



# Impact of a Wheelchair Sports Program on its Participants, Caregivers, and Alumni

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## ABSTRACT

**Background:** This study focuses on a wheelchair sports program, ABLE Youth, located in middle Tennessee. ABLE Youth is an organization that promotes independence and wheelchair training through adaptive sports for wheelchair users between the ages of 3-17 years.

**Aim:** This descriptive qualitative study aims to investigate the perceived impact of participation in ABLE Youth on the participants, caregivers, and alumni of the program.

**Methods:** Interview questions were developed by the researchers based on potential areas of impact of the program, input from program director, and a review of relevant literature. Semi-structured interviews were conducted with 20 participants in person or using a video conferencing platform. Interviewers took notes and used the transcription of the video conferencing recording. The data was thematically analyzed using the CDC Excel Tool for Thematic Analysis.

**Results:** Four themes emerged from the research: facilitation of skill development, opportunities for engagement, confidence, and positive effect of role models. These themes were consistent across participants, caregivers, and alumni when asked about ABLE Youth's impact on their lives.

**Discussion:** ABLE Youth fosters a community where participants have opportunities to engage meaningfully while learning and practicing skills, gaining exposure to role models, and building confidence.

**Keywords:** wheelchair users, quality of life, wheelchair sports, skill development, engagement

## DEMOGRAPHICS

Table 1

Demographic Table

	Participants	Caregivers	Alumni
<b>Total</b>	9	7	4
Male	8	3	3
Female	1	4	1
<b>Ages</b>			
5-9 years	-	2*	0
10-15 years	8	4*	0
15-20 years	1	0*	0
21-25 years	0	1*	1
26-30 years	0	0*	3
<b>Diagnosis</b>			
Cerebral Palsy	3	1*	2
Spina Bifida	6	6*	1
Spinal Cord Injury	0	0*	1
<b>Age began use of wheelchair</b>			
0-4 years	5	5*	2
5-8 years	2	2*	2
9-12 years	1	0*	0
<b>Length of travel</b>			
0-20 miles	0	0	NA
21-40 miles	5	4	-
41-60 miles	0	0	-
61+ miles	4	2	-
<b>Length of participation in ABLE Youth</b>			
0-5 years	8	5*	0
6-10 years	0	0*	3
11-15 years	1	2*	1

\*Information regarding caregiver's child

## METHODOLOGY

**Study Design :** A descriptive qualitative study was conducted using semi-structured interviews and recordings to discover the perceived impact of ABLE Youth on different populations associated with the organization. **Participants:** 20 individuals participated in this study consisting of 9 children, 7 caregivers, and 4 alumni. To be included in the study, children and alumni must have attended at least 5 ABLE Youth events, be at least 10 years of age, and be a wheelchair user. Caregivers must have had a child that attended at least 5 ABLE Youth events.

**Recruitment:** Participants were recruited by the executive director of ABLE Youth via a virtual flyer through email and at an ABLE Youth competitive team basketball practice.

**Data Collection:** Research was conducted through open-ended questions centered around 8 broad topics: social participation, quality of life/mental health, wheelchair sports, family dynamics, independence, academic performance, everyday mobility, and goals. The content of the questions was similar for all participant categories, and the language was adjusted to match the experience and/or age. Interviews were recorded and transcribed using a video conference platform and conducted with at least 2 researchers. Interviews ended when saturation of data was achieved.

**Data Analysis:** CDC Excel Tool for Thematic Analysis was used to analyze and code transcripts. Researchers used the tool to create broad codes to match research question topics with 15-20 associated subcodes under each. Subcodes were assigned based on similarities within the transcripts. For efficiency, researchers deviated from the tool after coding. Remaining steps for thematic analysis from the tool were completed through discussion and concept-mapping to visually represent meaning amongst various topics (Ligita et al., 2022). Themes were then derived from the top 3 most frequently discussed concepts under each broad code. This process resulted in 4 consistent themes from the perspectives of children, caregivers, and alumni: facilitation of skill development, opportunities for engagement, confidence, and positive effect of role models. Researchers reviewed transcripts to confirm the themes were reflective of the participants' experiences.

