

**Student Research**

# Sport and Physical Activity Participation Among People With Disabilities Reported at a Sports Exhibition and Six Months Later

## A Cohort Study

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**Abstract**

A cohort study of sport and physical activity participation levels of adults attending a disability sport exhibition and six months later, and barriers to sport participation. Outcome measures included current sport participation, the Physical Activity Scale for Individuals with a Physical Disability (PASIPD) in MET hours/day and the modified Barriers to Physical Activity and Disability Survey (B\_PADS). Out of a total of 39 participants, at the time of the exhibition, 25 (64%) participants played sport, but were physically inactive overall. At the six-month follow-up ( $n = 32$ ), 21 (66%) participants played sport and physical activity levels were low. The most common barrier reported at the exhibition was cost (54%), and at follow-up was a lack of appropriate sporting competitions (50%). Whilst more than half of participants were engaged in sport, frequency and overall physical activity levels were low and participants indicated a desire for greater sport involvement. Increasing opportunities and addressing barriers to sport participation for people with disability is warranted.

**Keywords**

*Sport, physical activity, disability, barriers*

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## Introduction

People with disabilities should have the same opportunities as people without disabilities to participate in physical activities such as sport. Unfortunately, this is often not the case, and therefore specific strategies or events are required to provide physical activity opportunities or information about such opportunities. This study investigated the sport and physical activity participation of people with disabilities who attended a sports exhibition that was specifically aimed to showcase sporting opportunities for people with disability and to encourage participation. Two questionnaires were used to determine levels of sport and physical activity for each individual at the time of the sports exhibition and six-months after the exhibition. In addition, participants were asked about perceived barriers in regards to engaging in sport and physical activity. These data were then analysed to determine changes in levels of participation and the most commonly reported barriers to participation in sport and physical activity.

## Related Literature

Physical activity is defined as “any bodily movement produced by skeletal muscles that results in energy expenditure” (Caspersen, Powell, & Christenson, 1985). Physical inactivity has been identified as the fourth leading risk factor for global mortality and results in 6% of global deaths (Lee, Zhu, Ackley-Holbrook, Brower, & McMurray, 2014). The use of physical activity to reduce the risk of disease is especially pertinent to ischaemic heart disease, which is the leading cause of death worldwide. Current physical activity recommendations are that adults undertake at least 150 minutes of moderate-intensity aerobic activity each week (World Health Organisation, 2010). According to the World Health Organisation (World Health Organisation, 2012), globally, around 31% of adults aged 15 and over are not meeting these recommendations. Amongst people with disabilities, who make up an estimated 15% of the world’s population (World Health Organization, 2011), the number of people not meeting physical activity recommendations is estimated to be at least twice as high as their able-bodied counterparts (Carroll et al., 2014; Rimmer & Marques, 2012).

Exercise is a form of physical activity that is planned and structured and aims to enhance physical fitness (Chodzko-Zajko, 2014). Sport is a subset of exercise undertaken either as an individual or in a group in which participants adhere to a common set of rules or expectations, and a defined goal exists (Khan, Thompson, & Blair, 2012). Sport participation has the potential to benefit several domains in the lives of people with disabilities (Ashton-Shaeffer, Gibson, Autry, & Hanson, 2001; Tweedy, Beckman, Johnston, & Connick, 2016). Firstly there are likely to be important benefits to physical fitness, which is significant for a population at such a high risk of serious health problems and severe deconditioning (Hassett, Moseley, & Harmer, 2016; Nooijen et al., 2014; Simmons, Kressler, & Nash, 2014; Smith, Saunders, & Mead, 2012). In addition,

employment (Blauwet et al., 2013; Lastuka & Cottingham, 2015), self-esteem, self-perceived quality of life, self-efficacy, body image, empowerment, challenging individual and societies' attitudes, and motivation for continued involvement in the community have all been reported as positively influenced by sport participation (Ashton-Shaeffer et al., 2001; Blauwet & Willick, 2012).

