GETTING INVOLVED IN SPORT

Participation and non-participation of people with disability in sport and active recreation

Australian Sports Commission research project, in collaboration with the University of Technology, Sydney 2010

Acknowledgments

The Australian Sports Commission is the Australian Government agency that manages, develops and invests in sport at all levels. It was established in 1985 and operates under the *Australian Sports Commission Act 1989*. The Commission's national leadership role is achieved through four operational areas: the Australian Institute of Sport, Sports Development, Sport Leadership, and Corporate Operations. The Australian Sports Commission forms part of the Prime Minister and Cabinet portfolio.

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Executive summary

Increasing the number of Australians participating in sport and active recreation through an integrated, whole-of-sport approach is an essential element of the government's new direction for sport, *Australian Sport: The Pathway to Success*. In building better communities, it is critical that we increase community participation and social inclusion by minimising the disadvantages and constraints that have an impact on the participation of many marginalised groups, such as people with disability, women and girls, Indigenous people, and people from culturally and linguistically diverse backgrounds.

This report examines the factors that influence the participation and non-participation of people with disability, the constraints that people with disability encounter which limit or deter their participation, and investigates the benefits people with disability derive from their participation in sport and active recreation. The social and structural disconnection faced by people with disability, often on a daily basis, is clearly evident in the significantly lower participation rates of people with disability in sport and active recreation than that of the general population.

The most recent comparative figures from the General Social Survey[1] indicate that, on average, people with disability are 15% less likely to participate in sport and active recreation than the general population. The literature strongly suggests that type of disability and level of support needs are important considerations in the participation and non-participation patterns of people with disability. The findings in this report reinforce these considerations, and suggest that any person who has high support needs faces significant constraints to their participation.

In the recently released *National Disability Strategy 2010–2020 (Draft),* sport is clearly articulated in the first of six broad outcome areas, 'Inclusive and accessible communities'. This outcome states that 'people with disability (should) live in accessible and well designed communities with opportunity for full inclusion in social, economic, sporting and cultural life'. By addressing the constraints to participation, people with disability may be empowered to engage more fully in all aspects of community and enjoy a better quality of life.

Mixed-ability track race.

Key findings

- All groups regarded social and cultural benefits as the most important benefits derived from their participation in sport and active recreation.

- Although there are a number of constraints affecting the participation of people with disability, individuals did not regard their impairment as the major reason for their non-participation.

- Nearly 75% of those currently participating would like to participate more than they are.

- Those who participate on a regular basis identified a series of constraints to their participation.

- Non-participants from all disability types want to participate in sport and active recreation, and realise that they are missing out on a very important part of life and Australian culture.

- It is essential to provide easily accessible information on local sport and active recreation opportunities.

- Cost is seen to be a major factor in many different ways, including its effect on transport, equipment, registration fees, cost to the organisation (support) and extra costs associated with disability.

- Lack of support by the government was identified as the single greatest constraint faced by people with disability (this may not be specifically related to sport and recreation).

- The research very strongly supports the literature showing that those people who are engaged in social activities and citizenship generally are much more likely to be connected to community and experience a better level of quality of life than those not engaged.

For further information, visit ausport.gov.au or contact the Australian Sports Commission (email: connect@ausport.gov.au).

If I lived in a society where being in a wheelchair was no more remarkable than wearing glasses, and if the community was completely accepting and accessible, my disability would be an inconvenience and not much more than that. It is society which handicaps me far more seriously and completely than the fact that I have spina bifida.

— Shut Out report[2]

1   Introduction

During the past 20 years, many Western countries have adopted their own disability discrimination legislation, including the right to a cultural life. This right was reinforced in the United Nations *Convention for the Rights of Persons with Disabilities*[3,4] and has to date been adopted by more than 145 nations. Yet, people with disability continue to have lower participation rates than the general population in all forms of cultural life.[5,6,7] An area in which the contrast is stark is that of sport and active recreation, where people with disability participate at some 15% less than the general population.[1] Participation is a complex interaction between intrapersonal, interpersonal and structural factors.[8,9] If access to sport and active recreation is constrained, inhibited or denied, then the benefits of involvement in these activities cannot be realised.[10,11] Current sporting and active recreation practices for people with disability reflect the historical contexts and issues faced by Australia's disabled population[12], and recent research reinforces that people with disability participate in sport and active recreation at a significantly lower rate than the rest of the population.[13,14,15]

In the Australian context, a great deal of the focus at federal level has been on elite Paralympic sports, with no greater indicator than the domination of the Australian Paralympic Committee in winning the majority of disability sport grants.[16] The Crawford report into the funding of Australian sport has certainly created a climate within which to investigate sport development processes, including the funding of disability sport.[17] To this end, this research and its findings represent a collaboration between the Australian Sports Commission (ASC) and the University of Technology, Sydney to investigate:

• the participation and non-participation in sport and active recreation by people with disability, including the constraints they face, the benefits they receive and their perceptions of health, fitness and general wellbeing

• the relevant engagement of the disability services sector in sport and active recreation as an indicator of demand.

1.1   Objectives

This research project aimed to provide an evidence-based position to inform government and the sports and disability sectors about the factors that influence the participation of people with disability in sport and active recreation.

The primary objectives of the research were to:

1 Identify the full range of factors that prevent people with disability from participating in sport and physical recreation.

2 Identify and provide an understanding of the benefits people with disability derive from participating in sport and physical recreation.

3 Identify the attitudes and perceptions that influence the participation of people with disability in sport and physical recreation.

4 Identify the key messages that would be most effective in influencing the participation of people with disability in sport and physical recreation.

5 Identify the extent and range of opportunities currently being offered by the providers of disability and sport and recreation services.

2   Background

This section provides a brief overview of the major concepts, definitions and literature that informs the research reported here. Disability sport and active recreation is a broad area of study with a well-developed body of literature that has two major foci: participation in elite sports and in community recreation and leisure.[18,19,20] In order to provide a brief description of these foci, this section reviews the following:

- models and approaches to disability
- definitions of sport, active recreation and physical activity
- participation in sport, active recreation and physical activity
- constraints
- benefits
- community and elite approaches to disability sport
- sport development processes
- the Australian inclusion spectrum.

2.1   Models/approaches to disability

Two broad approaches to an understanding of disability are the medical and social approaches. This report takes a social model approach to understanding disability, rather than the medical approach that has been dominant in conceptualising disability. The medical approach is founded on the 'personal tragedy theory of disability'.[21] Their impairment (for example, blindness, deafness, paralysis and mental health issues) is the reason they cannot participate fully in social life. This discourse views able-bodiness as the norm and, hence, excludes the 'abnormal' (people with impairments) from citizenship.

In the context of sport, the medical model disadvantages people with disability as their participation is defined by their impairment. For example, a coach may think that someone cannot play football because that person uses a wheelchair.

Social approaches to conceptualising disability challenge the notion that disability is the result of an individual's impairment, the individual's 'personal tragedy'[21] and instead conceptualise disability as the product of the disabling social environment and the prevailing attitudes.[22] The individual's embodiment (or impairment) is not the cause of the person's exclusion, but rather it is the oppressive social environment and prevailing attitudes that produce disability.[21,23] The social approach places disability on the social, economic and political agendas.

Again, in the context of sport, the social model offers greater possibilities for participation. For example, a person who uses a wheelchair can play football if modifications are made to the rules, equipment and playing areas. Here, it is the sport that disadvantages people with disability, not their impairment.

While the foundation of the *Disability Discrimination Act 1992* (Cwth) (DDA) defines disability in the same way that the Australian Bureau of Statistics' *Survey of Disability, Ageing and Carers* (SDAC) does, by identifying a deficit of ability (for example, loss of the use of fingers), the accompanying notes focus very much on broad disability groups and their access needs.

These groups are defined as:

- physical

- sensory (vision and hearing)

- intellectual (otherwise referred to as 'cognitive and learning')

- psychiatric (otherwise referred to as 'mental health')

- neurological

- physical disfigurement[1]

- presence in the body of disease-causing organisms.

In interpreting the law, rather than focusing on the medical conditions and medical diagnoses of impairments, the DDA requires that people with disability are treated equally before the law by ensuring that the access needs of the broad disability groups are met. The current research operationalises this approach by recognising that the broad disability categorisations represent different access needs, incorporating this understanding into data collection and providing adequate access to communication support in the questionnaire, in-depth interviews and focus groups.

2.2 Definitions of sport, active recreation and physical activity

The ASC defines sport as '[a] human activity capable of achieving a result requiring physical exertion and/or physical skill which, by its nature and organisation, is competitive and is generally accepted as being a sport'.[24] For the purpose of this study, a broader definition of sport and active recreation is used, whereby the activities incorporate organised and informal recreational sporting activities of a physical nature for the purposes of competition, training or other recreation purposes. The term 'sport and active recreation' is consistent with the Exercise, Recreation and Sport Survey (ERASS) definition of 'any physical activity'; that is, defined as 'physical activity for exercise, recreation or sport. It includes activities that were organised by a club, association or other type of organisation, and activities that were non-organised. It excludes activities that were part of household or garden duties, or work'.[25]

Part of the rationale for having a much broader definition of sport and recreation was to provide a comparison to the ERASS that was undertaken in the period 2001–09 but did not have a disability module. ERASS is a joint initiative of the ASC and the state and territory government agencies responsible for sport and recreation, known as the Standing Committee on Recreation and Sport (SCORS). ERASS collects data on:

- frequency of participation in organised and non-organised physical activity for exercise, recreation and sport

- duration of participation in organised and non-organised physical activity for exercise, recreation and sport

- type of participation in physical activity for exercise, recreation and sport

- trends in participation over time.[26]

The other term that is used within the biomedical literature is 'physical activity'. Physical activity means 'any bodily movement produced by the contraction of skeletal muscle that increases energy expenditure above a basal level. In these guidelines, physical activity generally refers to the subset of physical activity that enhances health'.[27] As VicFit[28] notes, there are no Australian guidelines for physical activity of people with disability. They suggest that the United States guidelines could be used as a guide to an appropriate level of activity, whereby '150 minutes a week of moderate-intensity, or 75 minutes a week of vigorous-intensity aerobic activity, or an equivalent combination of moderate and vigorous-intensity aerobic activity' is recommended.[27] For this study, it was regarded as less problematic to take a sport and active recreation approach than a physical activity approach to the complexity of accurately collecting intensity data by a self-reported questionnaire.

Sports Ability competition — Polybat.

2.3 Participation in sport, recreation and physical activity

For a sporting nation such as Australia, the country has not been well served by the provision of data on sport and active recreation participation or more general leisure participation.[29] It was not until ERASS was established[30] that the detailed annual data began to be collected. However, there were significant omissions in the survey instrument, with no data collected on Indigenous Australians, ethnicity or disability. The data that has been collected on sport and active recreation for people with disability fall into two major categories:

- general social surveys[31], in which the emphasis was on comparing those that identified with disability to the general population[1,32]
- a single question in the SDAC[33,34,35], looking at participation in sport and recreation away from home in the previous 12 months.

With this background and as outlined in the introduction, the participation rates of people with disability are significantly lower than that of the general population. Table 1 presents the most recent comparative figures from the General Social Survey (GSS), indicating that, on average, people with disability participate 15% less than the general population. Further, there are significant differences between the genders, with men having a 55% participation rate as opposed to females, who had a 51% participation rate.

Table 1: Participation in sport, by disability status and gender, 2002 and 2006

	Number ('000)		Participation rate (%)	
	2002	2006	2002	2006
Males				
With a disability	1 653.3	1 656.0	57.3	55.3
With no disability	3 152.8	3 147.1	73.5	69.1
Total	4 806.1	4 803.1	67.0	63.6
Females				
With a disability	1 493.6	1 574.9	52.0	51.3
With no disability	2 983.5	3 143.8	67.0	67.1
Total	4 477.0	4 718.7	61.1	60.9
Total				
With a disability	3 146.9	3 230.9	54.6	53.3
With no disability	6 136.3	6 290.9	70.2	68.1
Total	9 283.2	9 521.8	64.0	62.2

Source: General Social Survey[1]

Table 2 summarises the sport and active recreation participation rates found in major Australian and overseas national surveys. What can be seen from the collected data is that all surveys use a 12-month recall period, which has been noted to be problematic in the literature. The participation rate varies from 28% in the 2003 SDAC to a high of 55% in the 2002 GSS. Surprisingly, from an international perspective only Sport England had directly comparable data for adults with disability. A number of other countries, including Australia, had undertaken studies on the physical activity levels of children with disability.[36] While the GSS identified that gender was a significant issue, with lower participation rates among females, the 2002 GSS also showed that the type of disability affects participation. As Figure 1 shows, these rates of participation are further exacerbated by the type of disability. The GSS shows that those with intellectual disability have a significantly lower participation rate than other people with disability.

Table 2: Sport, recreation and physical activity participation rates

Author title	Year	Participation rate	Recall period	Disability type	Notes and sources
Australia					
ABS — Social Trends	1995	38%	12 months	All	ABS Social Trends — includes players, non-players and spectators' and was developed from the Survey of Disability, Ageing and Carers[33,37]
NSWDSR	2002	46%	12 months	All	Participation in Sport and Physical Activities by People with a Disability[38]
ABS — GSS	2002	55%	12 months	All	ABS GSS[31]
ABS — GSS	2006	53%	12 months	All	ABS GSS[1]
ABS — SDAC	1993	38%	12 months	All	ABS SDAC[33]
ABS — SDAC	1998	32%	12 months	All	ABS SDAC[34]
ABS — SDAC	2003	28%	12 months	All	ABS SDAC[35]
Overseas					
Sport England	2001	51%	4 weeks	All	Adult with a Disability National Sports Survey 2000–01[39]

Figure 1: Participation in sport and recreational physical activity, by disability
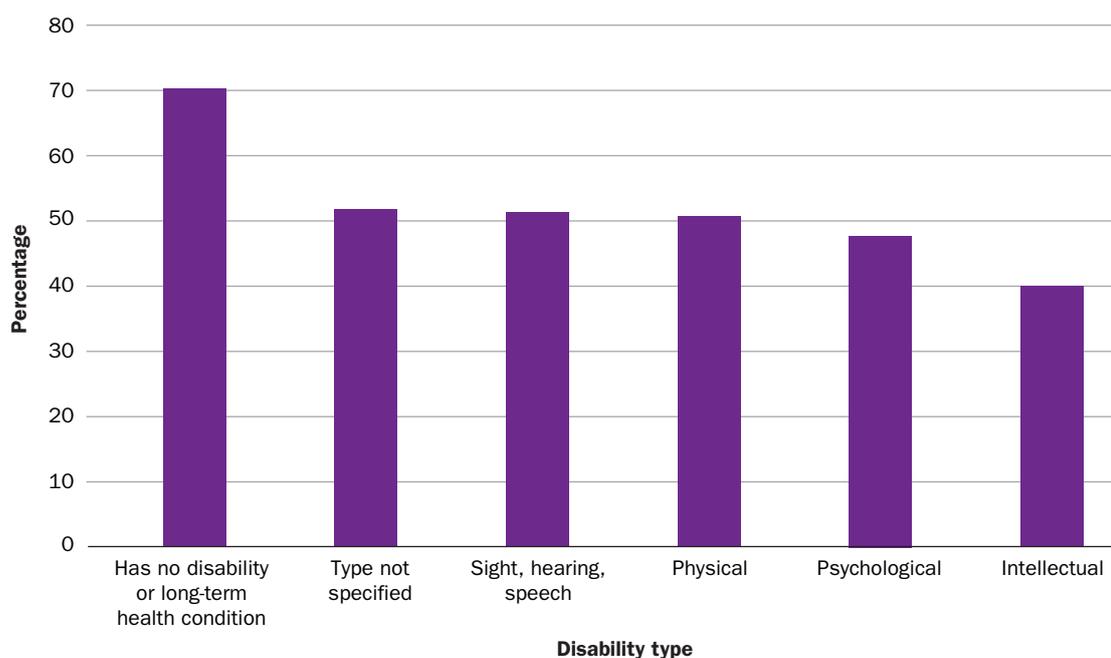
Source: ABS General Social Survey[31]

Similarly, the SDAC provides an insight into the participation rates of those with mild to profound support needs. In the social model literature, these biomedical classifications used by the ABS have been referred to from 'independent', whereby people have no support needs, through to 'very high support needs', whereby people need continuous, one-on-one, 24-hour support. As Figure 2 shows, the higher the support needs, the lower the participation rate across all categories of activity, including sport and recreation. Not surprisingly, the only exception to this is 'no activity participation', whereby people with very high support needs are at a higher level of non-participation.

Figure 2: Participation in sport and recreation away from home, by support needs
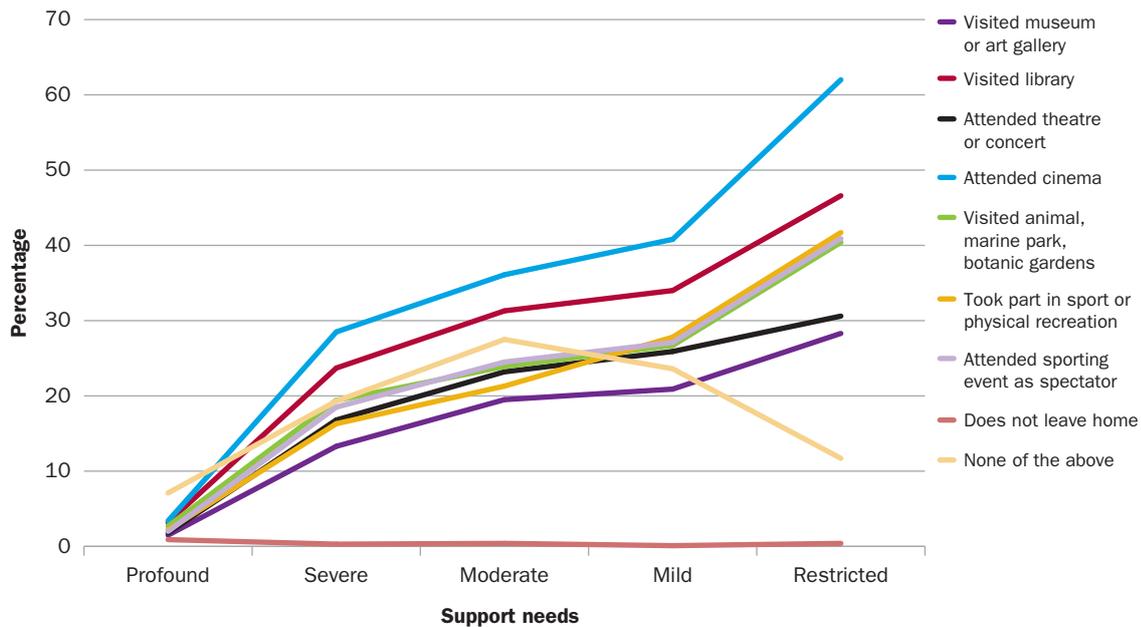
Source: Disability Ageing and Carers Survey[35]

Non-playing roles for people with disability —
local basketball umpire.

2.4   Constraints

Section 2.3 reviewed participation rates in sport and recreation by people with disability. In developing an explanation for why these participation rates are low, it is pertinent to understand what constrains the participation of people with disability in sport and active recreation. The leisure constraints literature provides a valid, reliable and robust framework for developing an understanding of constraints in an Australian disability and sporting context. So what are leisure constraints?

Researchers concur that historically there has been systematic discrimination against people with disability concerning access to leisure goods and services, both in Australia and internationally.[40,41] Academic analysis has shown that this discrimination constrains the citizenship of the group. Citizenship has been defined as the rights and privileges enjoyed by members of a democratic society. Complementary to these rights are responsibilities that these rights engender. Central to citizenship are the development of mainstream and inclusive experiences that facilitate the participation of people with disability in cultural activities with other members of the community.[42] The relationships developed by these experiences are interdependent, and involve people with disability in all roles as participants, volunteers, committee members or employees. These relationships are an important component of the rights of citizenship. As Hutchinson suggests, 'citizenship is much more than rights + empowerment + inclusion + getting a life. It is a more intangible concept that includes all of these things, but something more. It is at the core of what it is to be human'.[43]

Leisure research was developed to understand people's behaviour in the leisure domain, while leisure constraints research has investigated the reasons for constrained participation or non-participation.[9] There has been considerable academic debate about the use of the terms 'constraints' and 'barriers to participation'. Jackson defined constraints as factors that limit the formation of leisure preferences or inhibit participation and, hence, affect leisure experiences.[44] For the remainder of this section the terms are used interchangeably, depending on the sources quoted. Crawford and Godbey identified three categories of leisure constraints:

1   Intrapersonal — lack of self-confidence, lack of encouragement or lack of information about opportunities for leisure that affect preference or lead to a lack of interest in a particular type of leisure activity.

2   Interpersonal — associated with other individuals, including lack of leisure partners or lack of social interaction skills.

3   Structural — those that exist between individual preferences and participation in a leisure activity, including lack of finances, lack of transportation, limited abilities, lack of time or architectural barriers.[45]

Smith et al. summarised the barriers and constraints to leisure for people with disability, and categorised them as intrinsic, environmental and communication.[18] Table 3 summarises this categorisation with a brief description of each. These barriers incorporate the perspective of people with disability and leisure providers. There has been extensive research on the leisure constraints of people with disability, suggesting that constraints vary for individuals depending on their impairment, level of independence, race and gender.[7,12,46,47,49–59] In taking direction from Smears, a great deal of the more recent research has taken a social model disability studies perspective and has moved from purely quantitative paradigms to developing an interpretive understanding through qualitative research methods.[47]

Table 3: Barriers to sport, recreation and leisure participation for people with disability

Category	Barrier and description
Intrinsic (intrapersonal):	**Lack of knowledge** — about leisure programs, facilities, resources and other information required in order to make informed choices. **Social ineffectiveness** — some people with disability may have ineffective social skills. **Health-related issues** — people with disability, like the rest of the community, may have health-related issues that have an impact on their participation. **Physical and psychological dependency** — some people with disability have physical dependency due to their impairments, while others may have a 'learned' psychological dependency (for example, attendant assistance). **Skill/challenge gaps** — as conceptualised in 'flow' theory, skill/challenge gaps are a major consideration in choice of leisure activity.
Environmental (structural):	**Attitudinal barriers** — a variety of attitudinal barriers may be faced by people with disability. These include negative behaviour towards individuals (for example, exclusion, verbal abuse, violence), paternalism (for example, treated as childlike, assumed decision-making roles) and apathy (for example, ignoring existence and, hence, exclusion). **Architectural barriers** — to the built environment. Effective legislation, design, planning and construction can help to overcome these barriers and is discussed in greater detail later. **Rules and regulations barriers** — in some situations, rules and legislation have been enacted that deliberately discriminate against people with disability (for example, international air carrying regulations). **Transport barriers** — for people with higher support needs, there is a lack of suitable and affordable accessible transport. **Economic barriers** — people with disability experience far higher rates of unemployment (from the average to 99%, depending on a range of factors) and, therefore, are economically disadvantaged. Further, many impairments have additional costs that must be met by the individual (for example, equipment, wheelchairs, personal care consumables). **Barriers of omission** — this includes all those facilities, programs, policies and procedures that do not incorporate inclusive practices for people with disability (for example, modified rules).
Communication (interpersonal) barriers:	**Communication** — cannot be thought of as primarily intrinsic or extrinsic, as communication involves reciprocal interaction between the individual and their social environments. Therefore, barriers arising can occur through the sender, the receiver or both. Further, people with disability may have multiple disabilities that affect communication (for example, speech, hearing, sight, cognitive, brain damage).

Source: Smith et al.[18]

Leisure-constraint approaches have developed a great deal of sophistication over the past two decades, through a hierarchical and negotiation approach.[47,60] Figure 3 shows the way in which this model integrates the three categorisations and how it views participants as negotiating a hierarchical sequence. The sequence moves from intrapersonal constraints affecting leisure preferences to interpersonal constraints that have an impact on compatibility and coordination, to structural constraints as the last determinant of participation or non-participation. Crawford, Jackson and Godbey concluded that the model also provides an understanding of how constraints affect the choices of those already participating.[48]

Figure 3: A hierarchical model of leisure constraints

Intrapersonal constraints	Interpersonal constraints	Structural constraints
↓	↓	↓
Leisure preferences	→ Interpersonal compatibility and coordination	→ Participation (or non-participation)
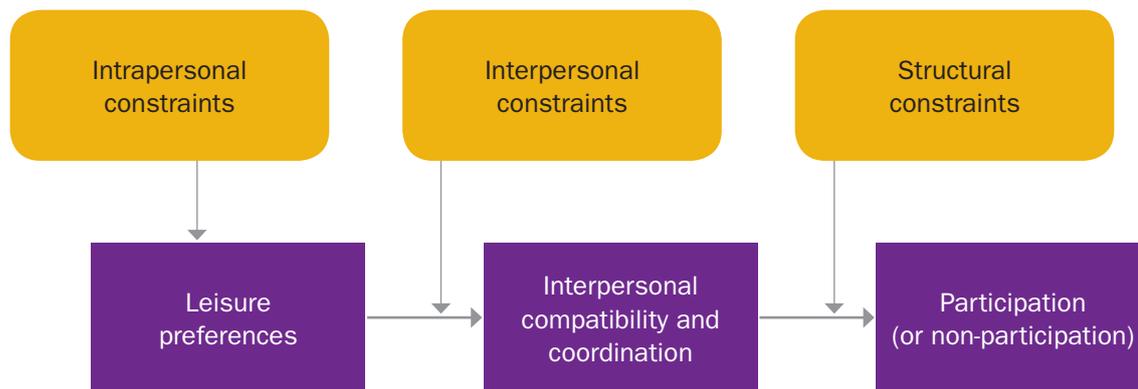
Source: Crawford, Jackson and Godbey[48]

2.5   Benefits

A great deal of anecdotal evidence suggests that sport and active recreation are beneficial to all people who participate, not just people with disability. However, an examination of the literature suggests that most of the research conducted in this area has focused on biomedical and health benefits, and has not incorporated the psychosocial benefits of participation in sport and active recreation. Within these medical studies some excellent work has been undertaken that has sought to provide a model of physical activity for people with disability.[50,61,62] A framework developed in Canada presents the major benefits derived from leisure participation and, hence, can be used to develop a psychosocial understanding of the benefits of sport and active recreation.[10] These benefits have been broadly defined as:

- psychological
- personal development
- enjoyment and satisfaction
- physical health
- social and cultural
- economic
- environmental.

Lord and Patterson have undertaken one of the few Australian studies looking at the broader benefits of physical activity.[63] Only one study has combined the constraints and benefits of understanding recreational participation.[64] Whether it is community recreation or elite participation, as outlined in figures 4 and 5, there is a unanimous belief that engagement provides benefits beyond the activity and level of participation.[65,66,67] Yet, as suggested earlier, the focus of Australian national disability sport funding has been on elite-level competition. The next section reviews the sport development process.

Figure 4: Characteristics arising from leisure experiences

Characteristics experienced by people who are not members of a community	Characteristics arising from community participation through leisure
1 A feeling of separateness from the real world	1 Belonging to and being part of communities
2 A life of constant boredom	2 Adventure and challenge
3 Loneliness	3 Companionship, increased social networks, new and stronger friendships
4 Dependence on services	4 Interdependence with community
5 Restricted freedom	5 Sense of freedom
6 Being controlled	6 Control and power over own lifestyle
7 Limited scope for growth and new challenges	7 Improved self image through achievement of goals
8 No sense of a future	8 Hope and enthusiasm for the future
9 Poor health	9 Good health/mental health
10 Feelings of failure	10 Achievement

please consider

Source: NICAN[65,66]

Figure 5: International Paralympic Committee benefits of Paralympic competition for athletes

Individual athlete
• Improved physical health
• Improved mental health
• Realisation of human rights and self-empowerment

Social perceptions
• Recognition of athlete as an autonomous and contributing member of the community
• Respect of unique abilities

• Increased rates of employment
• Increased access to education
• Improved quality of life for athletes and others
• Decreased burden on public health care and social welfare programmes

Environmental infrastructure
• Legacy of universal design and accessible infrastructures as result of hosting Paralympic competitions
• Human rights legislation and proactive social programmes resulting from the lobbying of Paralympic partners and sports advocacy groups

© International Paralympic Committee

Source: Blauwet[67]

2.6   Sport development processes

Sport development processes seek to attract, retain and nurture athletes through a series of processes, from grassroots to elite competition. This is encapsulated by the Framework of Sport Development Process (FSDP), developed by Sotiriadou[68,69,70] as shown in Figure 6. Three distinct processes of attracting participants to sport, retaining participants and nurturing for performance were identified in the FSDP, presented in Sotiriadou's earlier work as a consolidated diagram[68], but more recently as individual processes.[69] These processes identified in the framework have been examined by researchers in the Australian context.[71,72]

Sotiriadou, Shilbury and Quick[69] point out that irrespective of the many and varied sport development segments (for example, disability, Indigenous, youth) sport development still must: (a) provide **pathways** to allow and facilitate movement between processes, and (b) generate opportunities for the creation of different pathways (that is, **pathways to the attraction process, pathways to the retention/transition process** and **pathways to the nurturing process**). Therefore, an outcome of a process may be to enter a new development process. Pathways can be used to track movement from one level to another and note the potential impacts that might either facilitate or restrict that movement. There is a reciprocal relationship between stakeholders, strategies and processes. Stakeholders devise strategies relevant to the desired outcome. The attraction process requires different strategies from the nurturing or retention process, although there are obvious interrelationships.

Sotiriadou, Shilbury and Quick suggest that sport development strategies can be categorised into player development, facilities, coach, umpire, administration/management, promotions, and competitions or events. The three types of player-development programs were classified into those that are: formulated for membership/participation development needs, talent identification and transition to elite levels, and specifically developed for elite athletes. Facilities that fostered sport development included recreational and training facilities, which were important for all participants, from grassroots to elite. The training of coaches, umpires, trainers and club personnel is needed to support sport participants at every level of involvement. Promotions assist with the public profile of a sport, and competitions/events are the foundation stone of Australia's international success.

In this model, the attraction process aims to increase awareness, participation and overall membership, and to bring in a baseline of young participants that form the basis of future elite athletes. The retention or transition process aims to keep junior participants in the sport system through targeted retention and assistance. The nurturing process is a more direct, tailored approach to specific sports and individuals or teams. Sotiriadou, Shilbury and Quick caution that this model explains current sport development and in a rapidly changing sport scene, and thus future expectations, requirements, innovations and stakeholders may necessitate new approaches in sport development.

Stakeholders are critical in the delivery of quality programs, both for mass participation and elite athlete development. Sotiriadou, Shilbury and Quick stress the importance of understanding the way in which stakeholders cooperate and interact to achieve a sustainable sports system in Australia. They note that the ASC funding patterns directly affect national sporting organisations' operational choices, the extent to which they achieve elite success, and the reliance and accountability of the funded bodies to the ASC.

Figure 6: Sotiriadou's framework of sport development processes

1 ATTRACTION PROCESS
Members, participants, supporters, spectators of all ages

- Facilities
- Player development programs (Type I)
- Modified sports
- Promotions (awareness)
- Admin/management
- Events/competions

SDOs, sponsors

ASC, state departments, SSOs, clubs

2 RETENTION/TRANSITION PROCESS
Junior participants

Coaches, staff, athletes/national league

- Player development
- Programs (Type II)
- Facilities (training camps)
- Events/competitions
- Promotions

ASC, state departments, state institutes and academies, schools

3 NURTURING PROCESS
Elite athletes

Coaches, judges, staff, athletes, spectators/supporters, sponsors

- Player development
- Programs (Type III)
- Facilities (venues)
- Admin/management
- Events/competions

ASC, state departments, institutes of sport

Membership/participation and spectators/supporters

Junior

Talent

Pathways to talent

Pathways to elite

Pathways to foundation

Source: Sotiriadou[68,69,70]

While there is a well-established body of literature on the use of sport to address social issues in mainstream society, there is limited understanding of cross-cultural contexts. For decades, sport has formed part of government policies for marginalised groups, both overseas and in Australia.[73,74,75,76] However, there has long been an assumption that those who want to participate have equal access to participation; yet, as evidenced by the Human Rights and Equal Opportunity Commission and Tiddy, standalone human-rights measures and anti-discrimination legislation do not ensure the full and meaningful participation of Aboriginal and Torres Strait Islander peoples in sport.[77,78] Further, the legislation rarely encourages the proactive inclusion of minority groups' philosophies or cultures.[79–87] Similarly, people with disability have been known to be a significant marginalised group that has much lower levels of participation in sport and recreation than the rest of the community.

Figure 7: The supply and demand inclusion model

Demand — Getting people ready for inclusion | Getting sports ready for inclusion — Supply

2.7 The supply and demand framework

Sports CONNECT is a national framework that develops pathways for people with disability to get involved in sport and become active by creating and developing relationships between sports and disability organisations. Currently, many people living with disability participate in sport without the support of a sporting organisation, resulting in missed opportunities for individuals and the sporting organisations. Through Sports CONNECT, more people with disability are recognising the social and health benefits of being involved in sport. At the same time, sporting organisations are becoming aware of the benefits of involving people with disability as participants, administrators, volunteers, coaches and officials. The Sports CONNECT framework recognises the need to prepare both sport and active recreation providers for the inclusion of people with disability and **increase the supply** of inclusive sport. The Sports CONNECT framework is working directly with disability service providers to develop links and sustainable partnerships with sporting organisations and clubs. This will, in time, **increase the demand** for inclusive sport.[88]

From the AFL Sports CONNECT launch at the MCG 2009 — The 'FIDA League' Football Integration Development Association for people with intellectual disability.

2.8   Australian inclusion spectrum

The goal of inclusion is to provide opportunities for all people to participate in the most appropriate manner possible. A common misconception about inclusion is that it is about unmodified sports including people with disability. But inclusion actually encompasses many different options in different settings. Adaptations and modifications to existing programs are critical in minimising disadvantage experienced by a person with disability. This fine tuning can be major or minor, and it may be possible to do on the spot or may require extensive planning with a range of people. Over the past decade, the ASC's Disability Sport Unit (DSU) has developed the Inclusion Spectrum For Disability Sport.[89]

The inclusion spectrum is used to provide an understanding of the type of engagement and level of modification that may be required for participation of people with disability. A person may choose to participate in any section of the spectrum, depending on factors such as:

• their functional ability

• the sport in which they are participating

• the opportunities within their local environment

• their personal preferences.

The inclusion spectrum can be described as follows:

• No modifications — for example, an athlete with an intellectual disability may train and compete with athletes without intellectual disability at a local swimming club.

• Minor modifications — for example, a vision-impaired tenpin bowler using a support rail.

• Major modifications — for example, a seated shot-putter competing under separate rules, using modified equipment against other athletes with disability in an integrated track and field competition.

- Primarily for people with disability — for example, athletes with disability and their able-bodied peers combine to form teams for the purpose of developing a wheelchair basketball competition.

- Only for people with disability — for example, goalball players participating in a competition exclusively for people with vision impairments.

- Non-playing role — people with disability can be officials, coaches, club presidents, volunteers, spectators.

Figure 8: Inclusion spectrum

Source: ASC[89]

3   Research design

When conducting the research, the three-stage process suggested by the ASC research project document was adopted, with some minor amendments and additions.

3.1   Disability forum data

In March 2008, the DSU conducted its first disability service provider forum at the Office for Recreation and Sport in Adelaide, South Australia. There were ten attendees from ten different types of service providers from the disability sector. The aim of the session was to record the opinions and attitudes of organisations that support people with disability towards sport and active recreation.

The forums used an audience-response system that allowed all participants an equal and anonymous voice throughout the session. The technology provided a unique way by which to easily collect and collate quantitative attitudinal data across a broad range of topics related to the benefits and constraints of participation for their clients.

Following a review of this pilot session, it was decided that the ASC should expand the scope of the research project to include disability service provider (DSP) focus group sessions and to develop an online survey to gauge the opinions and attitudes of people with disability. A research project was developed and a tender process conducted to engage an experienced university to conduct research in both the sport and disability sectors. The university would facilitate the focus group discussions, develop and run the online survey, collate and analyse the data, and provide various reports to the ASC.

The DSP forum sessions were expanded to include one in each capital city. One hundred and thirty-nine representatives from 97 disability service provider organisations attended the forums in the period March 2008 to September 2009.

The disability forum data were not included for analysis within the final report. The interim report provided to the ASC analysed this data.[90] The process involved obtaining the raw data from the ASC in Microsoft Excel format to facilitate the transferral and analysis of data in the Statistical Package for Social Sciences version 17.[91] This software provides an opportunity to interrogate the data for statistically significant differences within and between groups. Standard statistical procedures for descriptive and inferential statistics were completed.[92] Based on the results of the analysis and review of the disability forum curricula material, suggestions were made to improve the evaluation of the program based on internationally recognised scales (Interaction with Disabled Persons Scale, Attitude Towards Disabled Persons Scale, Disability Factors Scale) and other relevant literature.[93,94,95]

3.2   Qualitative study with disability service providers, using focus groups

This stage of the project was designed for a maximum of six focus groups to be conducted in New South Wales, Victoria, Queensland, the Australian Capital Territory, South Australia and Western Australia. We relied heavily on the expertise and contacts of the ASC with DSP stakeholders in each state. The research team discussed with the ASC their schedule of activities where this research may be added to already scheduled programs or workshops. Where the convening of focus groups was logistically not possible, supplementary interviews with key informants from Tasmania, the Northern Territory and other states were conducted by phone (nine interviews).

DSPs were selected in consultation with the industry partner to ensure a broad cross-section of organisations was represented (for example, location, organisation size, time established, operational level). The focus group interviews provided an opportunity to identify the extent and range of opportunities currently provided in sport and recreation. The focus groups also elicited the major constraints, opportunities and best practice that DSP had in providing the experiences for people with disability. On the 'supply side' of the ASC framework, it is important to have an understanding of the issues facing the DSPs in providing opportunities for this group. This knowledge provides a sound foundation on which to develop strategies to broaden the organisations engaged in direct sport delivery or in brokering individualised sporting packages for their clients. Given the focus on individualised funding models by the Commonwealth State Disability Services Agreement, this would appear to be a major growth area for sporting opportunity in the future.

The focus groups were held in a variety of club, university and community facilities. All DSP representatives who had registered to attend were contacted by the research team in the weeks leading up to each focus group and were provided with an information sheet about the research and the procedures for the meeting. Two members of the research team attended each focus group. On arrival, participants were greeted, provided with a name tag, information pack and brief questionnaire about their organisation. Refreshments were provided throughout the focus group process. The focus group discussions took 1–2 hours to complete. Following the focus group discussion, participants were thanked and provided with a small token of appreciation donated by the ASC. While one researcher facilitated the discussion, the other kept notes of participants' responses. Both researchers debriefed each other after each focus group meeting, by reflecting on and documenting the process. These notes were used to refine the interview questions asked at subsequent focus groups and to summarise common issues and themes in DSP practices. An interim report of the results of this for the study has been supplied to the ASC.[96]

3.3   Online survey of people with disability

An electronic snowballing technique provides a method by which to sample people with disability from across the country. The technique follows the standard protocols for questionnaire design and analysis but uses an updated electronic platform.[97] This technique has been successful in previous research of people with disability in relation to accessible accommodation.[98–100] A database including more than 100 disability organisations provided a suitable sample for research. Communication with each disability organisation would include a description of this research and a hyperlink to the online survey. Prior research studies have shown that the online survey platform is robust, offers appropriate accessibility features for people with vision impairment and is compatible with the statistical software.

The online questionnaire instrument comprised four sections, including:

• benefits

• constraints

• patterns of participation and non-participation

• demographic and psychographic profile.

The details of the questionnaire were finalised following consultation with the ASC. The online questionnaire also incorporated a number of well-known theoretical frameworks to examine the objectives of the project, including:

• leisure/sport constraints theory

• benefits research

• individual and social attitudes towards disability experienced by the respondents

• aspects of the ERASS to compare people with disability with participation trends in the general population.[30]

3.4 Survey design

A questionnaire survey was developed using relevant literature and items from previous research on participation in sport. The survey was self-reported (or completed on behalf of the respondent by a family member or carer). The online questionnaire used an electronic snowballing technique in conjunction with a database of 300 disability organisation contacts. The questionnaire was then prepared in the following format to reach the broadest cross-section of people with disability:

• Survey Monkey online questionnaire compliant to section 508 of the *Americans with Disabilities Act*

• hard copy of the survey for those who do not have access to the internet

• large print

• easy text

• braille

• easy English

• Qualtrics online version of the questionnaire with embedded Auslan video clips for the deaf and hearing impaired community

• phone–assisted completion

• Survey Monkey online questionnaire specifically set up for people with mental health considerations.

At the time of the analysis there were 1050 fully completed questionnaires.

3.4.1 Population

The population for the study was all Australians with disability, whether they were participants or non-participants in sport and active recreation.

3.4.2 Sample frame

There is no census list of people with disability in Australia. The Australian Census does not have a disability module and the most comprehensive disability survey carried out by the ABS, the SDAC, uses a household sample. Further, as Veal notes, the sample size is determined by the precision required in the analysis, the level of sub-sample details and the resources available for the research.[92] To this end, the brief for the study stipulated that a minimum sample of 400 was required, and with the budget available for the study, the following sample frame was devised. The sample frame was based on a snowballing approach to membership of disability-related organisations. An information notice about the research was formulated and circulated electronically to the organisations, with a link to the online questionnaire. The organisations then provided the notice to their members through direct email, included within electronic or print newsletters, placed on their website notices or distributed through some other means. This form of electronic snowballing has proved successful in previous research.[101]

3.4.3 Sample size

Some 1900 people responded to all forms of the questionnaire, with 1050 fully completed questionnaires being used for the analysis. This response far exceeded the organisational brief. As will be seen in the findings, the sample included an excellent cross-disability and support needs sample that the research team believed was important for the study (see Figure 9).

Figure 9: Disability, by support needs
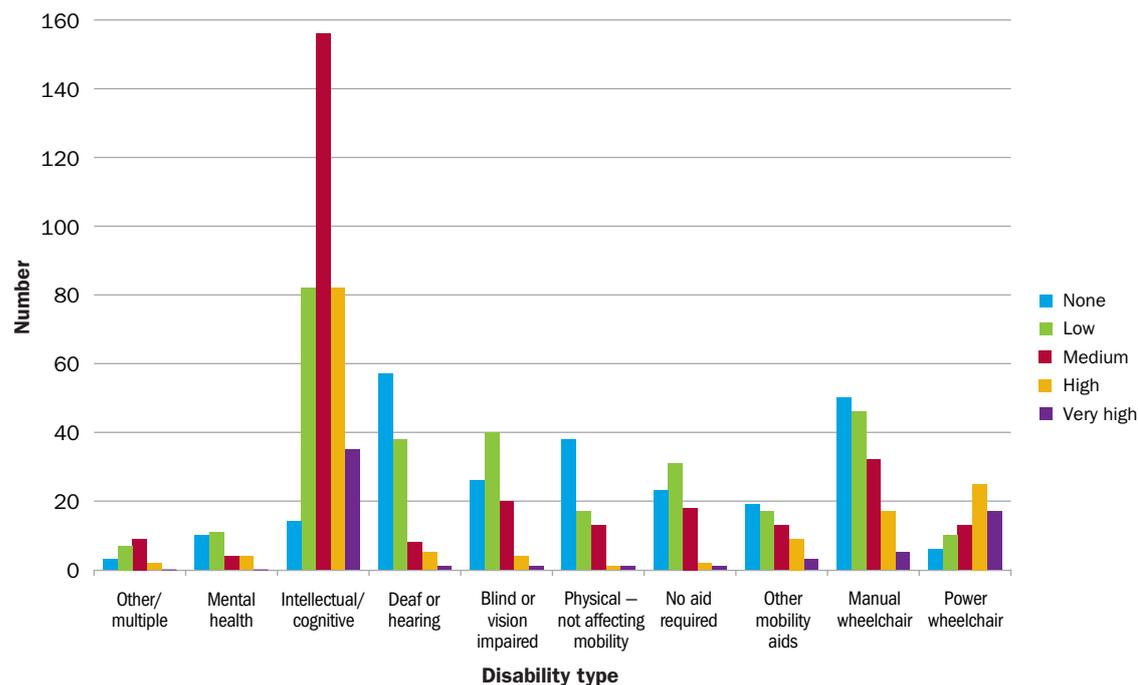
n = 1050

3.4.4 Limitation

While the sampling method of electronic snowballing is an efficient means of contacting people with disability and those with access needs, there are limitations to the method with respect to those who have access to the internet and those members who regularly check their organisational website or their electronic or print publications. Further, as noted in the discussion of the sample characteristics below, the electronic snowballing technique may have created a level of non-completion (1900 people responded with 1050 fully completed) as professionals associated with disability, building and the sports sector who were not the primary population for the study took the opportunity to review the research instrument online without completing questionnaire. However, this did not compromise the integrity of the study because non-completed questionnaires were excluded from the analysis. A number of these people contacted the research team and provided insight into sports participation and non-participation, used in another part of the research.

3.4.5 Bias

Compared with other studies[1], the response profile indicates a self-selection bias, which means that people with disability who participated in sport were more likely to complete the survey. This is not surprising, given that people who do not participate in sport and active recreation may not have had the predisposition to complete the questionnaire. The results should be read with this consideration in mind.

3.4.6 Confidence intervals

The sample for analysis of the online questionnaire was 1050 fully completed questionnaires. The sample size determines a margin of error (or confidence interval to 95% level) from which to estimate the true population. Table 4 shows the confidence intervals that must be used when interpreting results throughout the report, based on the proportion of response.

Table 4: The sample size and confidence interval for proportion of response

Result (n=1050)	95% Confidence interval
50%	+/- 3.1
40/60%	+/- 3.0
30/70%	+/- 2.8
20/80%	+/- 2.5
10/90%	+/- 1.9
5/95%	+/- 1.3

The following example explains how these figures can be applied. It was found that 58% of the sample was male and this means that there is an estimated 95% chance that this figure lies somewhere between 55% and 61%, or 58 +/- 3.0, in the true population. The interval for female representation is 39% to 45%, or 42 +/- 3.0, and as these two intervals do not overlap we can state that these two groups are significantly different.

If it is found that the results of another question in this report overlap once the confidence intervals are applied, it means that the difference between groups is not significant.[92]

3.4.7 Data analysis

The data from the online questionnaire and other questionnaire formats were transferred or entered into the statistical software. It was then used to undertake a variety of descriptive and inferential statistics to provide an insight into the phenomena being studied and to address the objectives identified by the ASC. For this purpose, the analysis included frequencies, cross-tabulations, graphs, chi-square, t-tests, correlations and analysis of variance. Qualitative analysis was limited to the reading of the data to determine emergent themes. Further qualitative analysis will be undertaken in preparation for journal articles and conference presentations. This work may take a number of months to complete.

3.4.8 Interim report

An interim report of the results of this for the study has been supplied to the ASC.[102]

4 Focus group findings

4.1 Sample profile

Some 70 attendees and nine interviewees, representing 68 DSP organisations, participated in this stage of the research. This included six focus group sessions during November 2009 and nine individual phone interviews from November 2009 to February 2010. Table 5 presents the number of participants that attended each focus group. The focus groups constituted the following types of DSP:

- advocacy/information services

- peak disability services (impairment based)

- DSPs — community participation providers

- employment services

- accommodation services

- day services

- local councils

- respite services.

Table 5: Organisational participation

State/Territory	Focus group attendees	Phone interviews
New South Wales	14	5
Queensland	9	1
South Australia	13	n/a
Western Australia	14	n/a
Australian Capital Territory	8	n/a
Victoria	12	1
Northern Territory	n/a	1
Tasmania	n/a	1

The DSP focus groups were guided by a semi-structured interview. The groups were designed to gather qualitative information on the following topics:

- Current practices in the area of sport and active recreation, including:
  - assessing whether sport and active recreation is on the agenda of organisations
  - understanding current delivery models and the extent of sport and active recreation service provision
  - understanding what resources enable service provision in sport and active recreation
  - assessing the types of organisational relationships with the sport and recreation sectors
  - identifying whether there were any volunteer management issues affecting organisations' ability to deliver sport and active recreation.

- The organisational constraints that limit or prevent the provision of sport and active recreation.
- What is required to enhance the provision of sport and active recreation, including:
  - identifying what assistance disability service organisations would like from the sport and recreation sectors
  - identifying the perceived messages that need to be promoted to get more people involved in sport and active recreation.

The notes and findings from the focus groups have been summarised below into common issues and themes.

4.2   Sport on the agenda

The major themes to emerge from the focus groups were:

- No
- Yes, but …
- Yes, demand driven
- Yes, through passion drivers
- Yes, but leisure/recreation focus.

For some organisations, sport and active recreation just was not part of their agenda. This became evident when we were recruiting organisations for the focus groups, and one organisation told us that as a membership-based advocacy organisation they had recently completed a national consultation, and sport simply was not an issue that their members identified as of concern or interest. For a significant group of disability organisations, sport does not play a role in the organisation's agenda. One of the major reasons for the theme of 'sport not featuring on the agenda' is that sport is not seen as a priority at an organisational level.

Those included in the 'Yes, but ...' theme regarded sport as being on the agenda, but as an incredibly low priority, after those priorities that evidently connect to Maslow's Hierarchy of Needs. This is to suggest that the DSPs prioritise services such as specialist medical care, accommodation/housing, access to education and employment, and attendant care above that of sport and active recreation. This is a significant issue for sports providers to address when strategically planning for the disability sector.

For the 'Yes, demand driven' group, clients are increasingly seeking sports and active recreation provision, which is being acknowledged because of the service's person-centred practices. Where there was an acknowledgment of this finding, services were not always resourced or connected to support clients' interests in accessing sports and active recreation. This demonstrates the current disconnect between the disability service sector, and the sports and recreation sectors.

For other organisations who fall in the group, 'Yes, driven by the passion', their involvement in sport is ad hoc, as it is driven by individual staff members who have particular skills and passions in the area of sport and active recreation. This has some interesting dimensions as it may not be what clients want to do, and organisations recognise that this is both a blessing and a problematic consideration. These organisations identified that they are engaged in sport; however, it is definitely not part of their agenda. It is interesting to note in that some of the examples provided, the passion driver might be just about local grassroots sport or competition, or it might be about the elite development paths to international representation. Powerful drivers, powerful passion!

The 'Yes, but leisure/recreation' theme sets sport as part of a low-key, informal, generally leisure or recreation-focused opportunity. Sports and active recreation are not planned for but may occur as part of a suite of activities to provide clients with opportunities for self-expression. The organisations are not against sport and active recreation, but it is not part of the organisational focus.

Of note, few organisations clearly demonstrated that sport was embedded into the organisation's culture and seen as part of their core business. This finding is significant in itself, and requires discussion as part of the overall research project. Basic questions as to why this situation exists and whether there are strategies to address the situation must be discussed.

4.3   Organisational constraints

The major organisational constraints to emerge were:

- not enough money
- can't get to sport
- don't know what's available
- timing doesn't suit
- venues not appropriate
- attitude toward sport
- support to participate.

The 'Not enough money' theme included a number of sub-themes. First, organisations identified that the level of funding generated from external sources was inadequate, and where it was not inadequate, the funding was not recurring. Inadequate funding results in organisations not being able to support people to participate in sport, and not being able to offer sport and recreational opportunities.

Second, where organisations identified as having sufficient funding, the constraint related to the lack of funding 'allocation' to sport and active recreation. This highlights an internal hierarchy of priorities and decision-making related to sport being on the organisation's agenda.

Funding for sport in disability services was seen as negligible
('a luxury item', practitioner, South Australia).
— Sports CONNECT[88]

Third, organisations also identified the cost of sport versus the financial position of the individual, suggesting that sport is not affordable for many people with disability.

One example from South Australia was of an organisation
whose clients had an average disposable income of
$12 per week once they had paid for accommodation, food,
travel and medication.
— Sports CONNECT[88]

DSPs identified transport as a significant constraint that limited or prevented people with disability from taking part in sport. When considered in depth, the issue of transport highlighted a number of specific constraints, including: organisations' or individuals' access to private transport; the cost of private and public transport; the availability of accessible transport; unreliability of public transport; and the timing of when private transport is available versus when transport is needed. This deconstruction suggests a need to address the constraint of 'transport' on many levels for the organisation and the individuals involved.

I have a gym nearby but do not feel safe walking there and back. I work full time and already have to pay out for taxis for that so I cannot afford to pay out to attend gym as well. The friends I do have live too far away to take me and are not interested in attending with me. That is why I bought a treadmill myself, but this can be boring and isolating.

— ASC online survey, 2010

There would be community outrage if we said that we won't allow people onto all of our public transport for the next 25 years because of their cultural background, gender or religious beliefs. Or that these people can only travel on 50% of our buses in Australia up to 2012. There would be a national and international outburst of rage and non-acceptance if either of these two proposals were made. Yet this is exactly what is contained in regulatory legislation in Australia today. People in wheelchairs continue to have to wait at bus stops, in all types of weather, while others get onto the bus because, on average, every second bus in Australia is not accessible. This continues to happen every day in capital cities around Australia and thousands of Australians with disabilities have no other option but to wait for the next bus and just hope that it will be accessible. Where is the community outrage?

— Shut Out report[2]

Given the demographic profile of those organisations that have a long-term engagement with the sector it is interesting that information provision featured so highly. This suggests primarily that the DSPs and, to an extent, people with disability, simply do not know what exists in the way of provision of sports and active recreation. Furthermore, DSPs indicated that there are no effective communication channels and there are no consistent messages being promoted. Yet, during discussions, it became evident that this was partly because of the dynamic nature of leisure, sports and active recreation, where there were new programs, changes to offerings and personnel changes internal to organisations. The result is a continuing need for up-to-date information about program offerings generically, geographically and in context to the client's individual needs (for example, age, dimension of access, support needs, equipment).

Finding out what is available is the big barrier. Even in our local area you often don't know what is available. Most things we found out were from other parents often years after we started looking. As ageing parents our adult child relies on us to take him to activities. Due to ill health we have found this increasingly difficult yet our son benefits greatly from sport and just loves it.

— ASC online survey, 2010

Depending on the type of disability organisation (for example, advocacy versus service), their services typically operated within standard business hours (Monday to Friday, 9.00am to 5.00pm). As such, the timing of sport as predominantly taking place after business hours or on weekends becomes a significant constraint to even being considered as a possibility. Moreover, the organisations that are not service oriented face internal cultural constraints, which may not be easily overcome. These issues are interrelated to the nature of the operation, the industrial relations awards of staff and the tenure of the jobs. Those who are engaged in service provision also indicated that the 'timing of sport' makes it difficult to access resources (for example, staff, volunteers and transport), which remain orientated towards standard service provision within a geographic context (for example, group home or head office). The nature of sport tends to be geographically decentralised through community engagement and may take place anywhere within a locality.

Venue accessibility was noted as a common structural constraint facing organisations. Even when organisations were established to deliver sports and active recreation, individual programs were brokered and transport was available, the accessibility of the venue physically and attitudinally stifled participation of clients. While venue accessibility is usually outside of the control of organisations, the constraints still have a significant impact on the individuals involved. Further, venue accessibility is related to cost, transport and support provision where venue substitution may be thwarted by the combination of these other constraints. For example, while the accessibility of the closest venue may be a problem, other accessible venues further away may not be viable alternatives due to travel time, transport and cost constraints. As others have noted, venue accessibility is also about the attitude of venue staff towards inclusive practice, and a number of examples of when clients were not welcomed were discussed.

Like everyone else, opportunities to participate in recreation are largely about time and money. Then it's accessible parking! Access after that is almost always a challenge, with stairs and bathrooms often being issues. Accessibility is usually a poorly thought out after thought, with parking, ramps and bathrooms ill positioned, and often requiring the person with a disability to go further than anyone else.

— ASC online survey 2010

*When I used to go to the leisure centre, I would ask the
receptionist if she could call me a taxi. She was always really
mean and kept telling me to buy myself a mobile phone to
call a taxi myself. At this time I was on a disability pension,
and was spending $12 to get to and from the leisure centre
(on a half-price MPTP card), and I was also paying the gym
membership. I was spending a lot of money just to participate,
and found her attitude to be my biggest barrier. Also there
are the obvious barriers of transportation and the lack of
variety with timetabling of leisure centre activities, as well
as team sports in my community.*
— ASC online survey 2010

The intrapersonal theme of 'attitude toward sport' was identified by organisations in which both staff and clients did not have a predisposition to be involved in sport. In the case of clients, they quite simply did not like sport and did not wish to be involved, regardless of what service providers or individual staff did to try to heighten their interest. This is each individual's right; as long as choice is provided, people should not be forced into a particular activity. However, sports organisations should be aware that client-centred funding requires that staff develop activities around client interest. The research suggested that the less an individual liked sport, the lower the priority of sport within the professional's position. This finding is of concern as there is evidence to suggest that the personal priorities of service providers reflected the extent to which they prioritised the domain of sport and active recreation for their clients.

Girl enjoying teeball through attendant facilitation.

A constant throughout the focus group discussions was the constraint on organisations to provide 'support to participate', particularly to those with high support needs or those who required one-on-one supervision. For people with disability requiring support to participate in sports and active recreation, this has a profound impact on organisational resources and the types of activity with which they can become involved. DSPs expressed a common voice, stating that there was not enough staff or volunteers to support participation for this type of participant.

I can only take part if there is Auslan support. If participating with hearing players they need to be informed and encouraged to actively include me; often at basketball the players call to each other and I miss out. Often I am excluded because it is hard for them to communicate with me. At sailing I require several adults to help — support, teach, interpret and follow in another boat.

— ASC online 2010

Teens with an intellectual disability have a particular difficulty accessing [sport and recreation] activities because [they sometimes] need a support person. Councils often concern themselves with physical access rather than the other support needed.

— Shut Out report[2]

4.4 Assistance required from the sport and recreation sectors

The major themes to emerge from the focus sessions were:

- share knowledge between sectors
- let people know what is available
- take sport to the disability service sector
- money would help
- improve facilities
- improve the connection.

Directly connected to 'Don't know what's available', identified in Section 4.3, DSPs believed there was a need to share knowledge and information between the disability services sector and the sports and recreation sectors. This theme suggests that both **the disability service and sport and recreation sectors need to share pertinent knowledge and information to enhance the provision of sport and recreation for people with disability**. Knowledge and information in this context includes the delivery of education and training, for the sport and recreation sectors on inclusive practices, and for the disability services sector on what opportunities exist and how to deliver inclusive activities.

Closely linked to this is the need for 'enhanced provision of information/communication'. One of the frustrations for those who champion sport and active recreation within their organisation is a lack of a collective mantra to promote consistent messages to DSPs. People suggested that if there was an ongoing promotion of a small suite of messages, then this may assist with getting sport on the agenda. The messages should address:

- What opportunities exist for people with disability?

- What are the benefits of sports and active recreation for people with disability?

- How can sport and recreation promote citizenship and social inclusion?

Once these messages are agreed on, provided with a substantial period of use and supported through appropriate resources, then personnel within DSPs would be in a better position to educate and advocate for increased programming.

The above would provide a period of conditioning for DSPs to become used to the idea of sports and active recreation programs being available. This strategy should be followed up through programs being actively 'taken' to the disability services sector. This requires a strategy whereby a series of activities on the scale from individual, small group and mass participation can be offered directly through the DSPs. This would not require a new set of resources but would draw on the resources that are already available and modify these to the DSP sector as the ASC has done for educational sport providers.

Funding is a perennial issue for any programs within the disability services sector and sport is no different. While organisations were not suggesting that the sport and active recreation sectors directly provide increased levels of funding, there was recognition that more sport and active recreation could not be provided unless funding is found. DSPs suggested that any increase in funding be allocated to:

- supporting people to participate

- alleviating the cost of sport where personal finances are the constraint

- improving the availability of reliable transport

- alleviating the cost of equipment.

Further, most organisations recognised that there was a link between improved participation in sport and active recreation, and improved health and social benefit outcomes, which could be used to leverage funding from the health sector as a form of preventative health.

The availability/accessibility of facilities were regarded as a constant issue, which all organisations recognised as a significant constraint to programming. DSPs believed that there is a need for a larger number of facilities to be available and for the accessibility of facilities to be improved. While the supply of new accessible facilities is being addressed through the Disability Standard for Access to Premises, there is certainly a need for a more detailed understanding of the overall accessibility of facilities within a regional context in order to more appropriately, effectively and efficiently deliver sport and active recreation programs to people with disability. As identified in the previous section, this also requires a greater program of training for sport and recreation staff, in order to be inclusive of people across the four major dimensions of disability and access:

- mobility

- vision

- hearing

- cognitive/learning.

Lastly, apart from information and knowledge management, the need for a better collaboration between the disability services sector and the sport and recreation sectors was regarded as an essential element to brokering increased levels of sport and active recreation programs.

These themes identify specific areas of collaboration; however, disability service organisations highlight the need for collaboration on a wider scale. This includes collaboration that will enhance the provision of sport and active recreation for people with disability through developing mutually beneficial information, marketing and training packages.

4.5   Focus group conclusion

In conclusion, it should be noted that there was a tremendous amount of goodwill between the DSPs, and for the notion of providing greater sport and active recreation participation for their clients. However, for a proportion of organisations, direct service provision is not part of their overall mission. Of those that do provide direct services, there is a hierarchy of other priorities which take up a great deal of the organisations' time and resources and, hence, they are unlikely to take on new areas of service provision without significant new resources, whether that be for sport and active recreation or other areas of service provision. The remainder of organisations already attempt to deliver quality services within individual client plans and within the overall organisational resources.

5   Survey findings

The online questionnaire and other methods of questionnaire delivery provided a very impressive outcome for cross-disability research engagement. All questionnaires answered on any format were entered into the statistical software for analysis. The only exception to this was the Easy English Modified Questionnaire for people with intellectual disability. The results of this study were analysed separately and a summary is provided in Appendix 3. Even the results of this sub-study provide overall support to the direction of the major questionnaire analysis.

5.1   Survey overview

The following results are based on a sample of 1050 completed questionnaires. Respondents were people with disability (54%), or their carers or family members responding on their behalf. The average age of the sample was 31 years and was skewed to the younger end of the spectrum, as Figure 10 identifies with the sample for this study and the sample for the SDAC[35], which was as close to a census of people with disability as carried out in the Australian context. The sample was also over-represented by males (58%) and younger age groups. According to the SDAC data, the ratio of males to females with disability was the reverse, with 42% males.[103] Additionally, 90% of the sample was born in Australia. As one-quarter of the country's population was born overseas[104], this sample was over-representative of Australian-born people with disability. Figure 11 provides a breakdown of the sample by state/territory, again in comparison with SDAC data.

Figure 10: Age of sample in comparison with SDAC, 2003
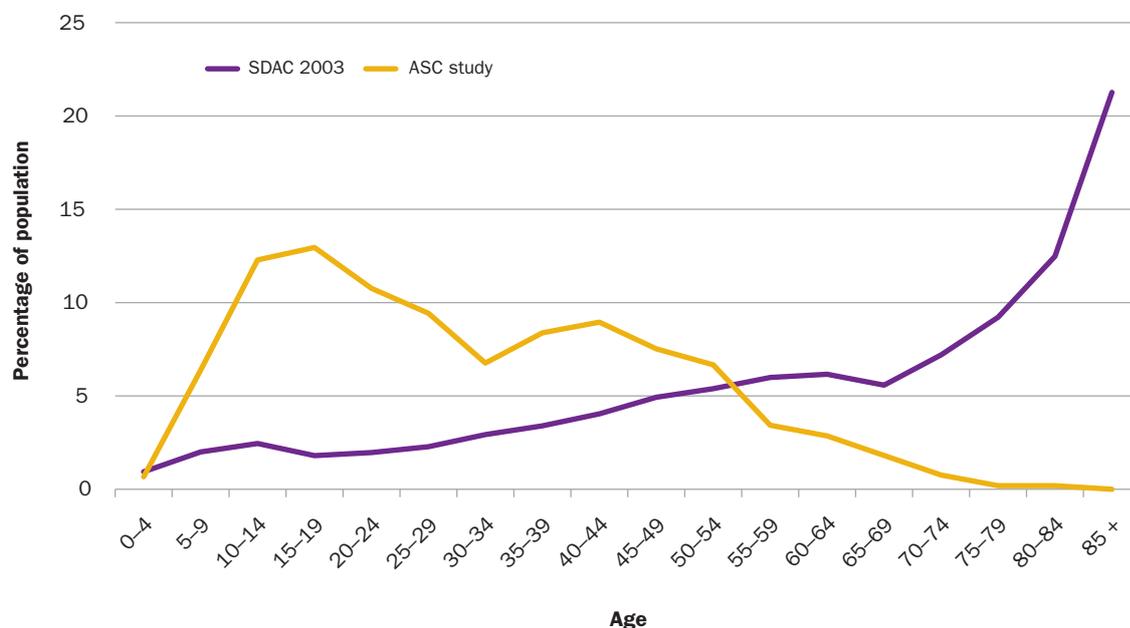
n = 1050

Figure 11: Geographic region of sample
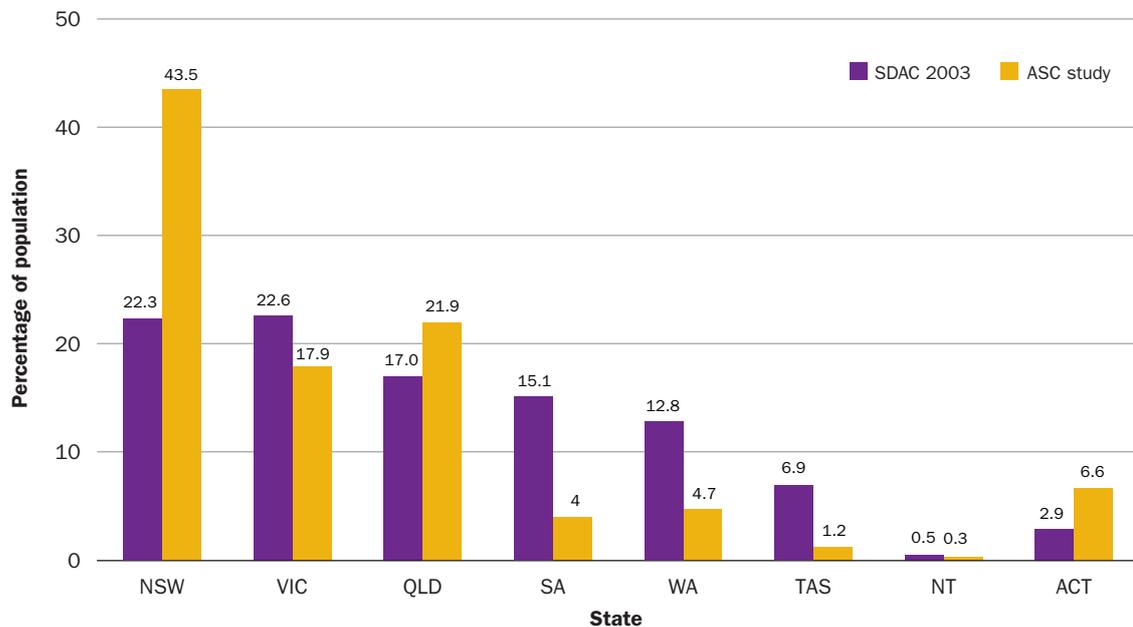
n = 1050

The respondents were well educated, with 39% having completed tertiary education (see Table 6). Of the respondents, 37% was engaged in paid employment (see Table 7). This is much higher than was found in the SDAC (18%).

Table 6: Educational qualifications

Education	%
University degree or higher (including postgraduate diploma)	21.3
Undergraduate diploma or associate diploma	5.7
Certificate, trade qualification or apprenticeship	12.1
Highest level of secondary school	19.0
Did not complete secondary school	14.2
Never went to school	1.7
Other	25.4
No response	0.6
Total	**100.0**

Table 7: Employment status

Employment	%
Full-time home duties	2.0
Looking for work/unemployed	4.2
Retired	3.0
Voluntary unpaid work	3.0
Part-time education	3.2
Full-time education	21.0
Part-time paid work	16.8
Full-time paid work	17.5
Self-employed	2.9
Full pension	13.8
Other	12.1
No response	0.7
Total	**100.0**

5.2 Profiles and segments

The largest group of respondents characterised themselves as persons with an intellectual/ cognitive disability (35%) (see Table 8) with very low levels of support needs (see Figure 12). According to national data[35] this is not representative of people with disability, who in fact have a far higher level of support needs than reported here. Further, some 85% of those identified in the SDAC had some form of 'physical disability'. The strength of the analysis is that the subsample from each of the dimensions of disability is large enough for the detail and precision of analysis required.[92]

Table 8: Main disability of sample

	Frequency	%
Power wheelchair	71	6.8
Manual wheelchair	150	14.3
Other mobility aids	61	5.8
Mobility — no aid required	75	7.1
Physical — not affecting mobility	70	6.7
Blind or vision impaired	91	8.7
Deaf or hearing impaired	109	10.4
Intellectual/cognitive/learning	369	35.1
Mental health	29	2.8
Other	21	2.0
No response	4	0.4
Total	**1050**	**100.0**

Figure 12: Level of support needs
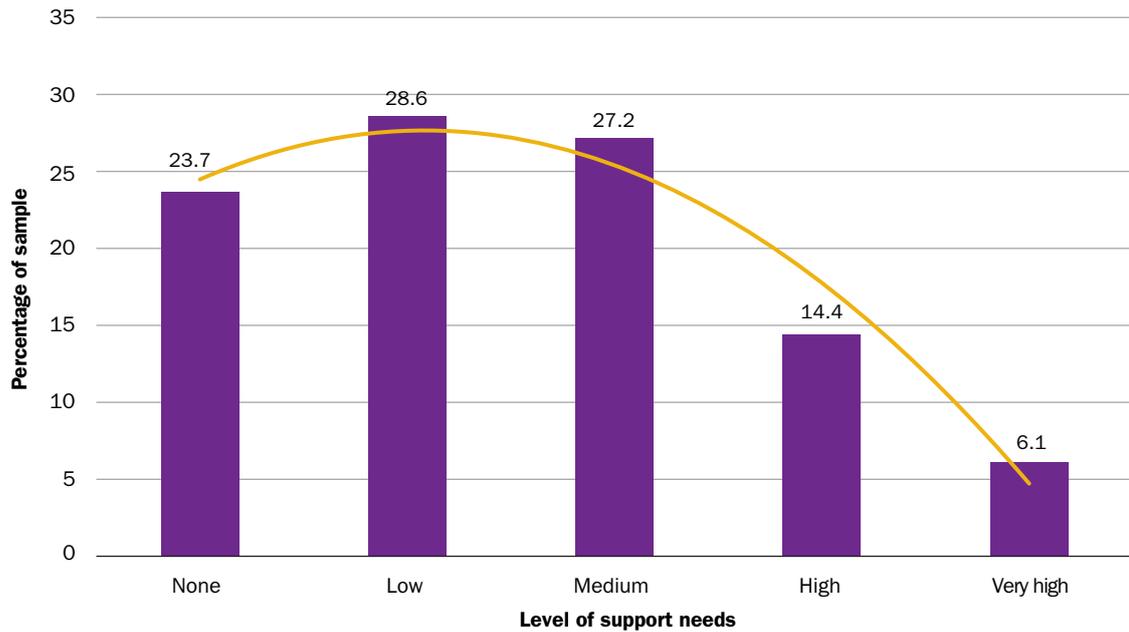
Respondents with an intellectual disability reported working the least hours per week (11.17), while those with hearing impairments worked the most (29.25, see Table 9). There is a statistically significant difference between groups which indicates that those who have higher support needs work fewer hours per week (see Table 10). This has significant implications for access to resources, the cost of participation and the implications for purchasing modified equipment.

Table 9: Hours worked, by disability type

Main disability	Average hours per week
Deaf or hearing impaired	29.25
Blind or vision impaired	21.95
Mobility — manual wheelchair	21.77
Physical — not affecting mobility	21.15
Mobility — power wheelchair	20.18
Mobility — other mobility aids	19.10
Mobility — no aid required	16.98
Mental health	16.92
Other/multiple	13.00
Intellectual/cognitive/learning	11.17
Total	**18.26**

Table 10: Hours worked, by level of support needs

Support needs	Average hours per week
None	29.45
Low	19.18
Medium	12.89
High	10.23
Very high	5.12
Total	**18.24**

5.3   Participation

Some 86% of respondents participated in sports and recreation activities in the previous 12 months, suggesting that the sample is highly active in sports and recreation. This figure is much higher than the 17% found in the SDAC.[35] Respondents are extremely active participants, the majority of whom participated more than twice per week in sport (see Figure 13). While this is at a much higher percentage of participation than previous studies, the definition of sports and active recreation was deliberately broad in this study, to include non-organised and non-competitive recreational involvement. This includes training, general fitness and participation in social recreation.

Figure 13: Frequency of participation
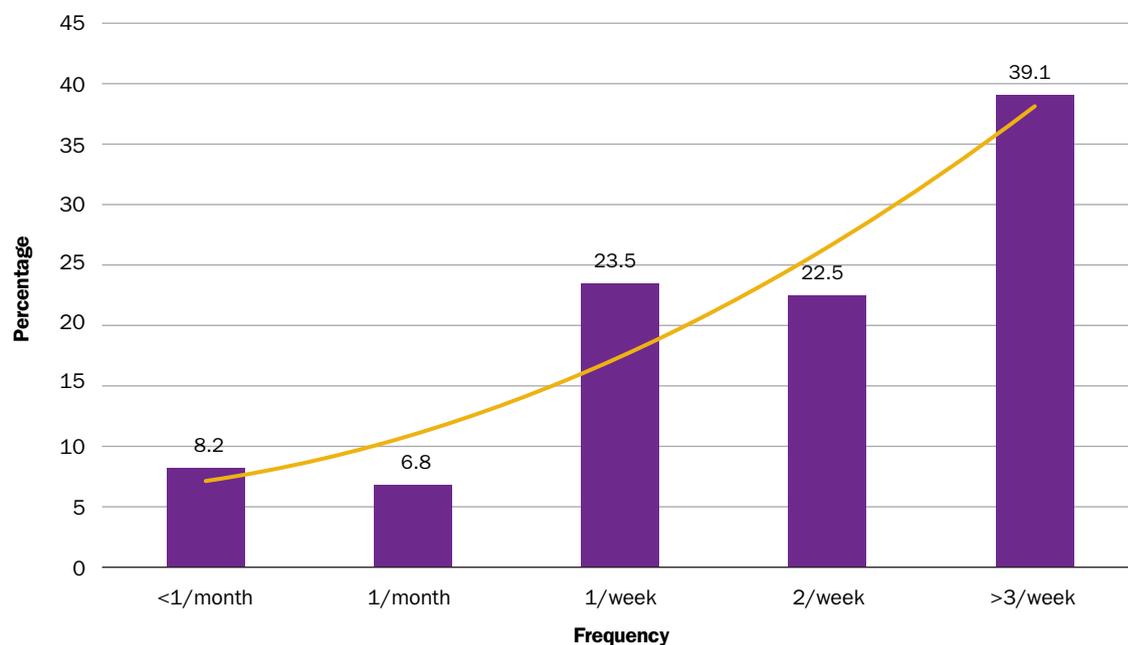
The most common activities were recreational swimming, going to the gym and walking (see Table 11). Although these activities appear to require relatively little structure, it was found that the main activities undertaken were predominantly organised (73% indicating some or all of their activity was organised), where the participants pay membership fees at a club (see Table 12). There was no correlation between organisation of the activity and level of support needs. Finally, over half of the respondents participated in at least two sporting activities (see Table 13).

Table 11: Top 20 main activities and total activities

Activity	% people with disabilities who participate	% people with disabilities where this is the main activity
Swimming — recreational	35.2	19.4
Gymnasium workouts	15.0	8.2
Walking	12.8	6.5
Tenpin bowling	9.7	5.0
Basketball	8.1	4.3
Cycling	7.5	2.7
Tennis	6.4	2.9
Athletics	5.6	3.3
Wheelchair basketball	5.6	4.2
Football (soccer)	5.4	2.5
Dancing	4.4	1.6
Cricket outdoor	3.8	1.6
Sailing	3.7	1.9
School-based activities	3.4	1.9
Golf	3.3	1.2
Horseriding/equestrian	3.3	1.9
Weights training	3.0	1.4
Running	2.8	1.4
General fitness activities	2.7	0.9
Cycling — hand cycling	2.2	1.2

Sports Ability competition — Goalball.

Table 12: Type of organisation with which the main activity is undertaken

Organisation	%
Fitness, leisure or indoor sports centre that required payment for participation	21.8
Sport or recreation club or association that required payment for membership, fees or registration	61.2
Community centre	4.9
Work	1.6
School	10.5
Total	**100.0**

Table 13: Level of participation in sport

No. of activities	Participation rate (%)
1	86.1
2	55.9
3	23.9
4	7.3
5	1.4

5.4   Detailed participation and satisfaction

It was more likely and statistically significant that non-sports participants had a higher level of support needs (see Figure 14). All groups were very likely to participate in sport and recreation; however, blind/vision-impaired respondents reported a higher participation level in sport (93%) while power wheelchair users were less likely to participate (60%) (see Table 14).

Figure 14: Participation rate, by support needs
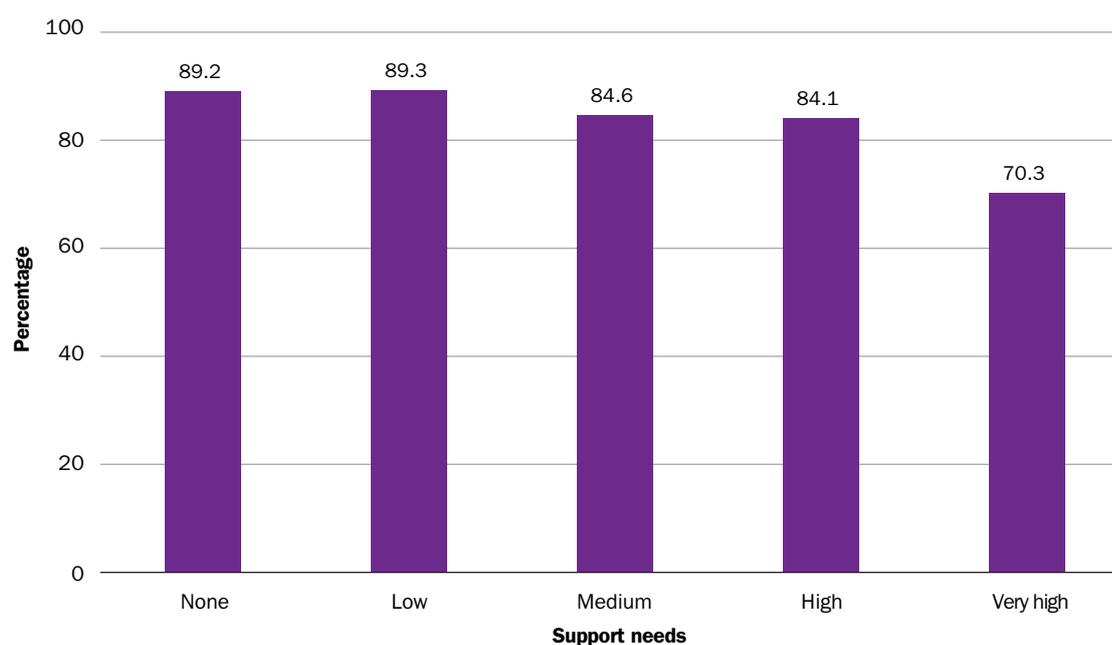
Table 14: Participation rate of disability groups

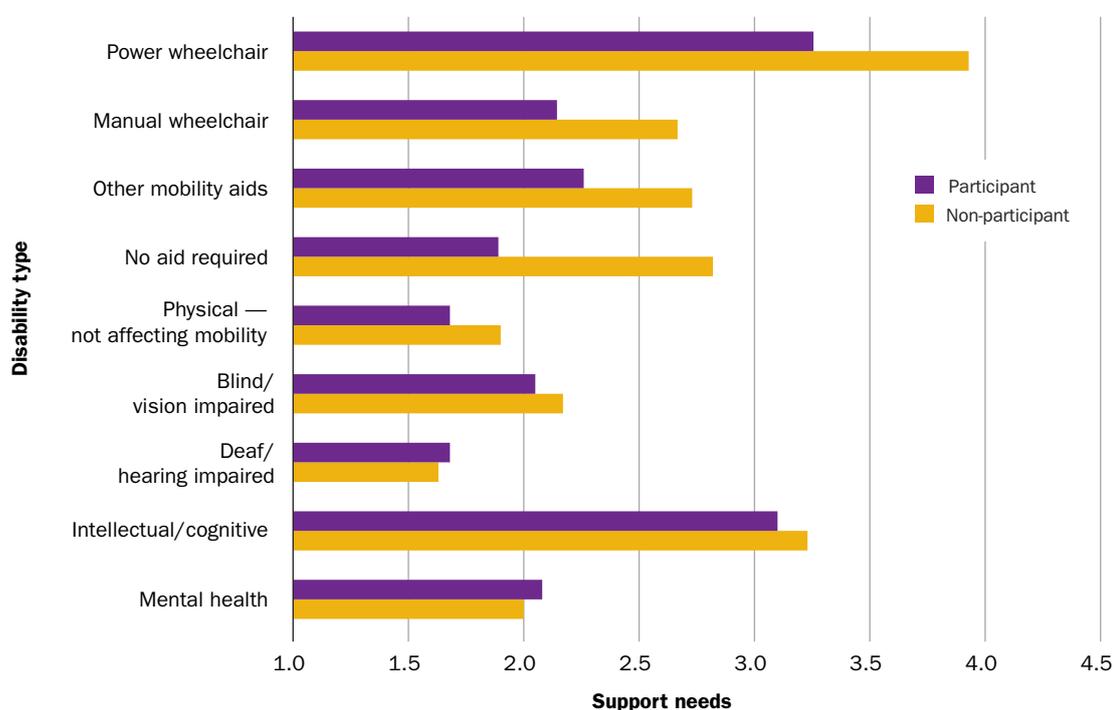| Main disability	Participation rate %
Blind or vision impaired	93.4
Intellectual/cognitive/learning	90.5
Mobility — manual wheelchair	88.0
Mental health	86.2
Physical — not affecting mobility	85.7
Mobility — no aid required	85.3
Deaf or hearing	82.6
Mobility — other mobility aids	82.0
Mobility — power wheelchair	60.6

Figure 15 shows the mean difference in support needs between participants and non-participants by disability groups. It clearly shows that people in a power wheelchair reported higher levels of support than other disability groups and that non-participants required a greater level of support than participants in all groups, apart from people who were deaf/hearing impaired or who had mental health issues.

Figure 15: Level of support needs of people with disability, according to disability type and participation

People who required a greater amount of support participated less in sports (see Table 15), although this was a relatively weak correlation. People with a physical disability not affecting mobility participated in sport and recreation at a greater rate than other groups (see Figure 16). They had a statistically significantly higher rate of participation than those in power wheelchairs, those requiring other mobility aids, people who were deaf/hearing impaired, those with a cognitive/intellectual disability and with mental health issues.

Table 15: Level of support needs and the frequency of participation

Frequency of participation	Average level of support
Less than once per month	2.72
Once per month	2.67
Once per week	2.66
Twice per week	2.44
Three times per week	2.24
Total	**2.45**

* 1=none, 5=very high

Figure 16: Disability and the frequency of participation
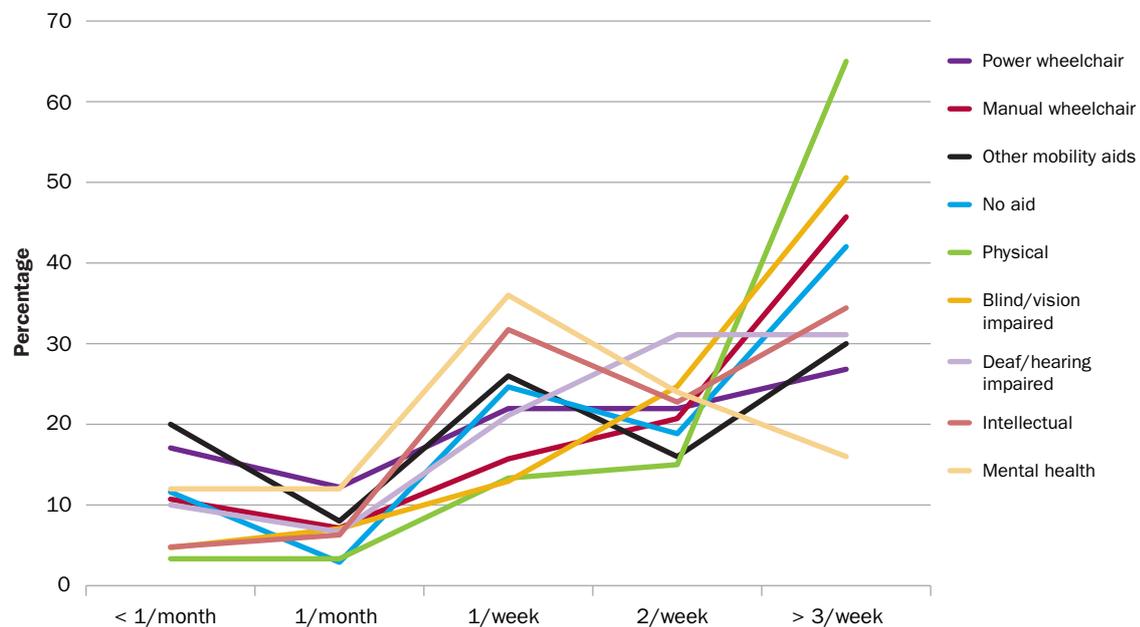
There was a strong perception in the disability sector of a lack of opportunities within sports for people who just want to participate at the recreational level. The sport needs to start developing and promoting these opportunities to 'potential' participants, as many people with disabilities previously may have had little experience or poor experiences with sport and may no longer feel they belong, or may feel that sport is 'just not for them'.

I get sledged a lot on the field, due to ignorance about disabilities from people playing in mainstream sports.

— ASC online survey, 2010

The main constraint is we don't attempt to be involved in mainstream sports, given prior experiences.

— ASC online survey, 2010

*For some people with disabilities, years of isolation
and exclusions have had a profound impact on
self-worth and self-esteem.*
— Shut out report[2]

Sport is an excellent vehicle by which to provide opportunities for people to build their confidence, provide a sense of hope and an opportunity to connect people with community. The contribution that people with disability are able to make to the sports sector and wider community is often overlooked. Being part of a 'sport' does not necessarily have to be in a playing context. Many people with disability contribute as club administrators, officials, coaches, volunteers and spectators.

CASE STUDY 1

At age 23, Joh Duffield has overcome a life-changing setback to coach his beloved Broughton-Mundoora Eagles B-grade footy team this year. Joh has quadriplegia and coaches from a motorised wheelchair. Typically, he plays down his achievements, saying he's had a lot of help.

'I don't think I'm doing anything special. Yeah, I'm in a wheelchair but I'm just coaching footy. That's all I'm trying to do,' he says. 'I don't see myself as being anything like that — courageous or anything. Some people say that sometimes, but you just do what you've got to do.'

As a junior, Joh was a regular regional representative in SAPSASA primary school football carnivals, was an Eagles captain and vice-captain and eventually an A-grade player, battling grown men by age 15. There was tennis in the summer and, by his mid-teens, cricket.

Paralysed four-and-a-half years ago when he smacked his head diving into a mate's swimming pool, Joh cannot move his legs and has limited movement in his neck, shoulders and arms.

'It happened just diving into a swimming pool and I broke my neck,' he says. 'C5 [vertebrae]. It was a bit of a shock to everyone [but] life goes along. It was in the shallow end but I just dived off the step really, it wasn't anything I hadn't done a thousand times before.

'I can't remember hitting the bottom, I just remember thinking, "S... I can't really move here". A couple of mates pulled me out and called the ambulance.'

What followed was an emergency helicopter dash to the Royal Adelaide Hospital, surgery to his spine, a nervous wait in the intensive care unit, a tracheotomy, six weeks of being unable to eat or speak, a two-month recovery in the spinal unit and four months recuperating at the Hampstead Rehabilitation Centre.

In 2006, the Eagles won the premiership, and the fire in Joh's belly was back. 'The coach that year said if I wanted to come in the change rooms before the game that would be fine. To feel that finals atmosphere is really good, whether you're playing or watching.'

'That was what kick-started me to want to get back into it. That's when I thought, Yep, I want to get back involved.'

Joh applied for the reserves coaching position at the end of the 2007 season and, despite impressing the selection panel, he failed to win them over. Joh again applied for the B-grade posting in October last year, and succeeded.

Joh says his lack of mobility makes no difference to his coaching duties. 'I don't know if it affects anything or not but it's not a hindrance. The hardest thing is coaching my mates. Half the team are guys I'd class as really, really good mates, so telling them they're playing crap or dragging them isn't easy.'

'I've had to drop a couple of mates this year and that's pretty hard. One was six games in and he cracked it a bit. We ended up catching up for a beer a couple of days later and he was the one who said it: "We're always mates before we worry about footy". That's hard, and then there's dealing with the parents, politics, the committee. I've had a few fiery conversations with the committee this year; they don't always see eye to eye with the way I coach.'

Joh's dad, Paul, says the key to Joh's success in the coach's box and in life is his infectious positivity. 'It's been easy the way he's motivated,' Paul said. 'He's never dropped his head and said "this is too hard"; he's just taken it on. He just likes to be one of the lads. He doesn't think he's sitting in a wheelchair'.[105]

Respondents were asked to rate their general level of health, fitness and participation in sports and recreation. Non-participants rated their health, fitness and participation in sport and recreation more poorly than participants did, and this result was statistically significant (see Figure 17). Respondents with a physical disability not affecting mobility rated themselves much more highly on these items than other disability groups, while females rated themselves more poorly on each item than males. However, this result is only statistically significant for level of fitness and sport participation.

Figure 17: Self-assessment of health, fitness and level of sport participation
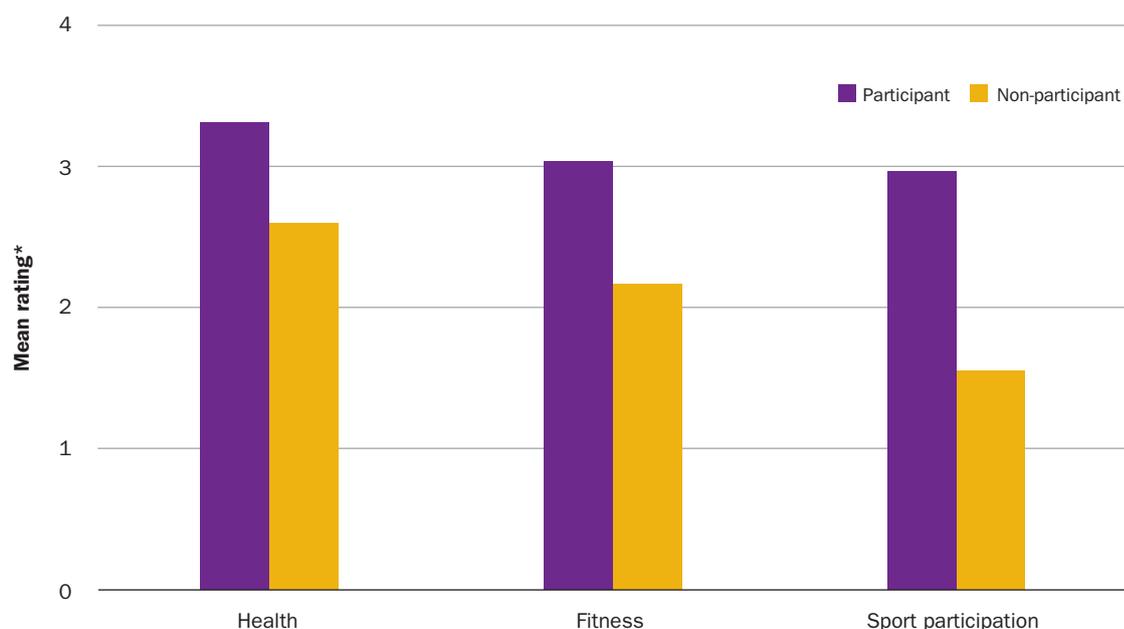
* 1 = poor, 5 = excellent

These ratings were also compared by level of support needs. Not surprisingly, there was a negative correlation, in that the higher the level of support required the worse respondents rated their levels of health, fitness and sports participation (see Figure 18).

Figure 18: Self-assessment of health, fitness and participation, by support needs
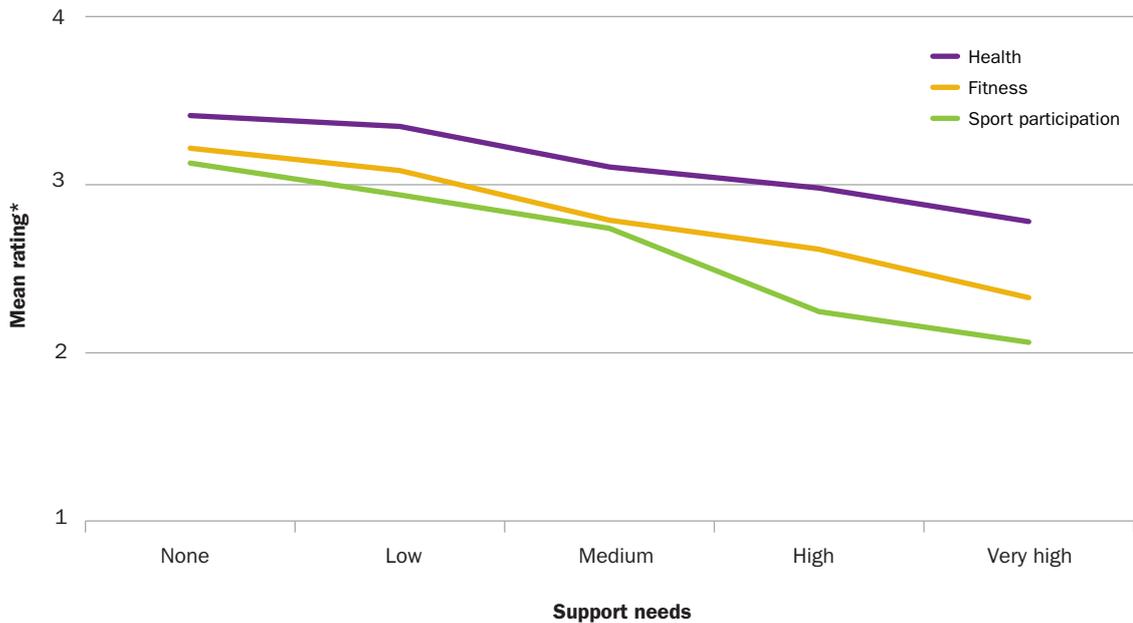
* 1 = poor, 5 = excellent

Figure 19 shows that people with a physical disability were the most satisfied with their level of participation, which is not surprising, as they participated the most frequently (see Figure 16). They were also comfortable with their current participation rate, with 57% indicating that they would not like to participate in more sport than they currently did, which is much lower than the total sample of 75% (see Table 16). On the other hand, respondents with mental health problems and those with no mobility aids indicated a need to participate in more sport. Within disability groups, more non-participants indicated a need to participate in more sport than they currently did than participants, with the exception of those in a power wheelchair or using other mobility aids.

