

A.T. Still University

Still ScholarWorks

OT Student Capstones

Occupational Therapy Department

2023

Effect of a Wilderness Rafting Trip on Disability Identity with those who Have Physical Disabilities

Kathryn Bauer

Follow this and additional works at: <https://scholarworks.atsu.edu/ot-capstones>



Part of the [Occupational Therapy Commons](#), and the [Recreational Therapy Commons](#)

Background

❖ 24 percent of Arizona residents have a physical disability. This can have several psychological implications such as body image concerns, depression, societal anxiety, and a lower quality of life.

Disability Identity

- ❖ Disability identity is a concept that can occur when one focuses their identity and purpose on their disability.
- ❖ This can be either positive or negative, depending on the cognitive beliefs and experiences one has had surrounding their physical limitations. A positive disability identity leads to a stronger sense of belonging and a higher quality of life, whereas a negative disability identity often leads to self-limiting choices and decreased hope for the future.
- ❖ Several studies have shown that participating in wilderness adventure trips have increased self-perception, their self-efficacy, their social connectedness, and their goals for the future. This offers potential for improving one's disability identity.

Accessibility

- ❖ Access to wilderness can be a significant barrier for those with disabilities, including both psychological limitations as well as physical barriers to maneuver the terrain.
- ❖ Other obstacles can include not having enough assistance and transportation to the austere environments, limiting one's occupational performance.

Community Partner

Ability 360

- ❖ The mission of Ability 360 is to empower people with disabilities to take personal responsibility so that they may achieve or continue independent lifestyles within the community.
- ❖ Ability 360 Sport and Fitness Center provides adaptive sports, recreation, fitness programs, an all-inclusive gym, and aquatics to promote independence, health, and overall well being of people with disabilities and their family members.

Purpose

- ❖ To measure change, if any, in one's disability identity as a result of participating in this wilderness trip.
- ❖ Accessibility was also analyzed to recommend modifications for making this trip more accessible to individuals with physical disabilities.

Methods

Participants

- ❖ Six individuals with physical disabilities; all Caucasian and hold a college degree.
- ❖ Exclusionary criteria: cognitive impairments due to reflective nature required to measure disability identity.

Design

- ❖ Utilized a pre/post survey to analyze change in disability identity.
- ❖ Surveys were sent at: 1 week pre-trip, 1 week post-trip, 3 months post-trip, 6 months post-trip.
- ❖ Informal interviews were completed daily during the trip to assess obstacles regarding accessibility.

Statistical Analysis

- ❖ SPSS Software was used to run the Friedman Test.

Outcome Measures

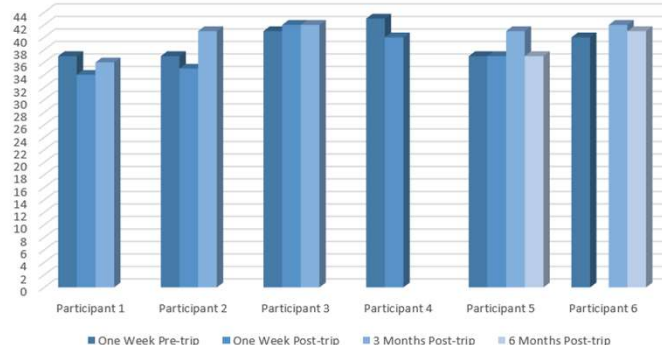
- Disability Identity
 - ❖ Gibson Disability Identity Development Scale
 - ❖ Questions from previous trips and literature review.
- Accessibility
 - ❖ Interviews and observations were completed throughout the trip.

Results

Gibson Disability Identity Development Scale

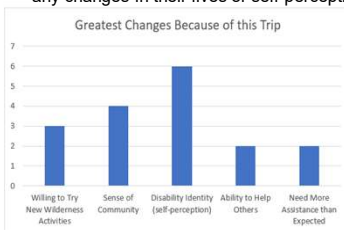
- ❖ 18 surveys collected over a 6-month period to determine any immediate and long-term effects from the wilderness trip.
- ❖ Scores range from 12-48, with each score categorizing them into a stage of disability identity.

Participant Survey Scores Over Time



Thematic Data

- ❖ Open ended questions were completed to explore what on the trip had the greatest impact on them, whether they better understand themselves, and whether they noticed any changes in their lives or self-perception.



Participant Quotes

- ❖ "I feel open to new ideas and adventures."
- ❖ "I felt so much more included. A real part of the group...I am a member of lots of types of groups, but not always part of the group."
- ❖ "I'm proud of accomplishing such an adventure I didn't think I could do."
- ❖ "I think the biggest [change] is how important it is to help other people when I am able."
- ❖ "I realize that I do need more assistance in activities like this river trip that I thought I would need."

Accessibility

Area of Challenge	Recommended Modification
Groover Accessibility	<ul style="list-style-type: none"> • Location moved to be closer to individuals for easier access. • Widening grab bars for additional room
Campsite Mobility	<ul style="list-style-type: none"> • Access Trax for wheelchairs • Returning items to same place for visually impaired • Guide ropes or Access Trax for independent maneuvering • Volunteer Training
Boat Access	<ul style="list-style-type: none"> • Lower strap for those who have lower extremity mobility concern • Two transfer teams, one on ground and one on boat • Mats for support, handles for greater comfort
Safari Chairs	<ul style="list-style-type: none"> • Lower the footrest • Adding cushions for a better fit and pressure relief • Chair attachments (see picture to right)
Side Excursions:	<ul style="list-style-type: none"> • Wilderness is rugged and an austere environment, no adaptive equipment could have changed the washed-out trails without compromising safety.
Nature Limitations	
High rainfall	

Discussion

Gibson Disability Identity Development Scale and Remaining Questions

- ❖ The results do not show a statistically significant change before and after this trip.
- ❖ There are trends showing half of the participants had a slight decrease in their disability identity score immediately following a trip.
- ❖ There was also a trend with a slight increase from the baseline to the 3 month post-trip survey, showing a shift toward a more positive disability identity.

Thematic Data

- ❖ The greatest change seen was in the participants' self-perception and understanding of their disability. This connects to disability identity as their understanding increases, so does their ability to accept themselves and their disability.

Accessibility

- ❖ Modifications are available for most of the challenges discovered on this trip.
- ❖ However, when weather elements affect the safety of side excursions, equipment adaptations may not be effective.

Limitations

- ❖ **Sample Size:** Due to the ratio of volunteers to participants needed to ensure safety and support, trips of this nature will always be relatively small.
- ❖ **Survey Response Rate:** Only one participant completed all four surveys, limiting findings or trends that could be representative of the group.
- ❖ **Baseline Scores of the Participants:** These participants were independent in their everyday lives, having been diagnosed over 10+ years ago. This prevents significant room for progress.

Available Chair Modifications



- ❖ A. Safari Chair used on this trip
- ❖ B. Freedom Trax FT1 Pro
- ❖ C. Freewheel Wheelchair Attachment
- ❖ D. Slick Skis

Implications for OT

- ❖ Half of the participants found a new meaningful occupation which provides OT the platform of wilderness to offer individuals when conducting therapeutic sessions.
- ❖ OT is beneficial in wilderness as the research shows the psychological benefits that wilderness environments can have on an individual.
- ❖ Improving access to wilderness environments enhances occupational performance, showing the need for OT to utilize adaptive equipment geared at doing so.

Future Studies

- ❖ Future research should look at individuals who are newly diagnosed with a physical disability or who are struggling with their new identity.
- ❖ More research is needed to see if using wilderness as a platform can help improve disability identity.

References

- ❖ References available upon request. Correspondences may be addressed to Kat Bauer at kat.bauer@atsu.edu.