Despite these potential benefits, people with disabilities are still 15% less likely to participate in sport than the general population (Australian Sports Commission & UTS, April-May 2010). However, this reduced participation does not appear to reflect a lack of desire to participate amongst people with disability compared with their able-bodied counterparts (Brasile, Kleiber, & Harnisch, 1991). In a report by the Australian Sports Commission (Australian Sports Commission & UTS, April-May 2010), which analysed responses from online questionnaires completed by 1,050 people with disabilities, 75% of participants from all disability types reported wanting to participate in sport and active recreation. With the high expression of interest, potential benefit of sport participation amongst people with disability as a whole, and the growing public health concern of physical inactivity, it is important to understand and address the barriers, facilitators and opportunities for sport participation (Rimmer, Braddock, & Pitetti, 1996; Shields & Synnot, 2014).

A common barrier to physical activity participation is a lack of knowledge of available opportunities (Crawford, Hollingsworth, Morgan, & Gray, 2008; Heath & Fentem, 1997; Kehn & Kroll, 2009; Levins, Redenbach, & Dyck, 2004; Mulligan, Hale, Whitehead, & Baxter, 2012; Rimmer & Marques, 2012; Saebu & Sorensen, 2011; Wu & Williams, 2001). To address this barrier to specifically target sport participation, sporting, disability and health organisations use strategies such as sport events and camps, "come and try" days and information exhibitions to promote available opportunities. While there have been a small number of studies specifically evaluating sport participation in people with disability (Jaarsma, Geertzen, de Jong, Dijkstra, & Dekker, 2014; Stephens, Neil, & Smith, 2012; Wilhite, Martin, & Shank, 2016; Wu & Williams, 2001), there are no prospective studies evaluating sport participation after attending an event designed to increase this participation. Therefore, the research questions for this study were as follows:

1. What are the sport and physical activity levels of people attending a disability sport exhibition and what types of sport do they participate in?
2. Is sport and physical activity participation changed six months after attending a disability sport exhibition?
3. What are the reported barriers to sport participation and is the number of reported barriers associated with the level of sport participation?

## Method

### Design

A cohort study was conducted to measure the levels of sport and physical activity participation before and six months after attending a return to sport exhibition for people with a disability. Participants were questioned about their previous and current sport participation and then asked to complete two questionnaires at the event. One questionnaire was comprised of questions regarding health conditions, demographic information, and barriers influencing sport participation. The second questionnaire

included questions concerning physical activity levels over the past seven days as categorised under the headings of leisure, transport, household, and work-related activities. Participants were asked for consent to be contacted six months later to evaluate their current sport participation and to respond to the same two questionnaires in order to compare data from the time of the exhibition with data collected six months after attendance at the exhibition.

## Participants

People with a range of health conditions and levels of disabilities attended the Return2Sport expo at Sydney Olympic Park Sports Centre in Sydney, Australia on October 10–11, 2013. Participants who met the inclusion criteria were invited by research staff on the day to participate in this study. Those who did not have time to complete the questionnaires on the day were offered a postal option. Inclusion criteria were: at least 18 years of age, any type of disability, and able to provide informed consent or with a guardian who was able to provide informed consent. Three research staff were involved in recruiting; two were experienced physiotherapists, one was a research assistant. The University of Sydney Human Research Ethics Committee approved this study. All participants gave informed consent before data collection commenced.

## Intervention Context

The Return2Sport exhibition is an annual event that began in 2011. Royal Rehab (formerly Royal Rehabilitation Centre Sydney) runs this event in collaboration with the Australian Paralympic Committee, Sydney Olympic Park and the NSW Government Office of Communities Sport and Recreation. The exhibition aims to provide people with disability with information on over 50 leisure, recreation and sporting activities and to give them the opportunity to try some of the sports. Additionally, it is an opportunity for scouts to identify potential future Paralympic athletes.

## Outcome Measures

*Sport participation* was our primary outcome measure. We asked specific questions relating to the types and frequency with which sports were played, before (if the disability was not congenital) and after the onset of disability. The way in which each sport was played was further categorised within the *Inclusion Spectrum For Disability Sport* (Australian Sports Commission, 2010) to give an indication of how the person with disability participated in sport. There are six categories in the inclusion spectrum: able-bodied sport with no modifications, minor modifications, or major modifications; sport primarily for people with disability; sport only for people with disability and non-playing roles.

The *Barriers to Physical Activity and Disability Survey* (B\_PADS) is a questionnaire that was designed to determine the barriers that people with disability face when participating in physical activity (Rimmer, Rubin, & Braddock, 2000). This questionnaire has shown to have construct validity and test-retest reliability (Rimmer & Riley, 2001). The B\_PADS includes six questions relating to demographic and disability information, followed by 17 questions relating to experiences and personal and environmental barriers that have the potential to influence physical activity participation. Question 16 consists of 19 ‘yes’ or ‘no’ questions concerning specific barriers such as cost, transportation, and motivation. For the purpose of this study, the B\_PADS survey was modified to obtain information specific to sport participation rather than general physical activity. That is, questions were phrased as “playing sport”

as opposed to “exercise” or “physical activity.” For example, question number 15, “My job prevents me from exercising as much as I would like,” was modified to “My job prevents me from playing sport as much as I would like.”

The *Physical Activity Scale for Individuals with a Physical Disability* (PASIPD) is a 13-item questionnaire examining leisure time, transport, household, and work-related domains of activities over the past 7 days (Washburn, Zhu, McAuley, Frogley, & Figoni, 2002). The modified 12-item version (Hassett, Moseley, Harmer, & van der Ploeg, 2015; van der Ploeg et al., 2007) was used in this study, as this was more relevant to an Australian setting. This questionnaire has demonstrated construct validity, test-retest reliability and criterion validity comparable to other established physical activity questionnaires from the general population (van der Ploeg et al., 2007; Washburn et al., 2002). The first item of the PASIPD, asking about sedentary activities, is designed to familiarise the participant with the questionnaire and as such, is not scored. For the remaining 11 questions, the frequency and duration of physical activities is obtained for the past 7 days and the average hours per day are calculated for each question. For each question, this value is then multiplied by an intensity rating in metabolic equivalents (METs) assigned for each question to reflect the oxygen requirements of the task. For example, question 5 about strenuous sport or recreational activities is assigned a MET value of 8, indicating that those types of vigorous activities require 8 times the oxygen requirement compared to sitting quietly at rest. The calculated score for each question is summed to determine a total physical activity score, which is expressed in metabolic equivalent hours per day (MET hours/day). As the PASIPD assesses total physical activity in all domains and at all intensities, the results cannot be compared with the public health recommendation of 150 to 300 minutes of moderate-intensity physical activity per week (equating to 7.5 to 15 MET hours per week). From the study in which this scale was developed (using the 13-item questionnaire), the mean score amongst a mixed sample of 372 people with disabilities was 20.2 ( $SD = 14.5$ ) MET hours/day (Washburn et al., 2002).

## Data Analysis

Descriptive statistics were used to summarise information about previous and current sport participation and responses from the modified B\_PADS and PASIPD questionnaires. Areas of interest included the demographics of the sample, physical activity participation and sport participation and barriers. A paired *t*-test was used to compare physical activity and sport participation at the time of the exhibition and at six-month follow-up. The total number of barriers reported in question 16 of the modified B\_PADS were summed at both time points for each participant. Point biserial correlations were used to investigate the relationship between sport participation and the number of barriers reported at each time point.

## Results

### Flow of Participants Through the Study

Thirty-nine attendees at the Return2Sport expo met the inclusion criteria and provided informed consent. At the exhibition, 35 people completed the B\_PADS survey. The other four participants' surveys were received by mail. Only 23 participants chose to complete the PASIPD survey due to time limitations. At the six-month follow-up, a total of 34 of the 39 participants (87%) agreed to be contacted. Two of these participants

who agreed to be followed up were left a message, but no response was received. A total of 32 participants completed the B\_PADS survey, and 22 of these participants also completed the PASIPD. Therefore, a total of 32 participants completed the B\_PADS, and 18 participants completed the PASIPD at both time points. The majority of the participants were male and in their mid-thirties (see Table 1). Participants had varying levels and types of disabilities, including acquired ( $n = 14$ ) and congenital ( $n = 25$ ) disabilities. The majority of participants had either partial or no use of their lower limbs. As such, half of the participants were in wheelchairs. Further demographics of participants are presented in Table 1.