Figure 19: Satisfaction with level of participation
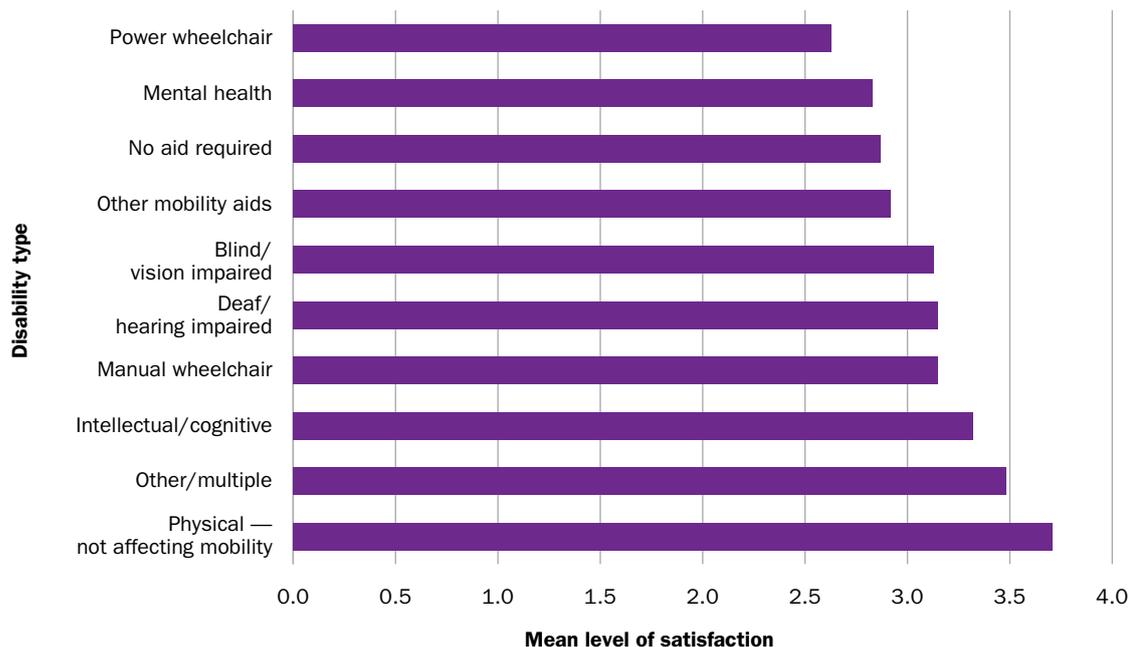
Table 16: Would respondents like to participate in more sport and recreation?

Main disability	Non-participant %	Participant %
Power wheelchair	78.6	79.1
Manual wheelchair	94.4	73.5
Other mobility aids	72.7	78.0
No aid required	100.0	84.4
Physical — not affecting mobility	90.0	56.7
Blind or vision impaired	83.3	78.8
Deaf or hearing impaired	84.2	71.1
Intellectual/cognitive	74.3	74.0
Mental health	75.0	80.0
Total	**82.90**	**74.2**

5.5   Participation by gender

A number of the items analysed and presented above were also compared between genders. Females were much less likely to be active participants in sports, at 83%, while male participation was at 88%, and this result was significant. This was despite the fact that women reported significantly lower levels of support needs than men did. This may go some way to explain the difference in satisfaction levels with current participation, as well as the fact that men participated in sport more frequently than women (see Figure 20). Men were significantly more likely to be satisfied with their current level of sports participation than women were (see Figure 21).

Figure 20: Participation rate, by gender
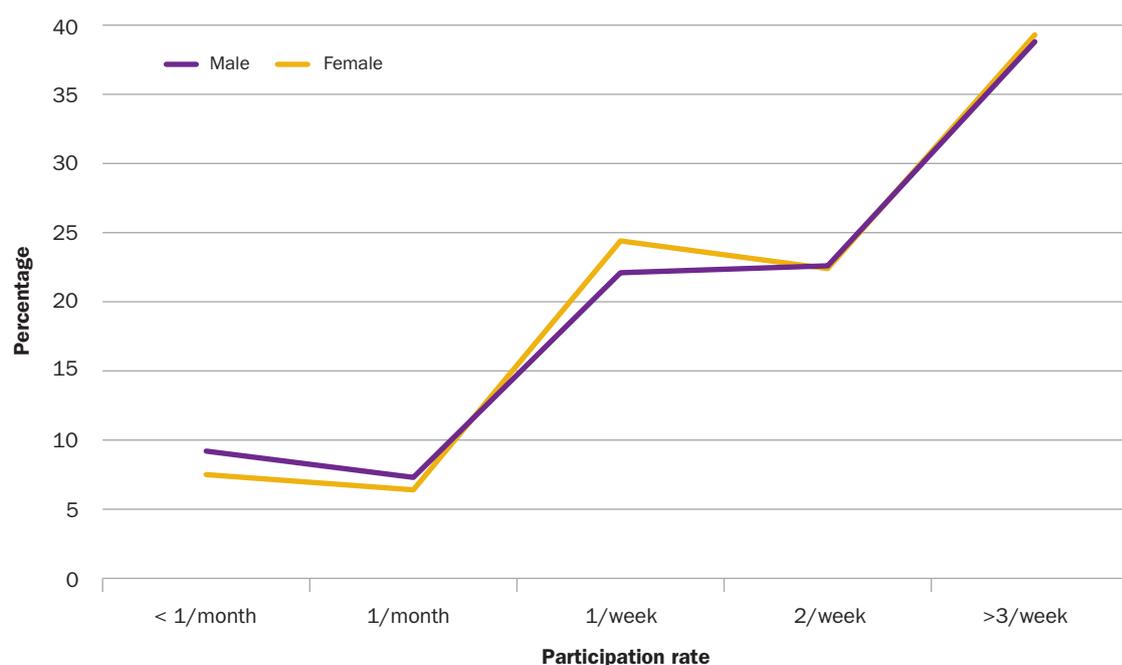
Figure 21: Satisfaction in level of sport participation, by gender
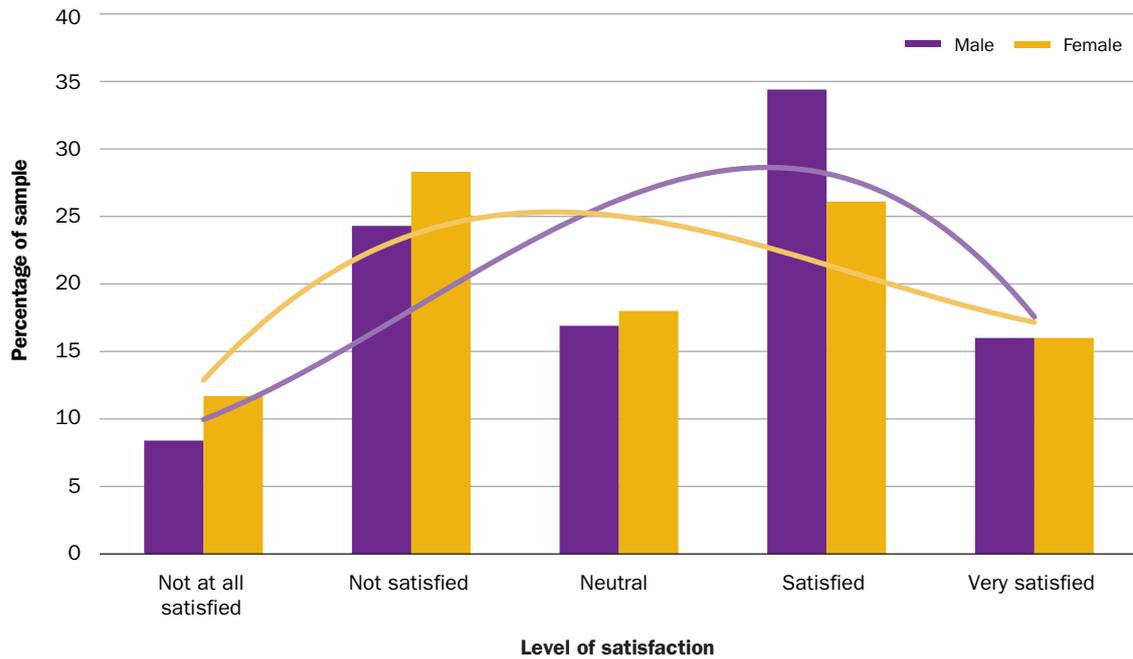
Respondents were asked to rate their levels of health, fitness and sports participation. On all three measures, men reported higher scores, and in fitness and sports participation, their average rating was significantly higher than women (see Figure 22). A detailed breakdown of self-rated sports participation by gender is shown in Figure 23.

Figure 22: Self-ratings, by gender
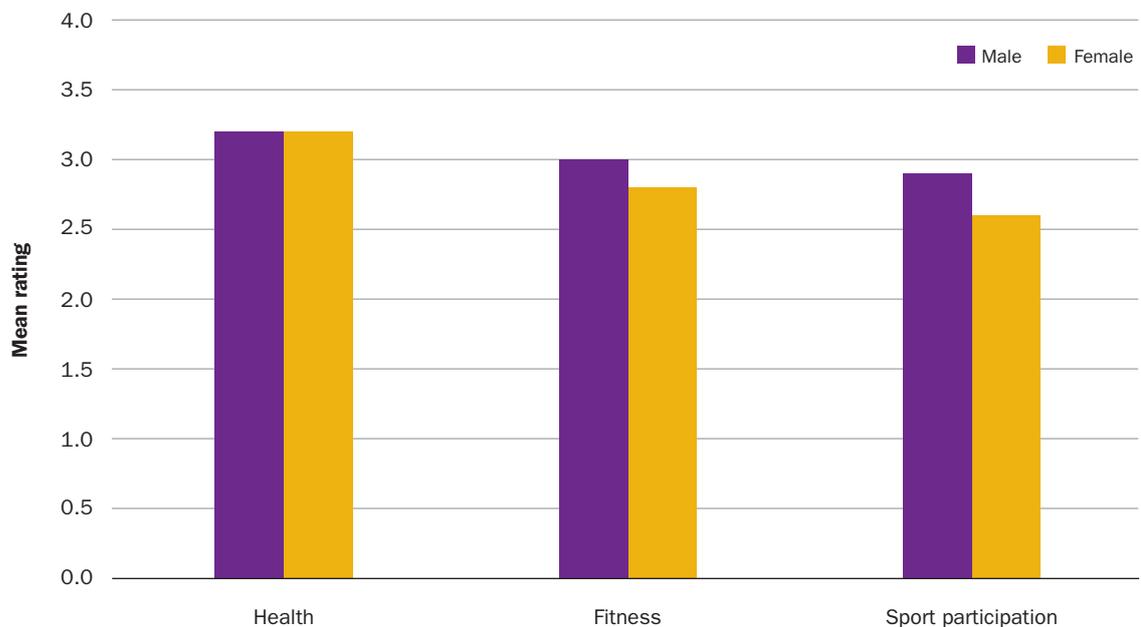
Figure 23: Self-rated level of sports participation, by gender
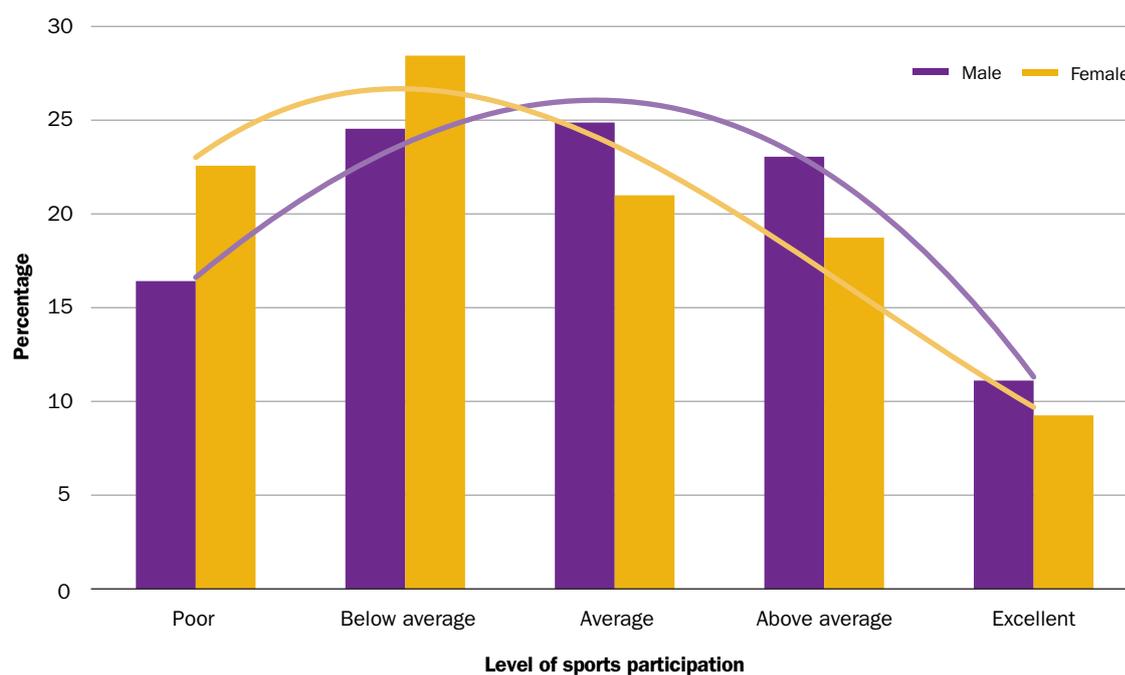
5.6 Benefits

The ten most and least important benefits of sports participation according to the respondents are listed in Table 17, showing a mixture of self-development, health and social outcomes as most important, as opposed to superficial outcomes such as feeling more attractive and losing weight.

The benefits I receive from doing my sport are a sense of achievement and the fact that I have the opportunity to contribute to my community and to also have the opportunity to compete for my country in my chosen sport. If I inspire other people to do the same thing, whether it's sailing or something else, then that is even a greater achievement.
— ASC online survey, 2010

Table 17: List of benefits

Ten most important benefits	Mean*	Ten least important benefits	Mean*
Achievement	4.23	Do my job better	3.20
Do something stimulating	4.14	Feel more attractive	3.31
Improve health or reduce risk of disease	4.14	Lose weight	3.44
Opportunities to socialise with others	4.12	Share activities with family	3.62
Enjoy company of friends	4.11	Forget my worries	3.68
Increase energy level	4.08	Have a sense of the future	3.71
Improve self-esteem	4.08	Get away from daily life	3.72
Improve heart and lung fitness	4.07	Increase my knowledge	3.76
Be with people enjoying themselves	4.07	Gain muscle	3.78
Spend time with friends	4.07	Have an adventure	3.85

* 1 = Not at all important, 5 = Very important

Mates.

*To have fun! Have something to look forward to.
I love hanging out with the guys and I fit in as if
I didn't have a disability.*
— ASC online survey, 2010

Males and females viewed the benefits of sports participation similarly, although there were some statistically significant differences. Sport for males was more likely to provide the opportunity to:

- meet new people

- have an adventure

- encounter exciting things

- make new friends

- feel like I belong

- be valued for my contribution.

Females were more likely to indicate that the benefits of sport participation were to:

- improve health or reduce the risk of disease

- do my job better

- feel more attractive.

A comparison was made between different levels of support needs and the benefits they received, and an interesting pattern emerged indicating that sport provided people who had lower-level support needs with fitness and self-development, while those with higher-level support needs gained the opportunity to socialise and have an adventure (see Table 18).

Table 18: Top-five benefits, by support needs

Support need level	Theme	Participation benefits
None	Health/fitness focus	1 Improve health or reduce the risk of disease 2 Increase energy level 3 Improve heart and lung fitness 4 Improve muscle tone 5 Build up muscle strength
Low	Self-development	1 Achievement 2 Improve health or reduce the risk of disease 3 Increase energy level 4 Improve heart and lung fitness 5 Improve self-esteem
Medium	Socialising	1 Achievement 2 Opportunities to socialise with others 3 Improve self-esteem 4 Spend time with friends 5 Enjoy company of friends
High	Socialising	1 Opportunities to socialise with others 2 Enjoy company of friends 3 Do something stimulating 4 Achievement 5 Improve self-esteem
Very high	Adventure	1 Do something stimulating 2 Have an adventure 3 To feel like I belong 4 Experience freedom 5 Encounter exciting things

I know I have grown as a person when I am engaged in sport especially when I am with mainstream people. It is the personal satisfaction and confidence of being accepted by the mainstream group and not having to feel as if I am inadequate and/or incapable due to having a disability (deaf). When they realise I have strong skills I am respected more and valued more and hence asked to be engaged in other activities such as committees and boards whereby I can contribute back to the community for the benefit of the next generation.

— ASC online survey, 2010

CASE STUDY 2

Lismore sporting identity Pat Leadbeatter was recently awarded his third life membership, when the Far North Coast Baseball Umpires' Association made the 55-year-old their most recent inductee.

It follows awards from Marist Brothers Cricket Club (1988) and Marist Brothers Baseball Club (1992), and confirms just how much Pat has done for local sport since he started playing cricket as a 15-year-old.

Born and bred in Lismore as one of seven children, Pat has a mild intellectual disability that has impeded his ability to read or write. He worked for many years at the Lismore Sheltered Workshop.

Pat is now a valuable member of the Lismore City Council Parks and Gardens staff, and shows the same cooperative zest for life at work as he does when he is playing or umpiring sport.

Pat had to pass umpiring exams in softball and baseball by taking an oral test because he was unable to sit a written assessment.

There were no other concessions given to him to assure his accreditation. Pat is also an avid fan of Marist Brothers Rugby League Club and almost never misses a game, often getting a lift to the games by a good mate, former Brothers club president Steve Campbell, whose late brother David had worked with Pat at the sheltered workshop.

Everyone who knows Pat has the utmost respect for him because of his wonderful friendly nature, his magical smile and his willingness to give more of himself than would be expected from anyone.

Life memberships confirm immortality in an organisation, and three such awards acknowledge an enormous vote of thanks that many people in cricket, baseball and softball would endorse to a truly unique individual and one of nature's true gentlemen.[106]

The benefits were also explored by disability group. The top-five benefits per disability group are shown in Table 19 and a common theme was drawn out from these.

Table 19: Top-five benefits, by disability group

Disability specified	Theme	Participation benefits
Mobility — power wheelchair	Socialising	1 Do something stimulating 2 Achievement 3 Experience freedom 4 Opportunities to socialise with others 5 Be with people enjoying themselves
Mobility — manual wheelchair	Health focus	1 Build up muscle strength 2 Do something stimulating 3 Improve health or reduce the risk of disease 4 Improve heart and lung fitness 5 Improve muscle tone
Mobility — other mobility aids	Physical improvement	1 Achievement 2 Improve health or reduce the risk of disease 3 Build up muscle strength 4 Improve muscle tone 5 Do something stimulating
Mobility — no aid required	Health focus	1 Build up muscle strength 2 Improve muscle tone 3 Increase energy level 4 Improve health or reduce the risk of disease 5 Improve heart and lung fitness
Physical — not affecting mobility	Mental health focus	1 Achievement 2 Do something stimulating 3 Increase energy level 4 Build up muscle strength 5 Relax
Blind or vision impaired	Self-improvement	1 Improve health or reduce the risk of disease 2 Improve heart and lung fitness 3 Achievement 4 Increase energy level 5 Improve muscle tone
Deaf or hearing impaired	Mental health focus	1 Increase energy level 2 Improve health or reduce the risk of disease 3 Improve heart and lung fitness 4 Feel less tension and stress 5 Relax
Intellectual/ cognitive/learning	Self-development	1 To feel like I belong 2 Opportunities to socialise with others 3 Achievement 4 Enjoy company of friends 5 Improve self-esteem

Disability specified	Theme	Participation benefits
Mental health	Mixed benefits	1 Feel less tension and stress
		2 Relax
		3 Improve health or reduce the risk of disease
		4 Feel better about my body
		5 Enjoy company of friends

CASE STUDY 3

A mother tells of her son's journey in sport from Auskick to playing competition football. Auskick is a weekly coaching program that provides children with the opportunity to learn the skills of the game of Australian rules football as well as promoting a healthy and active lifestyle.

Her son has Asperger's syndrome. Asperger's syndrome affects the way in which a person understands, talks and acts with other people. Someone with Asperger's syndrome may have trouble processing social situations and controlling emotions. Undiagnosed for a number of years, on-field meltdowns and tantrums were a regular occurrence, mostly because, like many people with Asperger's, he is a perfectionist, finding it intensely frustrating to cope with any shortfalls in the high standards he sets for himself.

Competition, teamwork, large-scale socialising and even ball skills are enormous challenges for a child with Asperger's. Seemingly minor incidents, such as missing a mark, being benched, hearing stray comments from team-mates or simply not getting enough of the ball, are all potential minefields.

Three years following her son's diagnosis, he is now playing his second year of competition football. He has learned to take as much pride in assisting as in kicking a goal himself; he stays in his position and his team-mates are sharing conversations on the field and greeting him in the local supermarket.

The lessons he learns on the football field aren't just lessons about the game and the friends he makes there. They are about working as part of a team, coping with disappointment, setting realistic expectations and respecting others around him; lessons that he carries into all other areas of life. The sports field provides a controlled environment in which she can observe him solving problems, discuss and refine his approach afterwards and provide encouragement from the sidelines.[107]

5.7   Constraints

Respondents were also asked to indicate the degree to which certain factors constrained their participation in sports and recreation. The ten most and least constraining items are shown in tables 20 and 21. The most constraining items were generally related to personal finances and lack of sports programs or trained staff. Power wheelchair users felt more constrained than other disability types on most items, while people with a physical disability or mental health problem were least constrained on most items.

Table 20: Top-ten constraining items

Ten most constraining factors	Mean*	Disability group most affected	Disability group least affected
Lack of government support	3.38	Power wheelchair users	Mental health
Pricing	3.10	Mobility — no aid required	Physical
Lack of trained staff to support my participation	3.05	Intellectual/cognitive	Mental health
No integrated sport and recreation programs available	3.02	Intellectual/cognitive	Mental health
Lack of money	3.02	Power wheelchair users	Deaf/hearing impaired
No friends to participate with	2.95	Intellectual/cognitive	Physical
Lack of personal income	2.91	Power wheelchair users	Deaf/hearing impaired
Scarcity of places	2.90	Power wheelchair users	Mental health
No assessment of people with disabilities' needs	2.89	Power wheelchair users	Mental health
No access to facilities close to home/ work	2.86	Power wheelchair users	Physical

* 1 = Never, 2 = A little, 3 = Sometimes, 4 = Often, 5 = Most of the time, 6 = Always

Table 21: Ten least constraining items

Ten least constraining factors	Mean*	Disability group most affected	Disability group least affected
Integration of sexes not allowed	1.32	Mental health	Physical
Sport and recreation only for men	1.36	Deaf/hearing impaired	Physical
Feelings of guilt	1.49	Mental health	Intellectual/ cognitive
Poor health of family member	1.55	Mental health	Blind/vision impaired
Fear of violence	1.65	Mental health	Other mobility aids
Sport and recreation not important to me	1.66	Mental health	Physical
Hygiene and cleanliness	1.66	Power wheelchair users	Blind/vision impaired
Permission needed to participate	1.82	Mental health	Power wheelchair users
Not accustomed to sport and recreation	1.90	Mental health	Physical
Lack of safety	1.95	Power wheelchair users	Physical

Generally, most disability groups felt that the most constraining factors in their sports participation were lack of government support and financial issues. However, there were some notable exceptions. People who were blind or vision impaired were more constrained by a lack of public and private transportation, and facilities being too far from home, while people with mental health problems were mostly constrained by financial factors, such as price and lack of personal income.

These were far more constraining than lack of government support to this group. Finally, although those who were deaf/hearing impaired or had an intellectual disability cited lack of government support as their most constraining factor in sports participation, they were also constrained by the industry itself, especially due to the lack of training of staff, integration of sport and recreation programs, and awareness of the benefits of sport and recreation.

> *The swim coach will not let me train with the squad as I am too slow, so he makes me swim in the junior class where they are all younger than me and do not do racing training which is what I want. I have tried other pools but they seem the same, they will not make any allowance for me being slower, they are just not interested.*
> — ASC online survey, 2010

The *Shut Out* report[2], concurred that negative and poor attitudes, and a lack of understanding about disability meant that many people with disabilities, and their families, friends and carers, experienced considerable difficulty accessing the kinds of services others in the community take for granted, including access to services to meet basic health, education, social and sports and recreational needs. The following quote, from a submission to the *Shut Out* report, told the story of a community recreation program that was unwilling to include a child with an intellectual disability in a gymnastics class.

> *The gym offered a separate class for kids with disabilities. I asked one of the teachers whether it would be possible for my daughter to attend one of the other mainstream classes. She frowned and looked concerned, and said that was why they had created the separate class. I said she was perfectly capable of joining in with the other girls. She said 'Well that's OK for your daughter but if we let her in we will have to let everyone else in'. These are not elite gymnasts. They are little girls jumping around in leotards having fun on a Saturday morning.*
> — Shut out report[2]

For most constraints to sports participation, it was found that a direct correlation existed with level of support needs, so that the higher the level of support required, the more constraining an item was. **As support needs increased, the most constraining factors centred on support from government, staff and the sports industry, rather than the personal constraints of lack of time, money and work commitments that those with no support needs experienced.** Medium-level correlations were found with the following constraints (in order of highest to lowest correlation):

- Lack of trained staff to support my participation
- No support to participate
- Lack of skills

- No assessment of the needs of people with disabilities

- Lack of government support

- No integrated sports and recreation programs available

- Permission needed to participate.

No correlation was found with the following constraints, signifying equal constraint among people with disability:

- Too many domestic duties

- Family responsibilities

- I do other activities in my leisure time

- Lack of time

- Integration of sexes not allowed

- Sport and recreation only for men

- Too many responsibilities

- Feelings of guilt.

Interestingly, 'work commitments' was the only constraint that scored a negative correlation, albeit a weak one, with level of support needs. This signifies that as support needs increased, work commitments were less constraining on people with disabilities participating in sports.

These constraints have also been compared for participants and non-participants. All of the 50 items were rated as more constraining by non-participants, apart from family responsibilities and work commitments (although the difference between the two groups was very small and not statistically significant). Additionally, of the 48 items rated more constraining by non-participants, all but the following were statistically significantly more constraining, meaning that the difference between participants and non-participants was negligible:

- Lack of time

- Permission needed to participate

- Too many responsibilities

- Feelings of guilt

- Poor health of a family member.

5.8   Open-ended responses

The survey intended to capture a range of open-ended responses from respondents as to the constraints, benefits, types of adaptive equipment they used, a word or phrase that best summed up sport, and other sports and active recreation experiences. An examination of the word/phrase most used to describe sports and active recreation for participants and non-participants is provided below.

Within the sample, 85% responded with a word or phrase that came to mind when thinking about sports and active recreation. The most popular response by far was 'fun', while health and fitness were also prominent responses. Although 'fun' was a common theme among all respondents, the supporting themes were quite different for participants and non-participants (see figures 24 and 25). That is, non-participants used the words 'hard' and 'friends', while participants used the words 'health' and 'fitness' to describe sports and recreation.

Figure 24: Sport for non-participants

Figure 25: Sport for participants

6 Discussion in relation to the objectives

This section provides an outline of some of the significant outcomes of the study in relation to the objectives set down by the ASC.

6.1 Participation and non-participation of people with disability

The findings contain a tremendous amount of detail about the participation and non-participation of people with disability. The study is one of the few to have undertaken cross-disability research at the national level. This in itself is a significant outcome, not only from the findings but also from a research design perspective, where a great deal has been learnt about engaging with different groups of people with disability. From a statistical perspective, **the significant findings reinforced the literature that suggests that the disability type and level of support needs are important considerations in the participation and non-participation patterns of people with disability**. Certainly, the findings suggest that any person with high support needs has significant constraints to participation.

While key themes emerged from the disability types and their support needs, the qualitative data collected in this study also suggests that the individuals' circumstances need to be clearly understood in formulating policy responses. For example, approximately two-thirds of people with disability are born with their disability (congenital), while about one-third of people acquire their disability through some type of trauma. Both of these groups of people have very different life experiences. With this in mind, some discussion points are now raised with respect to the four major objectives of the participation and non-participation study.

6.1.1 Constraints

- The constraints were overwhelmingly structural, suggesting that individuals with impairments did not regard their impairment as the major reason for their non-participation.

- It is interesting that even those who participated on a regular basis still identified a series of constraints as being present in their participation.

- Throughout the report, the qualitative data has been used to provide evidence of the lived experiences of constraint, constraint negotiation strategies and benefits.

- While individuals may negotiate constraints to participate in sports and active recreation, it in no way removes the significant structural issues facing people with disability as a group. If the constraints that are faced by the group were to be removed, then this group would be able to participate more freely, and others who are affected by these constraints may either participate more or begin to participate, as they have been deterred from participation in the past.

- The structural constraints can be analysed as:
  - broader social considerations, including transport, income, costs of disability, etc.
  - sports and recreation-specific, including access to adapted equipment, location of facilities, attitudinal issues with staff, access to support workers, etc.

- Lack of support by the government was identified as the single greatest constraint faced by people with disability. In the qualitative data there is some further explanation as to what this means. However, there is a need to deconstruct what people meant in answering this constraint, as to whether it related to broader social constraints (for example, lack of

employment, cost of disability, transport access, etc.) or whether it was specifically about the lack of government support for sports and active recreation. It may also be the case that the government is being criticised because people are marginalised and do not have avenues for empowerment.

6.1.2   Benefits

- The most striking finding in relation to benefits, as compared with studies on physical activity, was that all groups regarded the social and cultural benefits as the most important for their participation. This was even the case with those people who participated frequently, had no or low levels of support needs and were generally happy with their levels of participation in sports and active recreation.

- At the other end of the spectrum, those with high support needs had the most idiosyncratic benefits of sports and active recreation participation — excitement and adventure — where their daily lives were not as enriched as other groups in the sample.

- For others, the findings very strongly supported the literature showing that those people who are engaged in social activities and citizenship generally are much more connected to community and enjoy a better quality of life.

Game on!

6.1.3   Attitudes and perceptions

- The participants and non-participants in this study largely shared a love of sport.

- As discussed in the research design, there was a bias in the sampling, whereby people who were non-participants and did not have a love of sport decided not to answer the questionnaire.

- This creates a problem that is very common with non-participation studies — how to engage the disengaged.[92] The research team does not have an answer beyond what all researchers already know about research design: precision, detail and resources are the major considerations in undertaking research design and, for the purposes of this study, any increase in resources to undertake household studies in which non-participants may be engaged would have improved our understanding of this group.

- The analysis of the keyword/phrase most associated with participation in sports and active recreation presented in section 5.8 provides a graphic representation of what participants and non-participants thought of their engagement.

6.1.4 Key messages

- The results indicate that it is essential to provide easily accessible information on participation in local sports and recreation activities.

- For example, with the newly formed Jandowae Adaptive Games Society (JAGS), things have moved along very quickly from a simple idea of putting together a team of people with and without disability to participate in the local Sports Ability annual carnival. The group soon became an incorporated body designed to increase opportunities for people with disability of all ages to participate in sports and active recreation. The group publishes a monthly newsletter and distributes it throughout the local community through many DSP organisations and the Department of Communities.

- The volunteer members of JAGS, most with a disability themselves, have attended a variety of training courses (including securing a blue card so they can work with children) for the benefit of the group. JAGS now conducts weekly sports sessions, incorporating a number of inclusive activities. The group's membership base is constantly growing.

- Each disability group has identifiable constraints, benefits being sought and access needs that need to be satisfied. Sports providers need to be mindful of these considerations, sophisticated in their approach to addressing the access requirements and proactive in seeking strategic partnerships for those access requirements that fall outside of their scope of activities (for example, transport and costs of participation).

- Reaching people with higher support needs requires an organisational commitment to resourcing — quite simply, organisations must make a commitment in order to reach this marginalised group, whether within the sports participation arena or other areas of citizenship.

- This research has shown that non-participants from all disability types want to participate in sports and active recreation, and realise that they are missing out on a very important part of life and Australian culture.

- The qualitative responses of the survey respondents also showed that there is tremendous scope for sports and active recreation service providers to improve their baseline customer service provision, develop skill sets to assist in the participation of people with disabilities and see market potential in participants and non-participants, alike.

6.2 Disability service providers

- There are different types of service providers who are more or less likely to want to engage in the provision of sports and active recreation programs.

- A proportion of those who attended the focus groups and in-depth interviews are never going to be collaborating partners, because sport is simply not on their agenda. Further, other organisations will only be collaborating partners through the provision of information, as they are not service providers but information brokers and advocacy practitioners for people with disability. This is not a negative finding but an important area of clarification for government sports agencies and sports information providers to understand.

- It is clear that if government seeks to increase the participation of people with disability then there needs to be demand-driven strategies tailored to the diverse needs of the disability sector.

- Just as people with disability have certain constraints, so do those disability service organisations with a predisposition to be involved in sports and active recreation provision for their clients.

- Where an agenda exists, some staff within organisations are preventing or limiting the delivery of sport due to their personal interests or attitudes towards sport. This fact goes against person-centred practices and contemporary models of service provision.

- Disability service providers are increasingly seeking generic service providers and are frustrated with traditional disability sport. We could well suggest that disability sports organisations are not bound by or educated on contemporary government policy; that is, person-centred practices, therefore organisations continue to focus on increasing numbers and coercing individuals into their organisations.

- Given that many DSPs operate person-centred practices, and hence provide opportunities based on individual choice, it is essential that people with disability have direct exposure to a wider range of sporting activities. In this way, individuals have the opportunity to make informed choices based on experience.

- This report identifies many organisational constraints and the assistance the sector needs to address these. One message is that the sports sector could help alleviate the constraints on the disability service sector if they can find more ways to work collaboratively. Yet, even at the national sporting organisation level, there is a lack of understanding of how grassroots disability sports operate.

- Achieving and redressing the situation identified above involves matching demand with supply at the local level through a needs analysis — identifying who is interested in participating and in what sports. The data obtained could then be used to inform key decision makers in mainstream and disability sports provision. Of course, this requires a strategic program of research, collaborative engagement and testing.

7   Conclusion

Sport development processes seek to attract, retain and nurture athletes through a series of processes, from grassroots to elite competition. The importance of understanding the ways in which stakeholders cooperate and interact to achieve a sustainable sports system in Australia is a critical aspect of sport development.[69] The findings of this research suggest that many DSPs do not have a sports participation agenda as a high priority. Therefore, the first stage of the attraction process is not necessarily performing optimally. A lack of adequate resourcing and information were major constraints for DSPs. There are potential opportunities to address these obstacles through the facilitation of enhanced cooperation and partnerships between DSPs and community sports providers.

Within this enhanced framework of sport development, the benefits identified in this research project could be used to highlight aspects that would accentuate positives of participation in the attraction stage. Outcomes such as sports providing participants with a sense of achievement, its stimulating qualities, health benefits and socialisation opportunities are key dimensions of involvement by the sports. At the same time, the major constraints to participation need to be addressed. Increased government support, lower costs, a larger pool of staff trained in facilitation of participation, and more integrated sports opportunities would assist more people with disability in their participation.

In order to retain sports participants, the key elements of fun, fitness, enjoyment, healthy lifestyle, being with friends and socialising are important. People with disability and DSPs engaged in sport identified the difficulty in supporting the change from the initial interest of casual, recreation-based participation to organised sporting competition. The Australian inclusion spectrum identifies that opportunities can be drawn from a variety of delivery methods. The data were less clear on the elite athlete pathway constraints, enablers and the factors that trigger the movement of an individual from retention to transition to elite levels and, ultimately, nurturing of high-level performers. This research has primarily focused on stage one — attraction and retention — due to the parameters of the project. Further research is needed to more fully explore pathways for sport development for people with disability.

Participation
I receive the feeling of accomplishing something and feeling
alive and feel that I can achieve anything I want to.
— ASC online survey, 2010

Abbreviations

ASC   Australian Sports Commission

DDA   *Disability Discrimination Act 1992* (Cwth)

DSP   Disability Service Provider

DSU   Disability Sport Unit

ERASS Exercise Recreation and Sport Survey

FSDP   Framework of Sport Development Process

GSS   General Social Survey (Australian Bureau of Statistics, 2002, 2006)

JAGS   Jandowae Adaptive Games Society

PWD   People with disability

SCORS Standing Committee on Recreation and Sport

SDAC   *Survey of Disability, Ageing and Carers* [33,34,35]

References

1   Australian Bureau of Statistics (ABS) 2006, *General Social Survey*, *cat. no. 9155.0*, ABS Canberra.

2   National People with Disabilities and Carer Council 2009, *Shut Out: the experience of people with disabilities and their families in Australia — National Disability Strategy Consultation Report*, prepared by the National People with Disabilities and Carer Council, Canberra.

3   United Nations 2006, *Convention on the Rights of Persons with Disabilities*, New York www.un.org/esa/socdev/enable/rights/convtexte.htm: United Nations General Assembly A/61/611, 6 December 2006.

4   United Nations 2008, *Landmark UN Treaty on Rights of Persons with Disabilities Enters Into Force,* 3 May (viewed 12 May 2008), www.un.org/esa/socdev/enable/rights/convtexte.htm and www.un.org/apps/news/story.asp?NewsID=26554&Cr=disab&Cr1=.

5   Cozzillio, MJ and Hayman, RL 2005, *Sports and inequality,* Carolina Academic Press, Durham, NC.

6   Darcy, S 2002, 'Marginalised participation: physical disability, high support needs and tourism', *Journal of Hospitality and Tourism Management*, 9(1), pp. 61–72.

7   Rimmer, JH, Rubin, SS and Braddock, D 2000, 'Barriers to exercise in African American women with physical disabilities', *Archives of Physical Medicine and Rehabilitation*, 81(2), pp. 182–8.

8   Jackson, EL 2000, 'Will research on leisure constraints still be relevant in the twenty-first century?', *Journal of Leisure Research*, 32(1), pp. 62–8.

9   Jackson, EL and Scott, D 1999, 'Constraints to leisure', in *Leisure studies: prospects for the twenty-first century*, EL Jackson and TL Burton (eds), Venture Publishing Inc., State College, PA, pp. 299–332.

10   Driver, BL, Brow, PJ and Peterson, GL 1991, *Benefits of Leisure*, Venture Publishing Inc., State College, PA.

11   Liu, YD, 2009, 'Sport and social inclusion: evidence from the performance of public leisure facilities', *Social Indicators Research*, 90(2), pp. 325–37.

12   Aitchison, C 2003, 'From leisure and disability to disability leisure: developing data, definitions and discourses', *Disability and Society*, 18(7), pp. 955–69.

13   Vanner, EA, Block, P, Christodoulou, CC, Horowitz, BP and Krupp, LB 2008, 'Pilot study exploring quality of life and barriers to leisure-time physical activity in persons with moderate to severe multiple sclerosis', *Disability and Health Journal*, 1(1), pp. 58–65.

