Differences in patterns of physical participation in recreational activities between children with and without intellectual and developmental disability

Chi-Wen Chien\textsuperscript{a,}*, Sylvia Rodger\textsuperscript{b}, Jodie Copley\textsuperscript{b}

\textsuperscript{a} Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong Special Administrative Region

\textsuperscript{b} Occupational Therapy Division, School of Health and Rehabilitation Sciences, The University of Queensland, Brisbane, Queensland, Australia

\section*{ARTICLE INFO}

Number of reviews completed is 1

Keywords:
Participation
Recreation
Children
Intellectual and developmental disability

\section*{ABSTRACT}

Background: Children with intellectual and developmental disability (IDD) are at risk of experiencing limited participation in recreational activities, where they may be present but not physically engaged.

Aim: To compare patterns of physical engagement in recreational activities between children with and without IDD.

Methods and procedures: Fifty children with IDD (26 boys, 24 girls; mean age 8.7 years) were matched for age and sex with 50 typically developing children. Parents completed a questionnaire which captured participation in 11 recreational activities involving hand use as an indication of physical engagement.

Outcome and results: More than 80% of children in both groups participated physically in eight recreational activities, but fewer children with IDD participated in six activities when compared with typically developing children. Children with IDD also participated less frequently in five activities and required more assistance to participate in all the 11 activities. Parents wanted their child with IDD to participate in 10 recreational activities with less assistance.

Conclusions and implications: The difference between the groups related to participation frequency, independence, and parents’ desire for changes in their child’s participation. Greater efforts are needed to address these differences and to support recreational participation in children with IDD.

What this paper adds?

Previous research on the recreational participation of children with intellectual and developmental disability (IDD) has tended to focus on children with mild IDD. This study extends the current knowledge by investigating the patterns of recreational participation of children with moderate or severe IDD and by comparing these patterns with those of typically developing children. Since children with moderate or severe IDD may be physically present but may be less involved in engaging in activities, we targeted their physical engagement by studying the extent to which they participated in recreational activities requiring hand use. We found that children with IDD participate physically in most recreational activities. However, compared with typically developing children, a lower percentage of children with IDD participated in six specific activities (card/board games, computer games, using electronic devices, doing creative art/craft, organized sport, and taking photographs for fun). Children with IDD also participated less frequently in five

\* Corresponding author.

E-mail addresses: will.chien@polyu.edu.hk (C.-W. Chien), s.roger@uq.edu.au (S. Rodger), j.copley@uq.edu.au (J. Copley).

http://dx.doi.org/10.1016/j.ridd.2017.05.007

Received 16 November 2016; Received in revised form 6 May 2017; Accepted 25 May 2017

0891-4222/ © 2017 Elsevier Ltd. All rights reserved.
activities, three of which are physically related (unstructured physical activities and organized sport). Major differences between the groups were found in the children’s independence and their parents’ desire for change. The parents of a child with IDD wanted their child to participate in 10 activities with less assistance, in particular playing with construction toys and computer games, doing creative art/craft, and engaging in physical activities and organized sport.

1. Introduction

Participation is defined as involvement in life situations by the International Classification of Functioning, Disability and Health (ICF) (World Health Organization, 2001), and recreation is included as an essential life situation. Participation in recreational activities enables children to achieve happiness, develop skills and competencies, form social relationships, and enhance their self-efficacy (Hoogsteen & Woodgate, 2010; Powrie, Kolehmainen, Turpin, Ziviani, & Copley, 2015). For example, participation in physical recreation activities or sports can help children to develop healthy life habits which in turn improve health and quality of life (Khalili & Elkins, 2009; Murphy & Carbone, 2008). Children’s perception of self-efficacy and positive mood have been found to benefit from sport or leisure participations by providing freedom of choice and pleasured experience (Grandisson, Tetreault, & Freeman, 2012; Vogt, Schneider, Abeln, Anneken, & Struder, 2012). In addition, participation in recreational activities affords children with many opportunities to interact with other children, make friends, and develop social competence (Ozer et al., 2012; Solish, Perry, & Minnes, 2010). Increasing attention has been thus given to the investigation of children’s recreational participation patterns, particularly for children with disability who may have limited ability to play or interact with others (Dahan-Olie, Mazer, & Majnemer, 2012; Imms, 2008; Shields, King, & Corbett, & Imms, 2014).