**Table 1**

*Demographics of All Participants and of the Participants with B\_PADS and the PASIPD both at the Exhibition and at Six-Month Follow-Up*

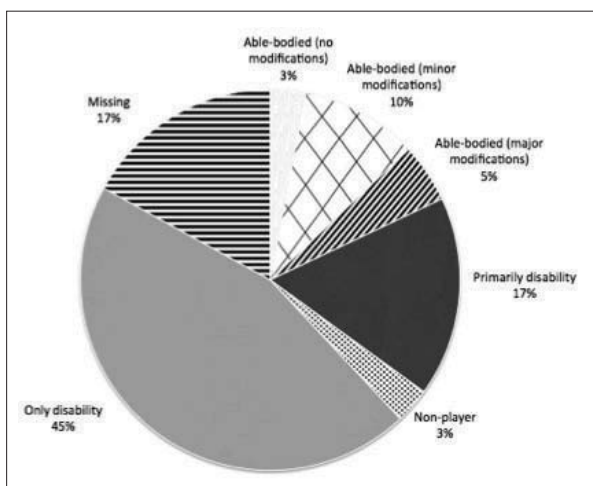
Characteristic	Full sample (n = 39) n (%)	B_PADS sample (n=32) n (%)	PASIPD sample (n = 18) n (%)
Mean (SD; range) Age (yr)	35 (14; 19-72)	35 (14; 19-72)	35 (15; 19-72)
Gender, number male (%)	29 (74)	25 (78)	14 (78)
Type of condition, number (%)			
Acquired Brain Injury	6 (15)	5 (16)	5 (28)
Spinal Cord Injury	14 (36)	11 (34)	2 (11)
Cerebral Palsy	3 (8)	3 (9)	2 (11)
Intellectual Disability	3 (8)	1 (3)	0 (0)
Neuromuscular Disease	3 (8)	3 (9)	3 (17)
Amputation	5 (13)	5 (16)	5 (28)
Other*	5 (13)	4 (13)	1 (5)
Assistive devices, number (%)			
None	8 (20)	4 (13)	3 (17)
Walking frame	0 (0)	0 (0)	0 (0)
Crutches	2 (5)	2 (6)	1 (6)
Walking stick	2 (5)	2 (6)	2 (11)
Wheelchair	19 (49)	17 (53)	6 (33)
More than 1 type	8 (20)	7 (22)	6 (33)
Use of arms, number (%)			
Full	20 (51)	18 (56)	9 (50)
Partial	16 (41)	11 (34)	8 (44)
No use	3 (8)	3 (9)	1 (5)
Use of legs, number (%)			
Full	9 (23)	5 (16)	4 (22)
Partial	17 (44)	15 (47)	9 (50)
No use	13 (33)	12 (38)	5 (28)

\*Other includes: Spina Bifida, Bone Dysplasia, Sacral Agenesis, Limb Deficiency and Unknown (car accident)

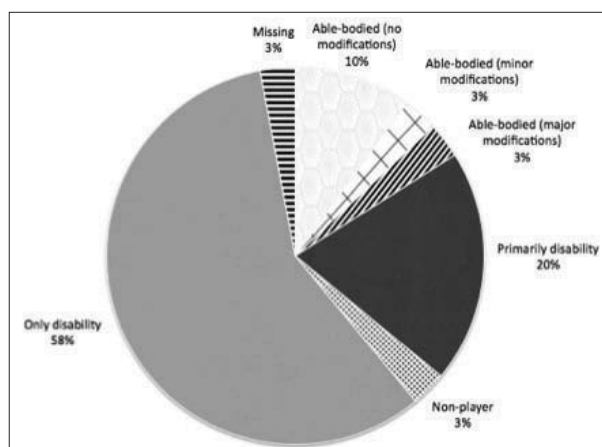
## Sport Participation and Physical Activity Levels at the Time of the Expo and at Six-Month Follow-up

Of the 14 participants who did not have a congenital disability, 11 participants (79%) reported participating in sport six months prior to their disability. Among all

39 participants, 31 participants (80%) reported having tried sport in the past. At the time of the Return2Sport exhibition, 25 (64%) reported currently playing sport; of these 25, 10 reported playing two sports, and six reported playing three sports. Six months after the exhibition, 21 out of the 32 participants (66%) reported playing sport; of these 21, six reported playing two sports and four reported playing three. The mean (*SD*) frequency of sport participation at the time of the exhibition was 6.4 (12.3) times per month. At the six-month follow-up, the mean (*SD*) frequency was 4.5 (6.0) times per month. The type of sport played was very varied, both at the time of the expo and at follow-up. Team and individual sports such as wheelchair rugby, climbing, ten-pin bowling and powerchair football were all cited. Participants reported playing sport in all categories of the inclusion spectrum; however, the majority played disability specific sport (see Figures 1a and 1b).



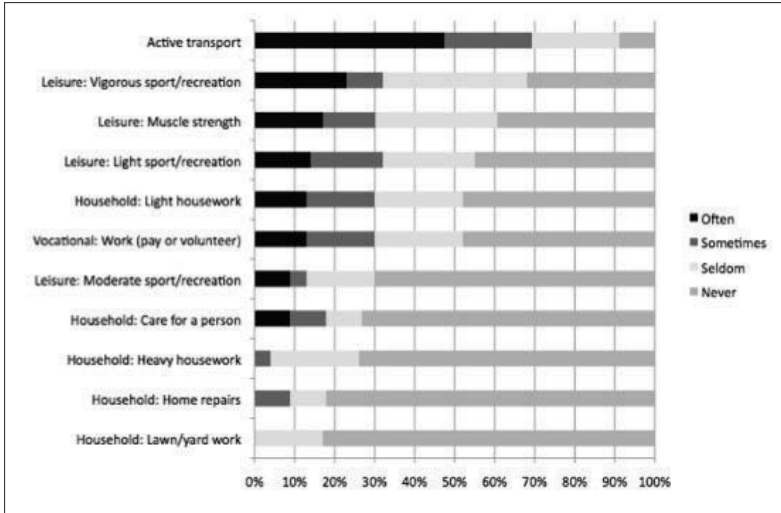
**Figure 1a.** Inclusion Spectrum of Sports at the Time of the Expo for 25 Participants Playing 40 Different Sports.



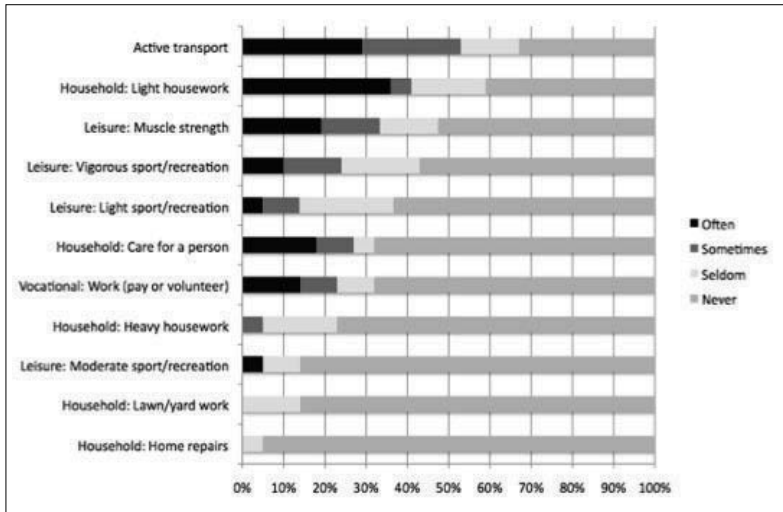
**Figure 1b.** Inclusion Spectrum of Sports for 21 Participants Playing 31 Different Sports at Six Months Post Return2Sport Expo.