14   Garber CE, Allsworth JE, Marcus BH, Hesser J and Lapane, KL 2008, 'Correlates of the stages of change for physical activity in a population survey', *American Journal of Public Health*, 98(5), p. 897.

15   Murphy, NA and Carbone, PS 2008, 'Promoting the participation of children with disabilities in sports, recreation, and physical activities', *Pediatrics*, 121(5), p. 1057.

16   Darcy, S and Cashman, R 2008, *Chapter 12 — Legacy*, in *Benchmark Games: The Sydney 2000 Paralympic Games*, in R Cashman and S Darcy (eds), Walla Walla Press, in conjunction with the Australian Centre for Olympic Studies; Petersham, NSW, pp. 218–31.

17   Independent Sport Panel 2009, *The Future of Sport in Australia* (The Crawford Report), Australian Sports Commission, Canberra.

18   Smith, RW, Austin, DR, Kennedy, DW, Lee, Y, and Hutchison, P 2005, *Inclusive and Special Recreation: opportunities for persons with disabilities,* 5th edn, NY: McGraw Hill, New York, NY.

19   Patterson, I and Taylor T 2001 (eds), *Celebrating Inclusion and Diversity in Leisure*, HM Leisure Planning Pty Ltd, Melbourne.

20   DePauw, KP and Gavron, SJ 2005, *Disability and Sport,* 8th edn, Human Kinetics, Champaign, IL.

21   Oliver, M 1996, *Understanding Disability: from theory to practice,* Macmillan, Basingstoke, Houndmills.

22   Barnes, C 1996, 'Theories of disability and the origins of the oppression of disabled people in western society', in L Barton (ed.), *Disability and Society: emerging issues and insights*, Longman, New York, pp. 40–59.

23   Goggin, G and Newell, C 2005, *Disability In Australia: exposing a social apartheid,* University of New South Wales Press, Sydney, NSW.

24   Australian Sports Commission 2010, *ASC recognition* (viewed 1 July 2010), www.ausport.gov.au/ supporting/nso/asc_recognition.

25   Australian Sports Commission and Standing Committee on Recreation and Sport 2010, *Participation in Exercise, Recreation and Sport Survey 2009,* Australian Sports Commission and Standing Committee on Recreation and Sport, Canberra.

26   Australian Sports Commission 2010, *Exercise Recreation and Sport Survey (ERASS),* 2010 (viewed 1 July 2010), www.ausport.gov.au/information/scors/ERASS.

27   US Department of Health 2008, *2008 Physical Activity Guidelines for Americans,* US Department of Health, Washington, DC.

28   VicFit 2010, *Promoting Physical Activity for All Abilities*, VicFit, Melbourne.

29   Darcy, S and Veal AJ 1996, 'Australia', in G Cushman, AJ Veal, and J Zuzanek (eds), *World Leisure Participation: free time in the global village*, CAB International, Wallingford, UK, pp. 17–35.

30   Australian Sports Commission and state and territory government agencies 2001–09, *Exercise, Recreation and Sport Survey (ERASS)*, Australian Sports Commission, Canberra.

31   Australian Bureau of Statistics 2002, *General Social Survey*, cat. no. 9155.0, ABS, Canberra.

32   Australian Bureau of Statistics 1988, *Disability and Handicap, Australia 1988, c*at. no. 4120.0, ABS, Canberra.

33   Australian Bureau of Statistics 1993, *Disability, Ageing and Carers, Australia: summary of findings,* cat. no. 4430.0, ABS, Canberra.

34   Australian Bureau of Statistics 1998, *Disability, Ageing and Carers: summary of findings,* cat. no. 4430.0, ABS, Canberra.

35   Australian Bureau of Statistics 2003, *Disability, Ageing and Carers, Australia: summary of findings,* cat. no. 4430.0, ABS: Canberra. p. 11.

36   Packer, T, Briffa, T, Downs, J, Ciccarelli, M and Passmore, A 2006, *PASCAD-Physical Activity Study of Children and Adolescents with Disabilities in Perth, Western Australia,* Curtin University, Perth.

37   Australian Bureau of Statistics 1995, *Australian Social Trends: culture and leisure — special feature: a sporting nation*, ABS, Canberra.

38   New South Wales Department of Sport and Recreation 2002, *Participation in Sport and Physical Activities by People with a Disability* (viewed 3 July 2010), www.dsr.nsw.gov.au/research/fact_part_ dis.asp.

39   Sport England 2002, *Adult with a Disability National Sports Survey 2000–2001*, Sport England, London.

40   Sherry, M 2000, 'Exploring the social and political dimensions of access', in *Promises Promises: disability and terms of inclusion*, M Clear (ed.), Federation Press, Sydney, pp. 126–37.

41   Barnes, C, Mercer, G and Shakespeare, T 2101, *Exploring Disability: a sociological introduction,* 2nd edn, Polity Press, Malden, Mass.

42   Lockwood, R and Lockwood, A 1999 (eds), *Recreation and Disability in Australia,* 1st edn, DUIT Multimedia, Perth.

43   Hutchison, P 1997, 'Citizenship — setting the scene' (keynote address) in *Citizenship … Beyond Disability Conference,* NICAN, Brisbane.

44   Jackson, EL 1991, 'Leisure constraints/constrained leisure: special issue introduction', *Journal of Leisure Research*, 23, pp. 279–85.

45   Crawford, DW and Godbey, G 1987, 'Reconceptualizing barriers to family leisure', *Leisure Sciences*, 9(2), pp. 119–28.

46   French, D and Hainsworth, J 2001, '"There aren't any buses and the swimming pool is always cold!": obstacles and opportunities in the provision of sport for disabled people', *Managing Leisure*, 6(1), pp. 35–49.

47   Smears, L 1996, 'Researching disability: a response to Karla Henderson, Leandra Bedini, Lynn Hecht and Rosemary Schuler', *Leisure Studies*, 15(1), pp. 79–81.

48   Crawford, DW, Jackson, EL and Godbey, G 1991, 'A hierarchical model of leisure constraints', *Leisure Sciences*, 13, pp. 309–20.

49   Fitzgerald, H, Jobling, A and Kirk, D 2003, 'Valuing the voices of young disabled people: exploring experience of physical education and sport', *European Journal of Physical Education*, 8(2), pp. 175–200.

50   Van der Ploeg, H, Van Der Beek, AJ, van der Woude, L and van Mechelen, W 2004, 'Physical activity for people with a disability: a conceptual model', *Sports Medicine*, 34(10), pp. 639–49.

51   Bedini, LA 2000, '"Just sit down so we can talk": Perceived stigma and community recreation pursuits of people with disabilities', *Therapeutic Recreation Journal*, 34(1), pp. 55–68.

52   Bedini, LA and Henderson, KA 1994, 'Women with disabilities and the challenge to leisure service providers', *Journal of Parks and Recreation Administration*, 12(1), pp. 17–34.

53   Hunter, DW 1984, 'Social constraints on the play behavior of the disabled person', *Journal of Leisurability*, 11(4), pp. 8–12.

54   Perry, TL 1994, *The Experience of Leisure Constraints by Families Who Have Children with Physical Disabilities*, Pennsylvania State University, PA, p. 214.

55   Wade, MG and Hoover, JH 1984, 'Mental retardation as a constraint on leisure', in MG Wade and M Ellis (eds),*Constraints on Leisure*, CC Thomas, Springfield, Ill, pp. 83–110.

56   Dattilo, J, Caldwell, L, Lee, Y and Kleiber, DA 1988, 'Returning to the community with a spinal cord injury: implications for therapeutic recreation specialists', *Therapeutic Recreation Journal*, 32(1), pp. 13–27.

57   Henderson, KA and Bedini, LA 1997, 'Women, leisure, and "double whammies": empowerment and constraint', *Journal of Leisurability*, 24(1), pp. 36–46.

58   Henderson, K, Bedini, LA, Hecht, L and Schuler, R 1995, 'Women with physical disabilities and the negotiation of leisure constraints', *Leisure Studies*, 14(1), pp. 17–31.

59   Oliva, GA and Simonsen, A 2000, 'Re-thinking leisure services for deaf and hard of hearing persons: a new paradigm', *Parks and Recreation*, 35(5), pp. 78–85.

60   Hubbard, J and Mannell, RC 2001, 'Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting', *Leisure Sciences*, 23(3), pp. 145–63.

61   Kayes, NM, Schluter, PJ, McPherson, KM, Taylor, D and Kolt, GS 2009, 'The physical activity and disability survey — revised (PADS-R): an evaluation of a measure of physical activity in people with chronic neurological conditions', *Clinical Rehabilitation*, 23(6), pp. 534–43.

62   Rimmer, JH, Riley, B, Wang, E, Rauworth, A and Jurkowski, J 2004, 'Physical activity participation among persons with disabilities barriers and facilitators', *American Journal of Preventive Medicine*, 26(5), pp. 419–25.

63   Lord, E and Patterson, I 2008, 'The benefits of physically active leisure for people with disabilities: an Australian perspective', *Annals of Leisure Research*, 11, pp. 123–44.

64   Freudenberg, P and Arlinghaus, R 2010, 'Benefits and constraints of outdoor recreation for people with physical disabilities: inferences from recreational fishing', *Leisure Sciences*, 32(1), pp. 55–71.

65   NICAN 2005, *NICAN's National Recreation Guidelines,* NICAN, Canberra.

66   NICAN 2005, *NICAN's 10 Step Guide Line Checklist,* NICAN, Canberra.

67   Blauwet, C 2005, *Promoting the Health and Human Rights of Individuals with a Disability Through the Paralympic Movement*, International Paralympic Committee, Bonn, Germany.

68   Sotiriadou, K 2005, 'The sport development processes in Australia', abstract in *School of Leisure, Sport and Tourism*, University of Technology, Sydney, Australia.

69   Sotiriadou, K, Shilbury, D and Quick, S 2008, 'The attraction, retention/transition, and nurturing process of sport development: some Australian evidence', *Journal of Sport Management*, 22, pp. 247–72.

70   Sotiriadou, K, Quick, S and Shilbury, D 2006, 'Sport for "some": elite versus mass participation', *International Journal of Sport Management*, 7(1), pp. 50–66.

71   Green, M and Collins, S 2008, 'Policy, politics and path dependency: sport development in Australia and Finland', *Sport Management Review*, 11(3), pp. 225–51.

72   Thomson, A, Darcy, S and Pearce, S 2010, 'Ganma theory and third-sector sport-development programmes for Aboriginal and Torres Strait Islander youth: implications for sports management', *Sport Management Review*, 13(4), pp. 313–30.

73   Hylton, K 2005, '"Race", sport and leisure: lessons from critical race theory', *Leisure Studies*, 24(1), pp. 81–98.

74   Houlihan, B 1997, *Sport, Policy, and Politics: a Comparative Analysis*, Routledge, London, New York.

75   Stewart, B 2004, *Australian Sport: Better by Design? The Evolution of Australian Sport Policy*, Routledge, London, New York.

76   Gratton, C and Taylor, P 2000, *Economics of Sport and Recreation,* 2nd edn, E&FN Spon, London, New York.

77   Human Rights and Equal Opportunity Commission 2007, *The Good, the Bad and the Ugly: Design and Construction for Access*, 2007 (viewed 5 January 2007), 3.1, www.hreoc.gov.au/disability_rights/buildings/good/GBU_Complete.htm.

78   Tiddy, J 2001, *It's Just Not Fair: overcoming discrimination in Australia*, ABC Books, Sydney.

79   Hayward, EH 2002, *No Free Kicks: the experiences of an aboriginal family in Australian rules football*, Curtin University of Technology, Perth.

80   Taylor, T and Toohey, K 1998, *Strategies to Improve Participation of Females from Non-English Speaking Backgrounds*, Australian Sports Commission, Canberra.

81   Environment Communications Information Technology and the Arts References Committee 2006, *'About Time!' Women in Sport and Recreation in Australia*, Commonwealth of Australia, Canberra.

82   Booth, D 1998, 'The race game: sport and politics in South Africa', in JA Mangan (ed), *Sport in the Global Society*, Frank Cass, London, UK.

83   Booth, D and Tatz, C 2000, *One-Eyed: a view of Australian sport*, Allen & Unwin, St Leonards, Sydney.

84   Hargreaves, J 2000, *Heroines of Sport: the politics of difference and identity*, Routledge, London.

85   O'Shea, M 2005, 'Sport's glass ceiling', *Australasian Leisure Management*, September/October (52), pp. 38–40.

86   Thomas, D and Dyall, L 1999, 'Culture, ethnicity and sport management: a New Zealand perspective', *Sport Management Review*, 2, pp. 115–32.

87   Minister of Public Works and Government Services Canada 2005, *Sport Canada's Policy on Aboriginal Peoples' Participation in Sport*, Canadian Heritage, Canada.

88   Australian Sports Commission Disability Sport Unit 2010, *Sports Connect Disability Sector Education Resource Project — Consultation phase report*, prepared by the Australian Sports Commission, Canberra.

89   Australian Sports Commission Disability Sport Unit 2010, *Australian Inclusion Spectrum*, Australian Sports Commission and Standing Committee on Recreation and Sport, Canberra.

90   Darcy, S, Murphy, A, Tahlor, T and Lock, D 2010b, *Interim Report to the Australian Sports Commission: Keepad Disability forum data*, Australian Sport Commission, Canberra.

91   SPSS 2002, *Help File: Statistical Package for the Social Sciences (v11 Windows Edition)*, v11 (ed.), Chicago, Ill.

92   Veal, AJ 2006, *Research Methods for Leisure and Tourism: a practical guide,* 3rd edn, Pearson Education Limited, Essex, UK.

93   Rimmer, JH 2005, 'The conspicuous absence of people with disabilities in public fitness and recreation facilities: lack of interest or lack of access?', *American Journal of Health Promotion*, 19(5), pp. 327–9.

94   Darcy, S 2001, 'People with physical disabilities and leisure', in I Patterson and T Taylor (eds) *Celebrating Inclusion and Diversity in Leisure*, HM Leisure Planning Pty Ltd, Melbourne, pp. 59–80.

95   Daruwalla, PS and Darcy, S 2005, 'Personal and societal attitudes to disability', *Annals of Tourism Research*, 32(3), pp. 549–70.

96   Darcy, S, Murphy, A, Taylor, T and Lock, D 2010a, *Interim Report to the Australian Sports Commission: focus group summary*, Australian Sport Commission, Canberra.

97   Dillman, DA 2000, *Mail and Internet Surveys: the tailored design method*, John Wiley, New York.

98   Darcy, S 2008, *Working Paper No 10: accessible tourism accommodation information preferences*, School of Leisure, Sport and Tourism, University of Technology, Sydney.

99   Darcy, S 2009, *Inherent Complexity: disability, accessible tourism and accommodation information preferences.* Tourism Management, doi:10.1016/j.tourman.2009.08.010 (in-press and published online), pp. 1–11.

100   Darcy, S and Cameron, B 2008, 'Accommodating tourism: hotel accommodation, accessible tourism and market principles: evidence-based research', *Independent Living: official journal of Independent Living Centres Australia*, 24(4), pp. 24–8.

101   Darcy, S 2009, 'E-approaches to destination management: the case of Sydney for all visitor accessibility in the Sydney CBD', in *Critical Tourism and Hospitality Symposium,* UTS Epress University of Technology, Sydney.

102   Darcy, S, Murphy, A, Taylor, T and Lock, D 2010c, *Interim Report to the Australian Sports Commission: Survey of People with Disabilities Sport and Active Recreation Participation*, Australian Sport Commission, Canberra.

103   Burns, RC, Graefe, AR and Absher, JD 2003, 'Alternate measurement approaches to recreational customer satisfaction: satisfaction-only versus gap scores', *Leisure Sciences*, 25(4), pp. 363–80.

104   Australian Bureau of Statistics 2007, *Australian Demographic Statistics, Sept 2006*, cat. no. *3101.0*, ABS, Canberra.

105   Walsh, S 2009, 'No ordinary Joh', *Sunday Mail Adelaide,* Adelaide, p. 39.

106   Mackney, S 2009, 'Pat's love of sport passes test', in *Northern Star,* Ballina.

107   Case, J 2010, 'The gift of the guernsey: CONNECTIONS', in *The Age,* Melbourne, p. 16.

Appendix 1: Sample size and confidence intervals

As noted in section 3.4.6, the survey must account for a margin of error (or confidence interval), and therefore to make an estimation of the true population the following confidence intervals must be used when interpreting results throughout the report.

Result (n=1050)	95% Confidence interval
50%	+/- 3.1
40/60%	+/- 3.0
30/70%	+/- 2.8
20/80%	+/- 2.5
10/90%	+/- 1.9
5/95%	+/- 1.3

The following example explains how these figures can be applied. It was found that 58% of the sample was male, and this means that there is an estimated 95% chance that this figure lies somewhere between 55% and 61%, or 58 +/- 3.0 in the true population. The interval for female representation is 39% to 45%, or 42 +/- 3.0 and as these two intervals do not overlap, we can state that these two groups are significantly different.

If it is found that the results of another question in this report overlap once the confidence intervals are applied, it means that the difference between groups is not significant.

Appendix 2: ASC expression of interest — Disability Sport Unit research project

Purpose

The Australian Sports Commission (ASC) seeks an experienced university to undertake a research project for the Disability Sport Unit (DSU). The research project is focused on understanding the issues surrounding People with Disabilities (PWD) participation in sport and physical recreation.

Specifically, the expression of interest (EOI) seeks to:

1. Develop a sound research approach for the conduct of the Disability Sport research project ensuring that the key objectives are met.

2. Conduct studies with PWD and Disability Service Providers (DSP) to understand the barriers and benefits of participation in sport and physical recreation.

3. Compile research reports coming out of the project which could include, but not be limited to: research reports, conference presentations and journal publications.

Background

This EOI is focused on a research project for the Australian Sports Commission's Disability Sport Unit (DSU). The research may involve a number of components including review of existing data, an online survey and a qualitative study utilising focus groups. The ASC seeks a suitably qualified and experienced university to undertake the research.

Objectives

The research project aims to provide an evidence based position to inform government, sport, and the disability sector about the factors that influence the participation of People with Disabilities (PWD) in sport and physical recreation.

The primary objectives of the research are to:

1. Identify the full range of factors that prevent PWD from participating in sport and physical recreation.

2. Identify and provide an understanding of the benefits PWD derive from participating in sport and physical recreation.

3. Identify the attitudes and perceptions that influence the participation of PWD in sport and physical recreation.

4. Identify the key messages that would be most effective at influencing the participation of PWD in sport and physical recreation.

5. Identify the extent and range of opportunities currently being provided by the disability service or sport and recreation provider.

Appendix 3: Easy English questionnaire summary findings

Demographics

- Number of people to complete the questionnaire was 69.
- The average age of respondents was 51
- The sample was over-represented by males (58.8%)
- Of the respondents, 7.7% identified as being of Aboriginal or Torres Strait Islander origin
- Of the respondents, 78.3% identified as having an intellectual disability

Current participation

- The four most common activities were:
  - walking
  - swimming
  - gymnasium workouts
  - tenpin bowling (bowling).
- Participation:
  - 89.9% said that they participate at least once a week
  - 44.9% said that they participated with other disability service users in at least one of their activities
  - 49.3% said they required assistance from a support worker to enable participation.

Constraints

- Of the respondents, 40.6% identified an interest in trying another sport or activity
- Common reasons preventing respondents from trying new sports/activities were:
  - cost/money
  - not enough support
  - transport
  - too busy.