

Occupational Therapy

Adaptive Climbing: Assessing the Needs for Program Development

Introduction

- Rock climbing is a quickly growing sport, but most climbing programs and gyms are catered towards able-bodied climbers. Accessible climbing programs exist but are not offered at every gym.
- Challenges and barriers resulting from disability limit opportunities for social participation, restrict functional capacity, and ultimately impact quality of life and autonomy (Isidoro-Cabañas et al., 2023; Lape et al., 2018).
- A variety of studies have demonstrated that adaptive sports reduce stress and anxiety, promote meaningful family and social relationships, and improve cognitive performance and self-image (Isidoro-Cabañas et al., 2023).
- Adaptive sports can also aid in the prevention of chronic disease, improvement in muscle strength, and increase in cognitive function (Lape et al., 2018).

The Site

MetroRock is an indoor climbing facility with multiple locations in New England. MetroRock in Littleton, MA, identified a need to develop a weekly climbing program for adaptive climbers in order to make their gym, programming, and community as accessible as possible.

Purpose and Aims

Purpose: Determine the needs of MetroRock Littleton's facility, athletes, and staff in order to provide adaptive climbing services.



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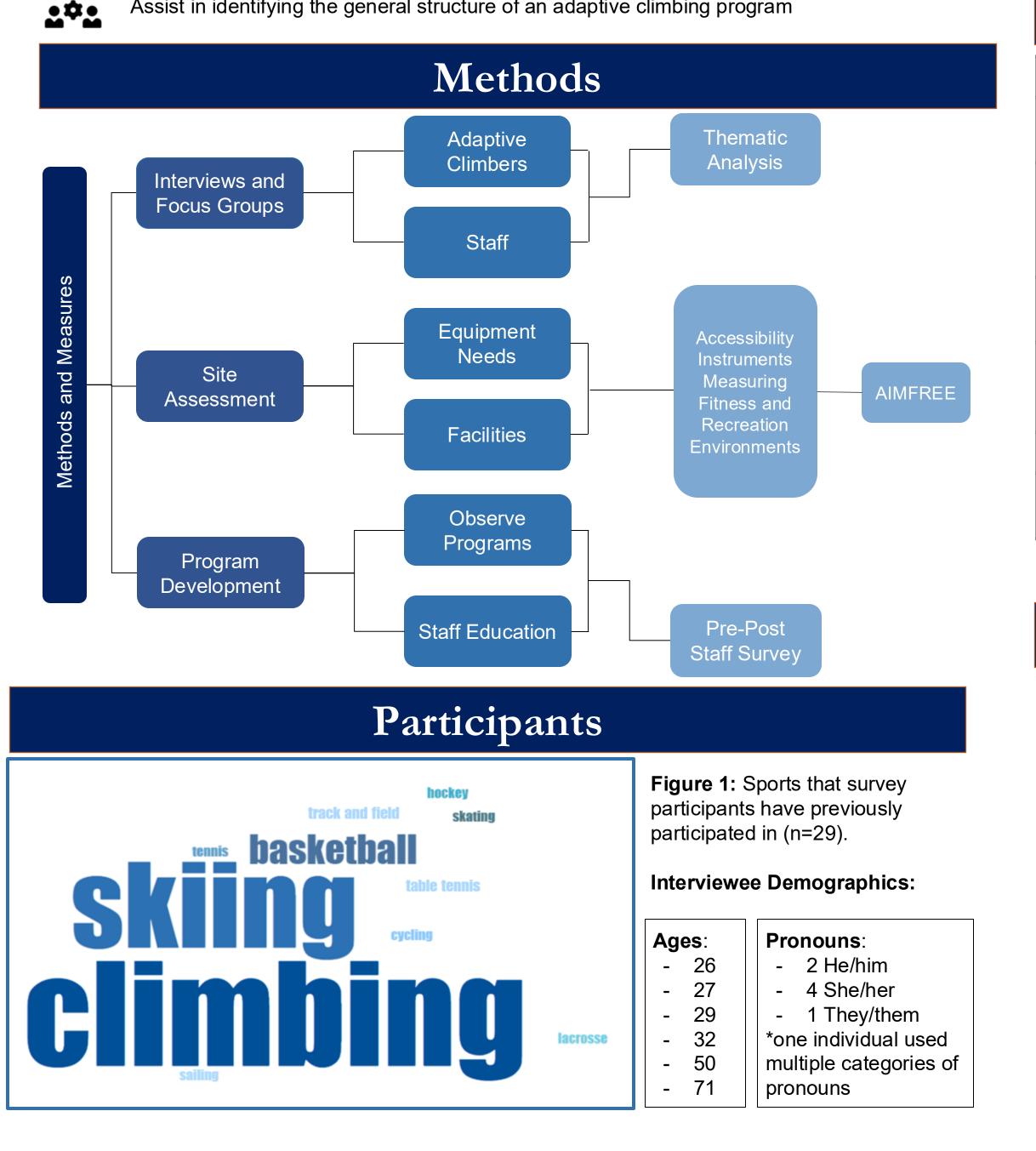
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Assess the needs of adaptive climbers in their participation in programming at MetroRock Littleton

Assess the needs of the physical space of MetroRock Littleton

Identify skills and knowledge staff need to learn to support adaptive participants

Assist in identifying the general structure of an adaptive climbing program



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Interview Results		
Theme	Description	Statements
Disability Etiquette	Statements that describe how to be polite and open minded when working with individuals with disabilities.	"Don't make assumptions" "Don't be afraid to ask questions"
Person-First Identity	Statements that describe a desire to be treated like any other individual.	"Just treat me like you'd treat anybody else." "I worry that people will stare or staff won't know how to in
Sense of Belonging	Statements that show a desire to be welcomed, supported, and part of a community.	"My disability is hidden, so I sometimes don't feel like I an enough." "Something that's cool about the climbing community is th everyone is pretty chill and welcoming and that made it co from the beginning."
Individualized Strategies	Strategies that participants and staff can use to work collaboratively as a team to ensure a client-centered experience.	"Staff need to be patient and willing to collaborate with the and adapt and improvise in the moment." "Goals are different for every climber and may look very d than those of a nondisabled climber." "Checking in with newer climbers and asking about their g
Barriers	Factors that limit an individual's ability or desire to participate in an adaptive climbing program.	Barriers that were most commonly mentioned include distance/location, concerns regarding physical ability, cos lack of knowledge/awareness around adaptive sports.
"Just Right" Challenge	Statements that demonstrate how clients want to measure their abilities and what level of challenge will keep them engaged and motivated.	"Exercise should be about pushing yourself, so balancing keep it a challenge without feeling like you're constantly lo "There is anxiety around how much I'll fail, like I won't eve to get started if something is too hard."
Goals	Achievements and benefits that participants have or want to experience.	Goals that were most commonly mentioned related to clin specific skills, fitness goals, and social/community goals.

Table 1: Themes identified from interviews (n=6).

Site Assessment Results: AIMFREE

Category	Sample Recommendation
Access Routes/Entrance Areas	 Install automatic doors or doors with power assist Install ramps to access padded floor areas
Equipment: Cardio and Weight Room	 Prop open fitness room doors or install power assist Arrange cardio equipment so that there is a clear space adjacent to each piece of equipment and a 5 ft turning radius Purchase 5lb, 2lb, and 1lb weight increments
Information and Signage	 Provide facility information in multiple formats (i.e. audio) Represent disabled participants in images, literature, and language on signs and the website
Locker Rooms and Showers	 Remove bulletin board blocking clear access to the locker room Shift lockers over to increase the shower entrance width to 3 ft Consider relocating or resizing the bench in the center of the locker room
Bathrooms	- Relocate or resize the bench to allow for a 5 ft turning radius in front of the handicap toilet stall
Parking	 Designate two parking spaces directly outside the entrance as accessible/handicap spaces Provide a curb cut or a ramp at the handicap parking spaces

Table 2: Examples of recommendations for relevant categories in the Accessibility Instruments Measuring Fitness and Recreation Environments (AIMFREE).