Distinguishing between physical presence and physical engagement is important when investigating recreational participation of children with disability. Recent advances in the concept of participation (Coster et al., 2011; Imms et al., 2017; Kang, Palisano, King, & Chiarello, 2014) show that participation encompasses two key elements: attendance (defined as “being there”) and involvement (defined as “the experience of participation”). Attendance at recreational activities may be easier to achieve than actual involvement because attendance requires only that the child attends and observes others’ engagement (Kang et al., 2014; Maxwell, Augustine, & Granlund, 2012). By contrast, the involvement aspect of participation includes the additional elements of engagement, motivation, persistence, social connection, and level of effort (Coster et al., 2011; Hoogsteen & Woodgate, 2010; Imms et al., 2017; Kang et al., 2014). Under this conceptualization of participation involvement, physical engagement refers to a child’s actual performance of the activity (Kang et al., 2014) and may involve the use of the hands (e.g., playing computer games) or lower extremities (e.g., playing soccer). As noted by Imms et al. (2017), attendance (physical presence) is a necessary requirement but does not always lead to involvement such as physical engagement. Investigations of the involvement in recreational participation of children with disability are needed to understand the “physically doing” aspect.

Most prior studies of recreational participation of children with disability have focused on children with physical disability (Law, Anaby, DeMatteo, & Hanna, 2011; Ullenlagh, Krumlinde-Sundholm, Granlund, & Almqvist, 2014), cerebral palsy (Imms, 2008; Longo et al., 2013; Majnemer et al., 2008), or high-functioning autism (Hilton, Crouch, & Israel, 2008; Potvin, Snider, Prelock, Kehayia, & Wood-Dauphinee, 2013). However, little is known about the recreational participation patterns of children with intellectual and developmental disability (IDD) (Shields et al., 2014), a group that is characterized by intellectual disability in combination with other lifelong disabilities. Children with IDD often exhibit reduced cognitive functioning, communication, and motor skills, which affect their recreational participation (Agran, Brown, Hughes, Quirk, & Ryndak, 2014; Shields et al., 2014). Therefore, understanding the recreational participation patterns of children with IDD and how these patterns compare with those of typically developing children is needed to maximize the recreational participation opportunities and to optimize the therapy services for children with IDD.

A systematic review by Shields et al. (2014) identified four studies that compared recreational participation patterns between children with IDD and typically developing children. These studies reported that children with IDD participated in a similar number of informal recreational activities (e.g., reading, playing computer games, or doing puzzles) and at a similar frequency as their typically developing peers (Ehrmann, Aeschleman, & Svnam, 1995; Margalit, 1984; Matthews, 1982; Solish et al., 2010). However, children with IDD participated in fewer formal recreational activities (e.g., organized physical activities) or did so less frequently. Shields et al. (2014) commented that these results may be inconclusive because three of the four studies were considered outdated (i.e., published before the introduction of the ICF participation concept). In addition, the children in these studies were not matched for sex and age, which can affect children’s participation (Longo et al., 2013; Mc Manu, Corcoran, & Perry, 2008; Ullenlagh et al., 2014). King, Shields, Imms, Black, and Ardern (2013) compare the recreational participation patterns between 38 matched pairs of children with and without IDD. Surprisingly, children with IDD participated in more informal recreational activities than their typically developing peers, although their participation in physical activities and skill-based activities (e.g., playing a musical instrument or learning to dance) remained lower.

The aforementioned studies on recreational participation of children with IDD have focused on children with mild rather than moderate or severe IDD. For example, King et al. (2013) selected children with IDD who had adequate cognitive and communicative abilities to answer the questions about participation. Also, no studies have differentiated the concepts of physical engagement from presence or have specifically investigated the physical engagement in recreational activities of children with IDD. It is possible that children with moderate or severe IDD may be as physically present but less involved in actually engaging in activities as their typically developing peers. For example, two studies have reported that children with disability desired for active involvement in doing the activities that they prefer rather than just being physically present (Bedell, Khetani, Cousins, Coster, & Law, 2011; Eriksson & Granlund, 2004). Solish et al. (2010) also found that children with IDD tend to engage in recreational activities that are
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات