

Department of **Occupational** Therapy

Developing a tool to evaluate the impact of participation in adaptive sports programming at New England Disabled Sports (NEDS) Julia Lettenberger, OT/s Sarah Everhart Skeels, MPH; Dana Dodge, former NEDS Operations Manager

Background

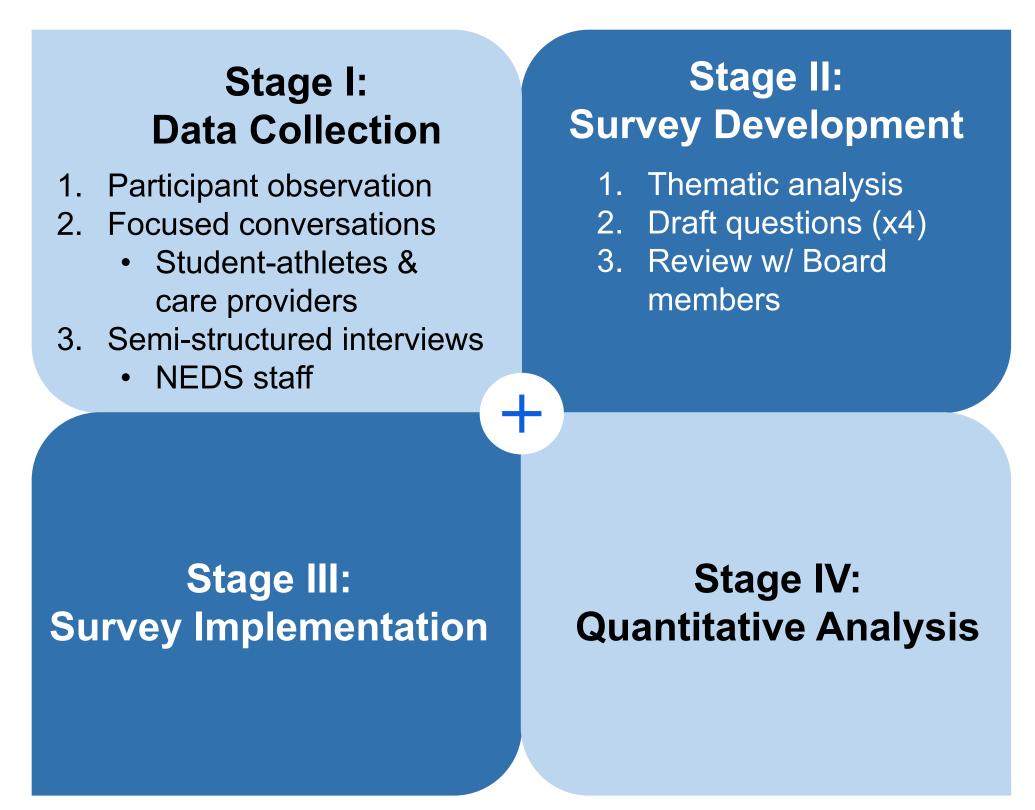
- Approximately 13% of individuals in the U.S. have a disability [3]
- **Barriers** to individuals with disabilities engaging in physical activity: • Inaccessibility, transportation, cost, embarrassment, lack of
- knowledge of how to exercise w/ their health condition [1]
- Adaptive sports: avenue for individuals with disabilities to engage in physical activity
- Physical, social & emotional benefits of adaptive sports for this population encompass:
- ↑ muscle strength & gross motor function;
 ↑ self-esteem &
 confidence; \uparrow quality of life; \uparrow opportunities [1, 2, 5]
- New England Disabled Sports (NEDS): non-profit organization offering year-round adaptive sports programming for individuals with disabilities across the lifespan [4]
 - Ages: 4-86 years old
 - **Diagnoses:** Autism Spectrum Disorder, intellectual & developmental disability, neuromuscular conditions, visual impairment, spinal cord injury
 - Summer programming: golf, paddling (kayaking & stand up paddleboarding), cycling, mountain biking
- Gap: NEDS lacks data to support the impact of participation in their programming
- **Significance:** Evidence-based data \rightarrow grant funding