with disabilities

For fu Access to an adaptive sports community Education/knowledge ybody else." about adaptive climbing staff won't know how to interact." Improved muscle strength metimes don't feel like I am 'disabled' New skil ne climbing community is that New friend coming and that made it comfortable Improved self image Mental health benefits illing to collaborate with the climber, Reduced stress and noment." anxiety imber and may look very different Improved cognitive nber." performance rs and asking about their goals." A consistent addition to my weekly routine nly mentioned include Disease prevention parding physical ability, cost, and a round adaptive sports. Other ning yourself, so balancing how to ng like you're constantly losing." uch I'll fail, like I won't even be able Least Important hard." Figure 3: Survey results regarding the average ranked importance of select benefits of adaptive climbing y mentioned related to climbing-(n=29).

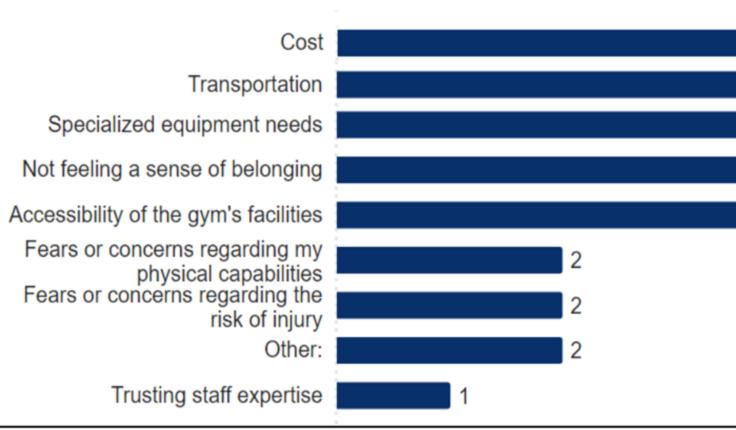


Figure 4: Survey results regarding how many individuals identified select barriers (n=29).

Conclusion

Interviews with adaptive climbers resulted in seven main themes regarding their needs in an adaptive climbing program:

- Disability etiquette
- Person-first identity
- Sense of belonging
- Individualized strategies
- Barriers
- "Just right" challenge
- Goals

Figure 2: Average response from staff before and after the adaptive better suit the climbing training adaptive climber session (n=6).

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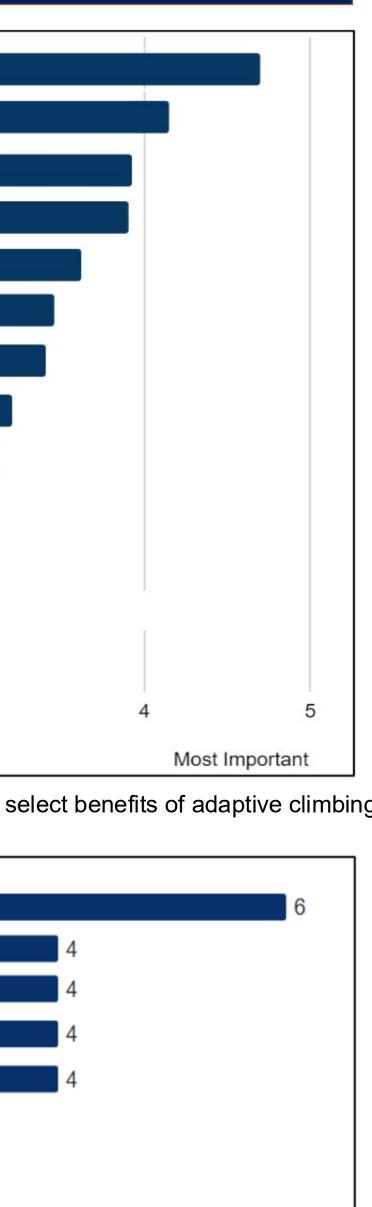
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References Contacts Acknowledgements

Survey Results





Both staff and adaptive climbers identified community and culture as being the main unifying aspect of adaptive climbing.

The physical space of MetroRock would benefit from modifications to their parking and bathrooms to make the facility more accessible.

This project pushes the boundaries of with whom and where Occupational Therapy can be impactful.