## RESEARCH QUESTION

What is the perceived impact of a wheelchair sports program, ABLE Youth, on its participants, caregivers, and alumni?

## LITERATURE REVIEW

- Opportunities for participation for children are critical for development, skill acquisition, and health (Bruyere, 2010).
- It is important that children with disabilities learn to be independently mobile at an early age to prevent learned helplessness (Fernandes, 2006).
- A disability can affect a child's autonomy, often requiring the caregiver to assume a larger role in the child's daily occupations, thus reducing their volition (Lee, Park, & Recchia, 2015).
- Barriers to participation exist due to not having easy access to adaptive equipment, communities that offer adaptive sports, or not being able to participate in exercise (Neyroud & Newman, 2021).
- Children with disabilities often have difficulty finding these types of environments, thus leading to fewer opportunities to participate in physical activity compared to their typically developing peers (Nijhof et al., 2018; Powrie et al., 2015).

## RESULTS

### 1: Facilitation of skill development

By partaking in organized sports teams, weekend clinics, and an annual overnight independence camp, participants were able to learn and practice skills related to sports and daily occupations. Specifically, children, alumni, and caregivers mention it is easier to transfer from their chair to the car, go through doors, pop wheelies, explore their environment, and participate in ADLs.

"My goal was just to get dressed so that I could...be on my own. I was really thankful that...because of the program, I was able to achieve that. And I certainly wouldn't have made that goal if it wasn't for that." -ABLE Youth Alumni

### 2: Opportunities for engagement

ABLE Youth has provided many opportunities for these families to be actively engaged in activities, even beyond the local geographical area. Many children expressed their love for playing sports, some noting that they had not been given this opportunity before. Ultimately participants report these opportunities for engagement and experiences with ABLE Youth are rare and invaluable to members and their families.

"Being around other people who look and move like she does, there's just no substitute for that kind of experience." - Caregiver

### 3: Confidence

Across several interview topics, the theme of confidence was prominent. Children shared their confidence has increased due to their participation in ABLE Youth activities. This increase in confidence can be applied to adaptive sports and daily life, with respondents seeing improvements in self-confidence, interactions with others, and athletic abilities.

"I can do anything I want to do and it doesn't matter that I am in a wheelchair." - ABLE Youth Participant

### 4: Positive effect of role models

Many participants noted they are not often exposed to other wheelchair users in their daily life; hence did not see how to perform certain tasks and did not have peer models similar to them. Throughout interviews, it was often mentioned that ABLE Youth gave its younger participants this exposure to wheelchair users who could provide modeling.

"She doesn't just hear about wheelchair users who live and work independently. She sees them, becomes friends with them, and they're mentors to her. It's the difference between watching a how-to video on YouTube and calling somebody up who knows and having a real time conversation...it's a different experience than you would get otherwise." -Caregiver

## DISCUSSION

- This research describes the perceived impact of ABLE Youth on its participants, caregivers, and alumni.
- ABLE Youth uses adaptive sports to facilitate increased independence. They do not solely foster wheelchair athletes; they encourage independent individuals.
- To facilitate independence, participants are given opportunities to practice skills in a supported environment. By doing this, participants gain confidence in performing various tasks, allowing for generalization to novel scenarios.
- Through the unique exposure of ABLE Youth, participants were introduced to others with similar lived experiences. This created a community that built a sense of inclusivity and connectedness they had not found prior.
- Confidence stemmed from the impact of the organization's leaders/coaches, involvement in the variety of programs, and opportunities the organization provides. Increases in confidence were associated with skill development, engagement, and observing role models.
- The themes that emerged through this research can be used to measure or further define outcomes of other adaptive sport programs.
- Limitations to the study included lack of broad representation from all types of ABLE Youth participants, lack of member checking, and poor quality of some transcripts.

## ACKNOWLEDGEMENTS

We would like to thank ABLE Youth and all the children, alumni, and caregivers for participating in the study. We would also like to thank Amy Saffell, Dr. Katy Schmidt, and Suzanne McCreath for their expert knowledge in providing feedback on the interview tool.



References Available Upon Request or Scan QR Code:

