the need to stay upright against gravity with muscles which co-contract at the faintest hint that I might fall. So at first the RaceRunner gave me the experience of what walking must be like without cerebral palsy- using motor patterns which come naturally and easily......
Katie

....So it's so beautiful on the track, fresh air, you get to obviously run on the RaceRunner ....and you can switch off that part of your brain. I think motor function just uses more - because we've got less maybe - we've got damaged brains so the bits that are alive are working 100 fold more than they're meant to, it might be the fact that somehow they can switch off and you can start thinking. What I can't do is think coherently when I walk, but I can when I Race Run...
...it created new abilities within me not necessarily physical...I had more self confidence and more ability to deal with stressful moments in my life...I actually applied for the student president of the faculty...I was so much more happy within myself...

Race Running is safe, you do need padded shorts and a padded saddle....you don’t have to concentrate you just see the world go by....it enabled me to stop hiding what I can’t do and say look at what I can do!.....
Touch Trust

• [http://www.touchtrust.co.uk/](http://www.touchtrust.co.uk/)
Adapted Skiing

• https://www.youtube.com/watch?v=Z0ePilUoC8
Adapted sailing

• http://ryasailability.tv/videos/boats/rs-venture-keel/
Horse riding

• http://www.rdasouthwales.org.uk/
Arts and culture

• Relaxed orchestral performance

• Accessible cinema showings

• ? Support to do activities e.g. pottery, drawing, gluing.....

• Playgrounds
Play schemes

- [https://www.cardiff.gov.uk/ENG/resident/Leisure-parks-and-culture/Childrens-Play/Play-projects/Disability-play-project/Pages/Disability-play-project.aspx](https://www.cardiff.gov.uk/ENG/resident/Leisure-parks-and-culture/Childrens-Play/Play-projects/Disability-play-project/Pages/Disability-play-project.aspx)
Environmental barriers
Changing places toilets
Mobile hoist
Transport – Jumbulance
Accessible playgrounds
Beach Access
Contact details

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