Physical activity mean scores for the 18 participants who completed both PASIPD questionnaires were 16.7 MET hrs/day (SD 10.5) at the time of the expo and 14.9 MET hrs/day (SD 14) at follow-up. The most commonly reported means of physical activity at the time of the expo was transport, followed by leisure-related activities such as vigorous sport/recreation, muscle strengthening, and light sport/recreation. Six months after the expo, transport was still the most commonly reported means of physical activity, followed by light housework and muscle strengthening. Further details regarding the way in which participants engaged in physical activity can be found in Figures 2a and 2b.



**Figure 2a.** Participants’ Physical Activity Levels at the Time of the Return2Sport expo; Categorised by Transport, Leisure Time, Household, and Vocational-Related Activities (n = 23).



**Figure 2b.** Participants’ Physical Activity Levels Six Months After the Return2Sport Expo; Categorised by Transport, Leisure Time, Household, and Vocational-Related Activities (n = 22).



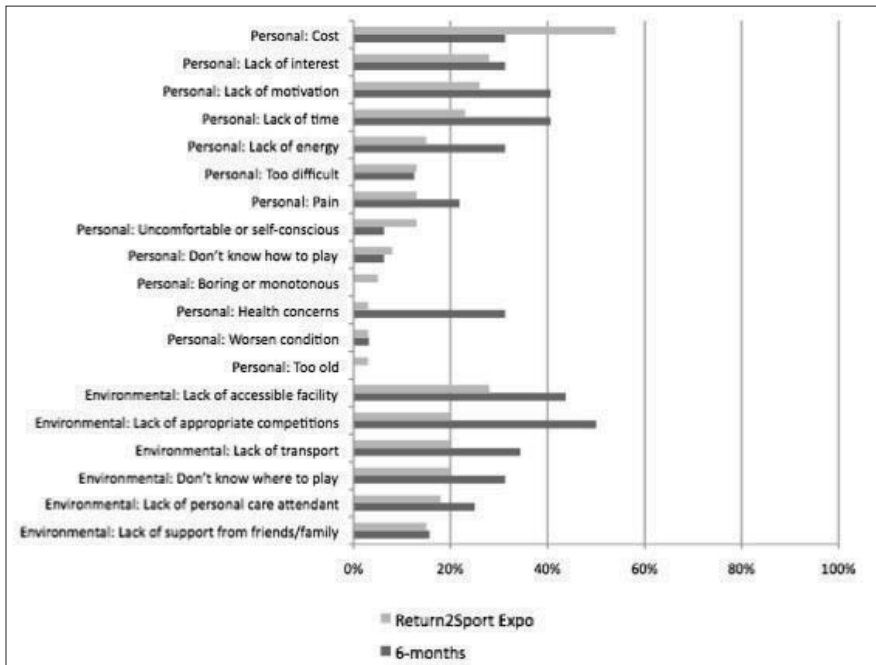
## Change in Sport and Physical Activity Participation Between the Return2Sport Exhibition and Six- Month Follow-up

At the Return2Sport exhibition, 25 participants (64%) out of the 39 reported a desire to play a new sport. Six months after the Return2Sport expo, three participants (9%) out of 32 participants reported playing a new sport since the expo. Two of these participants (6%) attributed their involvement in these sports to attending the sport expo. These sports were wheelchair basketball and archery. Twenty participants (67%) still reported a desire to take up a new sport, even six months after the exhibition. There was no clear change in frequency of sport participation from the time of the exhibition to six months after the exhibition (mean difference = -2.1 times per month; 95% CI -7.1 to 3.0, 32 participants). Similarly, the amount of physical activity participation as measured using the PASIPD did not significantly change over the 6 months (mean difference = -1.8 MET hrs/day; 95% CI -7.6 to 4.0; 18 participants).