Aims

Aims:

- Develop **user-friendly** outcome measure to evaluate the impact of participation in NEDS programming for student-athletes
- Utilize outcome measure to generate outcomes regarding effects of participation in summer adaptive sports programming

Methods



*Volunteer coach throughout Stages I-III

Pilot Survey Development & Implementation

Themes:

1	Health	&	Wellness
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- 2. Confidence
- 3. Independence
- 4. Socialization

Survey:

• 4-point Likert scale questions

• 2 open-ended questions

• End of Lesson Survey: 10

• End of Season Survey: 6

5. Quality of Life

Pilot Survey

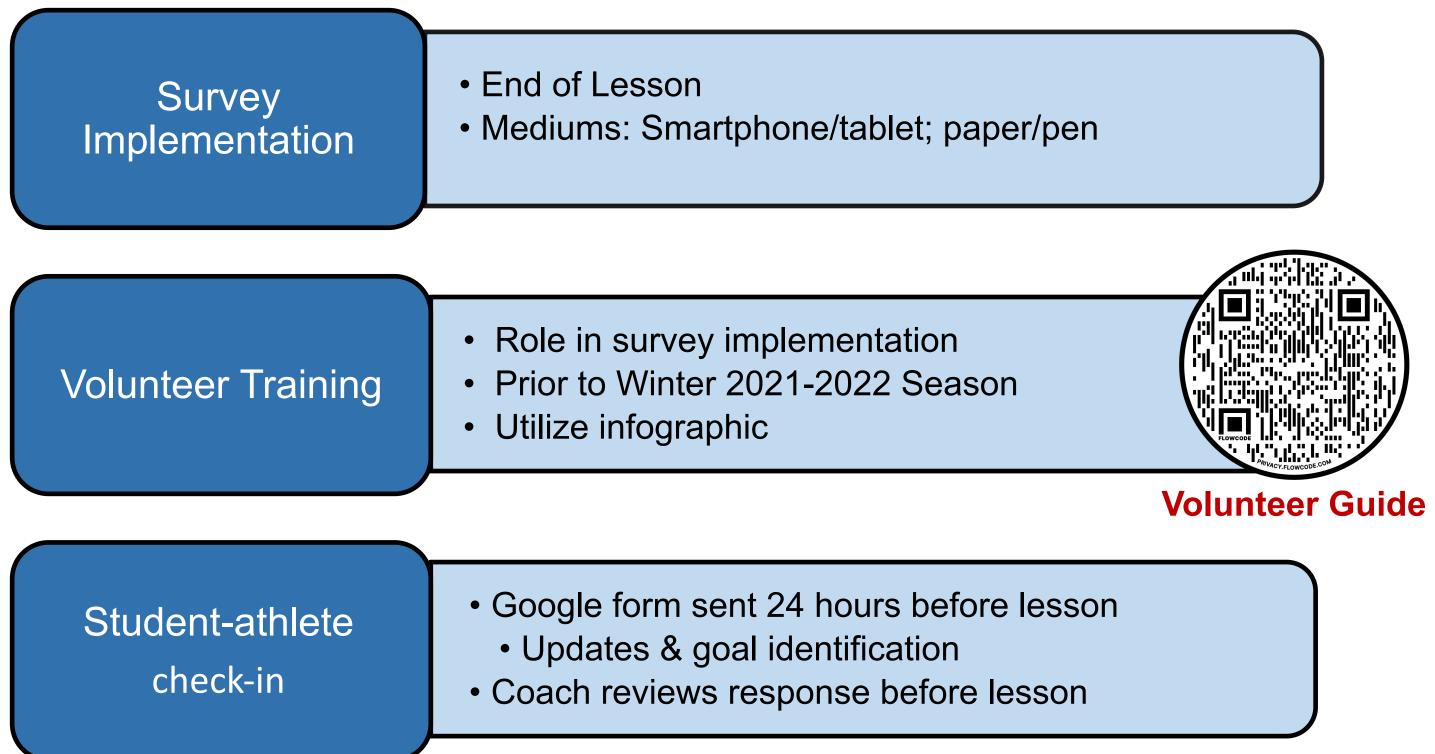
- Response rate: 55%

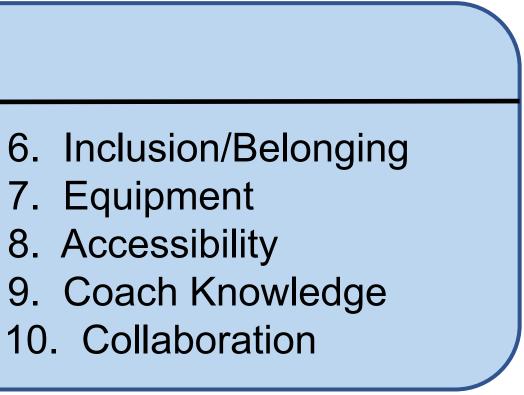
Findings & Recommendations

Findings:

- Able to engage stakeholders to develop **user-friendly** outcome measure
- Participation in summer programming has physical, social & emotional benefits
 - 100% of respondents reported that their lesson(s):
 - Improved their mood
 - Improved how their body feels
 - Helped them feel good about themselves
 - Help them do more things on their own

Recommendations:





Participants:

• Total unique individuals served: 99 • Total survey responses: 54



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Strengths of project:

- Stakeholder engagement: student-athletes, care providers, NEDS staff, volunteer coaches, members of the Board of Directors
- Themes for survey questions identified through qualitative analysis of focused conversations & interviews
- OT lens utilized throughout: therapeutic use of self, observation, interpretation
- Data collected over multiple weeks across all summer programs
- Recommendations developed based on experience with survey implementation and student-athlete input
- Immersive experience

Limitations of project:

- Small survey response sample (n = 54)
- Observations, field notes & thematic analysis completed by single student, making it difficult to eliminate bias
- Feedback from student-athletes and care providers on developed survey not gathered before implementation

Next Steps

NEDS can continue the work of this project by:

- Following up with student-athletes/care providers who expressed concerns on completed surveys
- Using survey results to refine programming to better meet the needs of student-athletes and their families
- Seeking input from student-athletes and care providers on their experience completing the survey
- Editing the survey based on feedback to ↑ accessibility
- Implementing the recommendations during Winter 2021-2022

Acknowledgements:

Special thanks to the NEDS community, my peers, and Mary Barnes, OTD, for their collaboration and support!

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*This project was IRB determined as human subject non-research

References:

- [1] Diaz, R., Miller, E., Kraus, E., & Fredericson, M. (2019). Impact of adaptive sports participation on quality of life. Sports Med Arthrosc Rev, 27(2), 73-82.https://doi.org/10.1097/JSA.000000000242
- [2] Lape, E. C., Katz, J. N., Losina, E., Kerman, H. M., Gedman, M. A., & Blauwet, C. A. (2018). Participant-reported benefits of involvement in an adaptive sports program: A qualitative study. American Academy of Physical Medicine and Rehabilitation, 10(5), 507-515. https://doi.org/10.1016/j.pmrj.2017.10.008
- [3] Institute on Disability. (2019). Annual report on people with disabilities in America. University of New Hampshire. https://disabilitycompendium.org
- [4] New England Disabled Sports (NEDS). (2021). About NEDS https://nedisabledsports.org/
- [5] Zabriskie, R., Lundberg, N., Groff, D. (2005). Quality of life and identity: The benefits of a community-based therapeutic recreation and adaptive sports program. Therapeutic Recreation Journal, 39(3), 176-191.

Discussion

