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Participant-reported benefits of involvement in an adaptive sports program: a qualitative study

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Abstract

Background—While participation in adaptive sports offers numerous benefits for persons with disabilities, a substantial number of eligible persons do not take part. Previous studies have identified personal and environmental factors that promote or inhibit adaptive sports participation. However, these studies have considered a relatively narrow range of factors.

Objective—Use qualitative research techniques to identify novel factors that influence participation in a community-based adaptive sports program.

Design—Qualitative focus group study

Setting—Community-based adaptive sports programs affiliated with a rehabilitation hospital network

Participants—Participants were recruited from among 134 adults who registered for the sports program in 2013–2014. We included participants with mobility or sensory impairment, absence of cognitive impairment, and English proficiency. We contacted the 91 former participants with adequate contact information; 17 participated in the focus groups.

This study utilized no medical devices.

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Methods—Two moderators led each of three audio-recorded focus groups utilizing a moderator's guide. We conducted a thematic analysis of transcript data to identify perceived benefits, barriers, and facilitators of participation.

Results—Our analysis identified five themes: physical well-being and health/safety; interpersonal and social relationships; intrapersonal and beliefs/attitudes; physical environment; and access. Participants experienced participation both as physically beneficial and as transformative in terms of how they view themselves. However, programs drew on limited personal resources and sometimes presented a perceived risk of injury. Finding information about and transportation to programs was a challenge. Participants formed an informal community that modeled what athletes with disabilities are capable of, helping to overcome initial doubts.

Conclusions—To gain the benefits of participation, athletes overcame significant barriers, several of which may be modifiable, including transportation and hard-to-find information about program offerings. The importance of community and raising awareness of athletes' own abilities suggests a key role for mentorship. Our study contributes to the understanding of experiential aspects that motivate participation in adaptive sports.

INTRODUCTION

The 53 million adults in the United States who have a disability[1] are at high risk for physical inactivity; only 53% report engaging in at least one 10-minute bout of aerobic physical activity (PA) in a week, compared with 74% of non-disabled adults [2]. Persons with disabilities may be less likely than those with no disability to receive the physical, psychological, and social benefits of regular PA [3,4,5,6]. The documented benefits of PA for persons with disabilities are many, from chronic disease prevention and increased muscle strength [3,4] to condition-specific improvements such as improved cognitive functioning after stroke or traumatic brain injury [5,7]. Organized sports for athletes with a disability, or adaptive sports, may offer similar benefits, given that most sporting activities involve some component of PA. Additionally, adaptive sports provide social interactions within sporting environments; contribute to improved social integration, affect, and life satisfaction; and potentially impact the likelihood of returning to competitive employment [8,9,10,11,12]. Recognizing the importance of sports for wellbeing, the 2006 United Nations Convention on the Rights of Persons with Disabilities considered equal access to sports a universal right [13].

The numerous benefits of adaptive sports have prompted interest in promoting participation [14]. This necessitates identifying factors associated with participation in sports, as well as influences that help or hinder an individual's involvement. Known facilitators include social support and increased positive affect and self-efficacy; barriers include transportation, program funding, and cost to the individual [14,15,16,17]. Previous studies have evaluated a limited scope of factors that may be associated with participation in adaptive sports. This points to a need to identify additional personal, environmental, and experiential factors that could potentially contribute to participation [18,19]. Qualitative methods are well suited to these objectives [14,18]. To gain a fuller appreciation for such factors, we conducted a qualitative study of registrants in an adaptive sports program who were diverse with respect to choice of sport, functional status, and etiology of disability. The aim was to elicit

participant-reported factors that act as barriers or facilitators to sustained participation in adaptive sports.

METHODS

Design and Participants

We performed a qualitative study using a focus group approach. Subjects were recruited from a pool of 134 individuals who registered for a community-based adaptive sports program that serves three regions of Massachusetts and is affiliated with a major rehabilitation hospital network. This pool of potential subjects comprised participants in a previous study who had registered for the adaptive sports program between June 1, 2013 and June 1, 2014. Criteria for inclusion in the prior study (protocol published elsewhere)[20] were presence of a mobility or sensory impairment, absence of concomitant cognitive impairment, age between 18 and 60 years, and the ability to speak or write in English.

For the present study, we contacted all previous participants who provided a phone number and mailing address. We sent recruitment letters to these 91 subjects explaining the study procedures, risks and benefits, and remuneration, and providing an opportunity to opt out; those who did not opt out within five business days were contacted by telephone. Study coordinators conducting the calls utilized a script to ensure that communication with potential subjects was standardized and all elements of informed consent were observed. Potential focus group participants were offered several time slots and locations to ensure the generalizability of participant input. The Institutional Review Board of Partners HealthCare approved all study activities.

Seventeen subjects took part in three focus groups of five, ten, and two subjects, respectively. Although similar numbers registered for each group, attendance varied. Focus groups took place in October 2016 at the main facility of the hospital network. Two investigators moderated each focus group utilizing a moderator's guide (JK/MG, EL/ECL, EL/ECL for the three groups, respectively). None of the researchers had worked with the participants previously.

Themes for Discussion

The guide featured open-ended questions that addressed a) perceived benefits and drawbacks of the programs, b) perceived barriers and facilitators to participation, and c) suggestions for improving the programs (Table 1). Each group lasted between one and two hours and was audio recorded digitally, de-identified, and transcribed by one co-author (ECL). The analytic dataset included all three transcripts.

Analysis

The dataset was analyzed using the thematic analysis procedure outlined by Braun & Clarke [21]. Thematic analysis is a widely used qualitative method that does not rely on a particular theory or epistemology [21]. The coding process began with each co-author reading approximately one-third of the transcript text and assigning codes to identify the most basic segments of data deemed meaningful in relation to the guiding questions: *“What factors*

bring people to these programs and sustain their participation? What factors make participation difficult?” The investigators then met to develop an initial coding scheme. We coded the entire dataset according to this scheme, adding codes until no further unique ideas emerged (ECL, HK). Coding resulted in 57 codes grouped into seven categories (see online Appendix A). All investigators reviewed the refined coding scheme.

Next, four investigators searched for themes in the entirety of the coded transcripts (JK, CB, ECL, HK). Whereas codes identify basic elements of data, which do not address particular hypotheses, themes serve to group individual codes and express broader patterns in the data that reflect on the questions guiding the research. This stage of the analysis produced a candidate thematic scheme, consisting of themes, subthemes, and explanatory statements describing the relationships among codes and themes. Quotations from the transcripts were collated under these themes using qualitative data analysis software (Dedoose) (ECL, HK). Each theme was reviewed for a) its ability to describe the excerpts coded under it and b) its coherence according to the principles of internal homogeneity (concepts collated under a theme are similar to each other) and external heterogeneity (concepts collated under a theme diverge from those under other themes) [21]. We refined the candidate thematic scheme accordingly (ECL, HK, JK). We portrayed the themes visually in a thematic map (Figure 1), which was approved by all investigators.

RESULTS

Participants

Fourteen of the 17 participants were female and participants ranged in age from 21 to 63 (Table 2). Ten reported using a power or manual wheelchair and seven were ambulatory. At least nine distinct causes of disability were reported by participants, with spinal cord injury (SCI), traumatic brain injury (TBI), and cerebral palsy (CP) being the most prevalent. The median number of years since diagnosis or injury was 22.5 (range 5–52) for the 14 participants with data available. Five had had their disability since birth.

All participants had been involved in adaptive sports for at least 2–2.5 years before the focus groups occurred. The programs for which the greatest number of participants had registered were cycling, sailing, golf, and a multi-sport program offering cycling and a variety of water sports (Table 2). Most participants (12) had registered for two or more sports.

Thematic Analysis

We identified five themes, which encompass nine additional subthemes: 1) physical well-being and health/safety; 2) interpersonal and social relationships; 3) intrapersonal and beliefs/attitudes (four subthemes); 4) physical environment; and 5) access (five subthemes) (Figure 1). In the following sections, we present each theme and discuss its associated hypotheses along with supporting data. (Online Appendix B provides a table listing all quotes associated with each of these themes). We identified facilitators and/or barriers within each theme (see also Table 3).

A. Physical well-being and health/safety—Participants perceived benefits related to the physical effects of participation, including improved strength and balance, mood

regulation, maintenance of a healthy weight, and improved function for daily living. Several participants described adaptive sports as an alternative to working out in a gym that was more engaging but could deliver similar physical benefits.

“You create some endorphins, and you’ve got your circulation working better [...] it’s really had an effect on [...] my whole outlook...”

However, significant barriers arose from the threat of injury. Time, equipment, effort, and staff expertise were needed to facilitate safe participation. One woman described preparing for her first experience with downhill skiing:

“I kind of went three weeks before [the skiing program] to figure out how to make it a little bit more safe.”

Injury was a consideration when beginning a sport, but also throughout participation. Seating was mentioned as a concern due to the risk of skin breakdown. For those with paralysis, problems with body temperature regulation in winter sports were also commonly noted. Pushing oneself too hard, or “overdoing it,” could cause injury and close off potential sport options:

“You’re enjoying [...] the sport, but like if you fall or injure yourself, it might prevent you from doing it like in the future.”

In discussing health and safety barriers, participants tended to bring up how they had, or might, overcome such barriers. Staff were seen as vital in ensuring safety for athletes and putting their minds at ease:

“And a big deal— even til today, it’s the safety. [...] I’ve had my little incidents but there’s somebody there so you know I’m not trying to attempt things on my own where I know I would just hurt myself.”

Participant attitudes also helped them cope with the risk of injury. For many, pushing to the edge of safety was apparently a thrill and a source of pride:

“I don’t mind taking that jump or leap, because I’m a daredevil.”

Others used humor to tackle the risks and potential indignities of challenging sports:

“I love the canoeing and the windsurfing, although I spent more time in the water than I did on top of the windsurfer.”

B. Interpersonal and social relationships—Social relationships with staff and with peers promoted participation, both through the general draw of social relationships, and through direct encouragement to take part. Staff members’ genuine desire to see participants enjoy sports was seen as reinforcing:

“They appear to really genuinely like having you there, [...] it’s like it makes them feel good to see you succeed.”

Several participants with experience as mentors remarked on the pleasure of helping others to receive the benefits of sports. One man described mentoring youth in wheelchair basketball:

“I’m always passing the ball to them. [...] and they go and they dunk the ball in the little thing and they do this little happy dance...[laughter] [...] Yeah just to see them. It makes me feel good.”

A participant who was also a ski coach commented:

“It’s such a gratification for us that we have another person outside of their house in November, December, January, February.”

Peers were a key source of information about what programs were available and what athletic feats might be possible. Information about programming was shared within sports groups, among friends, and at support groups. Peers also served as role models, expanding participants’ knowledge about what they as individuals were capable of. Watching other athletes and “*seeing what other people in wheelchairs were doing that I could also do*” could be an “*eye-opening*” experience. However, others noted that athletes with disabilities had little exposure to such role models.

Through participating in sports as a community of athletes, focus group participants were able to reframe disability and emphasize the unique abilities of athletes with disabilities. The accomplishments of peers were a source of pride and admiration:

“I don’t know anything about how he’s blind [...] except he’s one of the finest windsurfers I’ve seen [...] I find it admirable.”

Participants expressed that tapping into the potential of multiple athletes with disabilities could advance the community as a whole by, for example, helping to develop Paralympic teams:

“We try sports that we might’ve never tried. [...] That’s how our [Paralympic] team develops in all our different sports.”

Finally, there were chances to integrate with non-disabled athletes and “*have them see what I do*.”

C. Intrapersonal and beliefs/attitudes

1. Transcendence of disability identity: Participants noted that participation transforms or strengthens a positive identity and beliefs about the self. Through claiming or reclaiming athletic identities, participants transcended their identities as persons with disabilities:

“What I loved the most was that [...] I felt more like an athlete than a person with a disability doing sport.”

Sports drew attention toward ability and away from limitation:

“It’s like, you don’t see your wheelchair as a boundary.”

An athletic identity provided constancy even as abilities and circumstances changed:

“I’ve started sports since I was little [...] I always um played um basketball standing up. So when my disorder got worse it was easy to transit—to sittin’... So I’ve been competitive all my life.”

Some framed the onset of disability as a transition, a way to engage with sports they would not have tried otherwise:

“After I couldn’t skate anymore competitively, I thought that was gonna be it, for that. And, but then [...] I started working with Ross and everyone else [...] in the adaptive sports program. And it, it just opened so many new doors, and helped me realize that even if I couldn’t skate for right now, I could at least find other different types of sports that I had never even thought I’d ever get the opportunity to do.”

Self-concept also developed around sports for which one had a loyalty or affinity:

“My favorite sport [...] is the windsurfing. I’ve been doing that since I met Ross, so when I was 10. [...] I just love the feeling of going through the wind and honestly it really feels like you’re flying.”

2. Abilities and self-efficacy: Doubts about ability were a common barrier. However, discussions revealed that participation tended to dissolve these doubts; improving at a sport increased confidence and promoted future participation. Mastering one’s physical environment contributed to feelings of self-efficacy:

“You need to keep your balance, you need to learn how to like make turns, how to stop the horse, how to move on again [...] it’s like constant challenge for you.”

3. History with sport: As would be expected, attitudes varied among individuals, often due to personal history with sports. While some valued sports mainly for their physical benefits, others sought to maintain a self-concept as competitive, risk-taking, or athletic. Some wished to regain pre-disability activities:

“I used to climb the [...] Appalachian, you know? [...] And I miss it terribly.”

Some had memories of exclusion in non-adaptive settings; some noted a transition in their feelings about a sport, preferring the adaptive version:

“I hated dancing in [a non-adaptive context] but wheelchair dance I loved.”

Many seemed to value long-term loyalty to a particular sport or sports.

4. Valuing challenge and experimentation: Certain commonly shared values promoted participation. Experimentation was seen as positive in and of itself, and as a way to find sports that one might come to love:

“We try sports that we might’ve never tried. [...] you never know what you’re gonna love.”

Similarly, many valued challenge as a chance for personal growth:

“Like I said just with the speed banking [...] I asked them at the gym, can you lower it for me? They lowered it for me. Now, I love it because it’s almost like you’re dancing. When I’m hitting, I’m gettin good rhythm, I’m gettin good core, balance, and that’s what you have to do is you have to challenge yourself and you have to believe in yourself.”

The sports activity itself presents a challenge, but so does the entire process of participation; there are challenges inherent in navigating transportation and in simply being ‘out and about’ in spaces unfriendly to people with disabilities. Participants took pride in facing these challenges:

“A lot of people I live with [...] they don’t leave the facility. [...] Every day that’s nice I’m out. And, people who work there will say, ‘Where’s [name]?’ ‘She’s out.’ [...] Damn straight. I’m gonna make the best of every day. And that’s how I feel about windsurfing.”

Engaging in sports was an expression of boldness and a desire to break out of a small or limited personal world. However, not all participants valued experimentation equally. Challenge and uncertainty could also be barriers.

D. Physical environment—The locations of program sites contributed to the draw of participation, but also created barriers to access. At the sites in Boston and on Martha’s Vineyard, tourism and natural beauty brought participants back time and again. The chance to be outdoors was also valued. However, accessing more distant locations required more time, money, and emotional and physical resources. Consistent participation was more challenging in sports that were seasonal or weather-dependent:

“I went to sailing in Piers Park. I...there was no wind that day, what’re you gonna do? It wasn’t all that exciting.”

E. Access

1. Adaptiveness: Committed, expert staff accommodated the needs of individuals with the help of adaptive equipment, allowing participants to safely engage in a wide variety of sports. This universality was a source of wonder and pride:

“But we always say there’s no one that we can think of that can’t ski. We have um quad amps [...] they’re able to snowboard, they’re able to ski.”

However, participants noted a lack of widespread awareness about what specific adaptive sports entail. As an adaptive sport is not always the same as the non-adaptive sport of the same name, preconceived ideas of a sport were often barriers to trying it:

“How do you bicycle when you can’t bend your knees? I was like, that makes no sense at all to me [...]. And then I saw the, the film thing they have going across the wall there [...] and I was like, oh I can do that. [...] That’s what got me into a different mental state [...] Cause nothing anybody said to me was changing my history of what I knew those things to be.”

The key for this participant was raising awareness of how adaptive cycling could be suited to her abilities. Participants expressed concern that, much of the time, potential athletes with disabilities lack this critical awareness.

2. Knowledge acquisition: Focus group participants accessed information about program offerings through word of mouth, the rehabilitation process, and continued contact with the

rehabilitation hospital. However, they were familiar with the difficulty of finding program information:

“It’s amazing how many programs that are offered that nobody knows about. You really have to dig.”

Participants also reported that medical professionals frequently either lacked or did not volunteer information about adaptive sports.

“We need more education [...] for medical doctors, um I think that we need more publications [...] whether we’re in a wheelchair, or missing a leg, or able to run [...] as able bodied athlete [...] we’re all athletes. And I just think enough people don’t even realize that there’s adaptive sports unless you’re in the field.”

3. Program facilities and resources: Limited program resources made their effects felt through competition for equipment and appointments. Participants were aware that there was not always funding to replace old equipment or to keep equipment tailored to each participant:

“You know we’re talking money money money.”

Accessible facilities at each program site, particularly restrooms, were especially important to participants.

4. Transportation: Transportation appeared to be a multi-faceted barrier to participation. Travel to and from programs required advance planning and consumed financial, physical, and emotional resources. Experiences with transportation threatened to diminish enjoyment of the programs:

“You won’t get [...] any fun when you already tired.”

Frustration with publicly funded accessible transportation programs was widespread. Participants reported experiencing long waits, inconvenience, and disrespect that threatened their feelings of control and autonomy.

5. Personal resources: Financial cost was mentioned as a greater barrier for some than for others, perhaps due to individual variation in financial resources. Time constraints—including work, school, family, and medical demands—reduced the time available for sports:

“I’d love to do the cycling program. But I can’t get out of my job early enough to get here to do that.”

One common response was to plan ahead in order to reserve limited money, time, and energy for sports.

DISCUSSION

We conducted three focus groups (17 participants) in order to learn about participant-reported facilitators or barriers to participation in a community-based adaptive sports program. After thematic analysis of the transcripts, we found that those who took part repeatedly experienced participation as both beneficial for physical wellbeing and

transformative in terms of how they view themselves. Participants described a community of athletes transcending ‘disability identity’ as they demonstrate mastery and self-efficacy to themselves and to others. In doing so, they claim or reclaim athletic identities, which often have competitive and risk-taking aspects. Social relationships and mentoring (peer-staff and peer-peer) enrich, inspire, and facilitate participation.

Yet, participation may come at a cost. It presents a risk of injury, and it draws on limited financial, emotional, and physical resources, and time. The frustrations of navigating transportation contrast with the support and flexibility experienced in the adaptive sports environment. Many athletes or potential athletes with disabilities lack the necessary information about what programs exist, how adaptive sports differ from their familiar non-adaptive versions, and the feasibility of taking part. On the other hand, for those who access adaptive sports programs, expert staff help create an environment that sustains participation by helping individuals to a) find a ‘match’ for their evolving abilities and safety needs, b) form identities around favorite sports, and c) seek continual challenge and experimentation.

Facilitators were usually personal, social, or attitudinal. Transformation of beliefs about the self—including identity and self-efficacy—played a central role, as in several previous studies of adaptive sports participation [15,17,18]. Our participants reported several barriers identified in prior work among athletes with disabilities: lack of adaptive sports knowledge in the medical community [17], problems accessing information [17], a dearth of role models, finances [17,28,29], safety concerns [17,30], and transportation [18,28,29,30].

However, qualitative methods allowed us to explore perceived benefits in greater detail than other studies to date [14]. It has been noted that only a few qualitative studies have addressed participation in organized adaptive sports [18,22] (on PA participation, see Williams 2014 [17]). Stephens et al. interviewed seven individuals with SCI and identified benefits related to mood, self-beliefs, and seeking challenge [16]. These themes also emerged in our mixed-disability groups.

Of note, our participants also described novel pairings between barriers and the strategies used to overcome them (Table 3). They met pervasive risk of injury with confidence in the support of staff and an appreciation for risk-taking behavior. Overcoming initial misunderstandings, participants came to appreciate the adaptive versions of sports, in contrast with individuals in other studies who expressed disappointment in the less familiar adaptive versions [17]. Planning outings well in advance was used to ameliorate problems with transportation. These new insights into participant strategies can inform program solutions: for example, offering information on safety measures and logistics in advance, or promoting understanding through live or video demonstrations of particular sports.

In the mainly quantitative adaptive sports literature, most studies have been conducted in predominantly male groups [23,24,25]. Our participants (14 of 17 female) add to the smaller literature on females’ experiences with PA and organized adaptive sports [26,27]. Further studies investigating gender differences in experiential aspects of adaptive sports would advance this area of research.

While reducing barriers can create access and thus make participation possible, access alone does not motivate participation; there is also a need to understand experiential aspects of sport if we wish to promote sustained engagement [19]. Experiences beyond what could be noted by an outside observer motivate individuals to take part [19]. These may provide critical insight into how one can promote sustained participation—an important goal when considering the impact of adaptive sports on outcomes related to physical health, function, and community participation. Qualitative studies like ours help to position adaptive sports research within this framework.

A few studies have investigated trajectories of sports participation through injury, rehabilitation, and life post-injury. Often, these focus on sports as an adjunct to formal rehabilitation [23,25]. Quantitative studies suggest that those active pre-injury are more likely to take up sports and to do so sooner, and have longer sports careers on average [23,24,25]. Our study adds a set of personal histories with sport. These narratives highlight how sports can provide a source of consistent identity even as needs and abilities change, as long as there is access to an array of choices suiting different needs.

In placing our findings in a societal context, we make use of the International Classification of Functioning, Disability and Health (ICF), a framework used to describe disability and functioning [31]. Body structures and functions, individual activities, and participation within society are influenced by health, environmental, and personal factors. Our participants elaborated on the role of personal attitudes. Their comments additionally reflected the three subsets of environmental factors in the ICF: physical, social, and attitudinal [31]. As in prior studies, while the physical environment presented barriers [15], social and attitudinal environments predominantly promoted participation: friendships, mentorship, and shared beliefs in the value of engaging with the wider world. The ICF posits a bidirectional relationship between activities (individual) and participation (societal), and this was reflected in our analysis as well. For example, while the community aided individual participants, each individual could also influence the community of athletes by demonstrating ability or serving as a mentor.

As is typical in qualitative studies, our findings should be viewed as hypothesis-generating. All participants in our focus groups had taken part (at least once) in sports programs despite frequently facing challenges; thus, our analysis has limited ability to identify factors that stop non-participants from taking part. Additionally, focus group participants were mainly female, which may limit generalizability to mixed-gender groups, particularly where barriers vary by gender [17]. Particularities of this adaptive sports program may affect generalizability to the broader set of programs across the country and worldwide. For example, natural and tourist attractions should be expected to differ by location, and these may affect the desirability of outdoor programming. Finally, affiliation with a rehabilitation hospital likely influences the characteristics of participants and the ways that they access the programs.

CONCLUSION

Focus group participants reported that involvement in an adaptive sports program provided physical, social, and attitudinal benefits. Yet, these athletes often had to expend limited personal resources to access programs. Our findings have implications for program improvement, within our program and elsewhere. Many barriers could be modified or mitigated, including transportation and hard-to-find information about program offerings. The importance of inspiration and raising an athlete's awareness of his/her own abilities suggests a key role for mentorship. For the field of adaptive sports research, our study contributes to the understanding of experiential aspects that motivate participation, and the transformational role of athletics in overcoming 'disability identity.' Future studies should investigate gender-specific experiential aspects of adaptive sports as well as the experiences of non-participants to identify factors that keep some individuals from regularly taking part. Including adaptive sports in the routine rehabilitation process may be a promising way to help more individuals avail themselves of these benefits.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Figure 1.
Thematic map illustrating the results of thematic analysis: five themes that influence participation in adaptive sports. Subthemes are presented in ovals.

Table 1**Questions Asked by Focus Group Moderators**

<i>Physical activity</i> What do you personally gain from participating in exercise? How important is exercise and why, from your point of view?
<i>Decision to take part</i> How did you first find out about Spaulding Adaptive Sports and make the decision to register the first time? When you have registered for a program, how do you make the day-of decision either to go or not to go? Can you recall instances of deciding not to attend?
<i>Activity choice</i> Do you have one sport or activity that you like attending the most? Why? How did you choose your favorite, and did you try multiple other activities first? Is there any activity you are interested in but hesitant to try?
<i>Challenges to access</i> Has transportation affected your ability to attend activities you registered for? Does it affect your overall experience of the programs? Have financial concerns affected your decision whether to attend a program? Have concerns about interrupting your personal routine interfered with participation?
<i>Program challenges</i> What are the drawbacks of participation in Spaulding activities? In what ways do you think we could improve the program as a whole, or accommodate your needs?
<i>Knowledge about the programs</i> Is there anything that you wanted to know about Spaulding Adaptive Sports before attending an activity? What do you know about the variety of programs offered? How available is information about program offerings? Have your doctors or therapists played a role in your ability to safely participate? Are they knowledgeable about adaptive sports?
<i>Talking with others</i> How would you describe the programs to someone who had never heard of them? How would you, or do you, encourage others to participate and overcome any hesitations?
<i>Building community</i> What is the role of meeting people and socializing?

Table 2

Participant Characteristics

Variable	Number (%) n = 17
Gender	
Female	14 (82)
Male	3 (18)
Age	
15–29	3 (18)
30–44	4 (24)
45–60	7 (41)
60+	3 (18)
Sports registered for	
Multi-sport program	9 (53)
Cycling	8 (47)
Sailing	4 (24)
Golf	4 (24)
Rowing	3 (18)
Kayaking	3 (18)
Yoga	3 (18)
Dance	2 (12)
Nordic skiing	2 (12)
Other *	4 (24)
Type of disability	
Spinal cord injury (SCI)	4 (24)
Traumatic brain injury (TBI)	3 (18)
Cerebral palsy (CP)	3 (18)
Multiple sclerosis (MS)	2 (12)
Other **	5 (29)
Primary mode of mobility	
Manual chair	7 (41)
Power chair	3 (18)
Ambulatory, uses device	4 (24)
Ambulatory, no device	3 (18)

* Other = 1 participant each taking part in rock climbing, basketball, downhill skiing, sled hockey

** Other = 1 participant each with stroke, scoliosis, muscular dystrophy, spasticity, other MSK impairment

Table 3

Barrier-Strategy Pairings Described by Participants

Barrier presented	Strategies to overcome it
Threat of injury	Assistance from program staff Enjoyment of “risk-taking,” identification as “risk-taker” Investing time to figure out how to safely participate before trying new sports
Doubts about abilities	Staff and peer-peer mentorship Watching others with similar disabilities participate Acknowledgement that it can take some time to gain mastery
Lack of awareness about what a given adaptive sport entails or requires	Watching other athletes engage in adaptive sports First-hand experience with new sports
Transportation problems	Planning trips in advance Establishing regular dates and times to participate Setting aside several hours for transportation before/after programs