### Barriers to Sport Participation

At the time of the exhibition and at the six-month follow-up, the overwhelming majority of participants reported a positive view towards sport; specifically, that playing sport would be beneficial for them (95% [ $n = 37$ ] at the exhibition; 94% [ $n = 30$ ] at six-month follow-up), they were willing to spend money to play sport (82% [ $n = 32$ ] at the exhibition; 91% [ $n = 29$ ] at six-month follow-up) and they felt a sporting coach would know how to set up a training program to meet their needs (87% [ $n = 34$ ] at the exhibition; 90% [ $n = 27$ ] at six-month follow-up). A small number of participants reported being injured from playing sport (36% [ $n = 14$ ] at the exhibition; 10% [ $n = 3$ ] at six-month follow-up) or not having a positive experience on an occasion when playing sport (23% [ $n = 9$ ] at the exhibition; 3% [ $n = 1$ ] at six-month follow-up). The mean (*SD*) total number of barriers reported from question 16 of the B\_PADS at the exhibition was 3.3 (2.9) out of 19 possible barriers. At six-month follow-up, a mean (*SD*) of 4.6 (3.4) barriers were reported. However, the number of barriers reported was not correlated with participation in sport, both at the time of the exhibition ( $r = -0.02$ ,  $p = 0.92$ ) and at the six-month follow-up ( $r = -0.17$ ,  $p = 0.35$ ).

The most commonly reported barriers were personal and environmental. At the exhibition, the most commonly reported barrier was cost (54%), followed by a lack of accessible facilities (28%). At the six-month follow-up, the most commonly reported barrier was a lack of appropriate sporting competitions (50%), followed by a lack of accessible facilities (44%) and a lack of motivation (41%) and time (41%). Figure 3 shows the differences in reported environmental and personal barriers at the exhibition and at six-month follow-up.



**Figure 3.** Percentage of Participants Reporting Personal and Environmental Barriers at the Time of the Expo ( $n = 39$ ) and at the Six-Month Follow-Up ( $n = 32$ ).

## Discussion

The findings of this prospective cohort study suggest that the majority of participants in this study attending the Return2Sport exhibition participated in sport both at the time of the event and six months after the event. However, the frequency of sports participation was low and the calculated average physical activity remained low, similar to previous studies (van der Ploeg et al., 2007; Washburn et al., 2002). Additionally, a high percentage of people (67%) remained interested in taking up a new sport. A range of personal and environmental factors were reported as barriers to sport participation. However, there was a change in the most commonly reported barrier from the time of the exhibition (the personal barrier of cost) to six months after the exhibition (the environmental barrier of lack of appropriate sporting competitions). Several factors could have influenced these findings. The six-month follow-up was conducted toward the end of April, which is nearing winter in Australia. In general, people are less active during the winter seasons than in the summer due to the colder weather (Pivarnik, Reeves, & Rafferty, 2003). The impact of seasons may have influenced the change in perspective toward participation in sports, as well as changed the type of sports and sporting competitions available. Another factor that may have influenced the number and type of barriers reported to influence sport participation amongst participants at follow-up is the effect of “hype.” At the Return2Sport expo, the atmosphere was one of positivity and excitement towards sport. Whereas six months later, in the absence of hype as a facilitator, participants were reporting a lack of motivation and lack of time as barriers with almost double the frequency as they did during the expo.

Several studies have investigated disabled participants' experiences of sport before and after sporting events and programs (Ashton-Shaeffer et al., 2001; Dorsch, Richards, Swain, & Maxey, 2016), but none have specifically evaluated participation changes over time. In 2001, Ashton-Shaeffer et al. conducted in-depth interviews with 15 individuals with physical disabilities who had participated in a sport camp in the United States aimed to provide sporting opportunities for people with physical disabilities. Participants identified surveillance of themselves by people without disabilities (e.g., staring, looking at their wheelchair, focusing on what was different) as causing them to feel self-conscious and "not normal," resulting in exclusion from everyday activities such as work and sport (Ashton-Shaeffer et al., 2001). From attending the sport camp, participants reported a greater drive to resist and challenge the attitudes of society and felt more entitled and empowered to participate in community activities such as sport (Ashton-Shaeffer et al., 2001). Similar sentiments of empowerment and greater self-confidence were expressed by people with disabilities attending the Common Ground program which provides opportunities for people with disability to participate in outdoor recreation sports such as kayaking and downhill skiing (Dorsch et al., 2016). Together these studies highlight the potential wide-reaching benefits and skill development of providing sporting programs specifically for people with disability, which is likely to overcome barriers and lead to greater sport participation.

A recent systematic review (Jaarsma, Dijkstra, Geertzen, & Dekker, 2014) investigated barriers and facilitators of sport participation for people with physical disabilities. This review used a broader definition of sport and half of the articles included in their systematic review were broader physical activity studies, rather than specifically sport. Similar to our findings, they found a mixture of personal and environmental barriers (Jaarsma et al., 2014). Environmental barriers that they reported included lack of facilities, transport, and difficulties with accessibility. However, their review found the personal barriers of health concern and pain to be important, while our study found the personal barriers of lack of motivation, interest, time, and energy to be more frequently reported.

Certain limitations of the present study need to be taken into account. While our six-month prospective cohort study was novel in that it involved evaluating change in sport and physical activity in conjunction with an event, our sample size was dependent on the attendance at the Return2Sport exhibition. As there was no record of how many people attended the exhibition, we were unable to evaluate the percent of people in our study compared to the total number of attendees. There was also a loss to follow-up due to participants not agreeing to be contacted at the six-month follow-up, or not being contactable at the six-month follow-up and not all participants agreed to complete both questionnaires. In addition, this study has a small sample size, partly due to the fact that a large portion of attendees were unable to provide informed consent, had no accompanying legal guardian, or were under the age of 18. Different strategies for recruitment should be considered for future studies, such as broadening the inclusion criteria, obtaining consent where possible from legal guardians prior to the event, or working with the event organisers to record attendance information and utilise this information for recruitment after the event. Interestingly, there were a number of healthcare professionals, carers and family members in attendance who were interested in the study and in providing their views on barriers to sport participation. As health

care professionals, carers and family members are people who are influential in physical activity levels of people with disabilities under their care (Dorsch et al., 2016; Heller, Ying Gs, Rimmer, & Marks, 2002; Heron, Kee, & Cupples, 2015), it would also be beneficial to conduct a similar study with these three groups to gain their perspective on sport participation. Another limitation of our study is that our participants were predominantly males in the mid thirties and approximately two thirds were engaged in at least one sport. As such, our findings may be limited in application outside this population and barriers reported by a population who are not already engaged in sport may differ significantly from those who are currently participating in sport. For future studies, it would be worthwhile to consider targeting people with disability of all age groups and who are not already involved in a sport.

### Implications for Practice

At the six-month follow-up, 67% of the participants were still interested in taking up a new sport, but 50% of the participants remained unsure of available sporting competitions. This perhaps demonstrates that while this event is an excellent initiative, ongoing follow up and support for people attending the expo is necessary, and better means of identifying sporting opportunities for people with disability are needed. Sporting bodies, health professionals and disability organisations can all play a vital role in this. For example, health professionals could help to match their clients with an appropriate sport for their abilities and sporting and disability organisations can ensure disability sporting opportunities are well promoted. Finally, participants report getting a large proportion of their physical activity from vigorous and light leisure activities; however, the mean frequency of sport participation was less than five times per month. This reflects the need to consider how to increase opportunities for leisure-related activities for people with disabilities in order for them to meet the physical activity guidelines. This may include creating more opportunities to increase involvement of people with disability in sport by better inclusiveness of able-bodied sports and more disability-specific sporting competitions and events.

## Conclusion

Although the majority of participants in this cohort study were participating in sport, the frequency of sport participation and the calculated average physical activity remained low at each time point. In addition, there was no significant difference in sport and physical activity participation from the time of the Return2Sport exhibition compared to six months post the exhibition. Many factors, such as seasonal impacts, the effect of hype at the exhibition as well as reported personal and environmental barriers could have influenced these findings. Nevertheless, the majority of the participants remained interested in taking up a new sport. These findings can be used to direct future information exhibitions, opportunities for sport participation and health professionals' management of people with disabilities.

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