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Summer 2024 OTD Capstone Symposium

**OTD Capstone Symposia** 

Summer 8-19-2024

#### Outdoor Recreation for People with Spinal Cord Injuries: An **Educational Video Series**

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#### **Recommended Citation**

Walker, S. N., Gerardi, S. M., & Rennerfeldt, H. (2024, August 19). Outdoor Recreation for People with Spinal Cord Injuries: An Educational Video Series. Poster presented at the Virtual OTD Capstone Symposium, University of St Augustine for Health Sciences. Retrieved from https://soar.usa.edu/ otdcapstonessummer2024/52

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## Outdoor Recreation for People with Spinal Cord Injuries: An Educational Video Series

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## **BACKGROUND**

- People with SCI experience significant declines in leisure participation (Hwang et al., 2016).
- Participation in recreational activities, especially when completed outdoors, have been shown to have strong correlations to numerous physical, cognitive, psychological, and psychosocial benefits (Dorsch et al., 2016; Kemeny et al., 2020; Labbe et al., 2019).
- Outdoor recreation intervention implementation for people with SCI is underutilized and underreported in the OT literature (Schonherr et al., 2005; Wickham et al., 2000).
- People with SCI report a lack of knowledge and inaccurate accessible online regarding outdoor recreation (Arbour-Nicitopoulos et al., 2009; Ryan et al., 2023).

## **PROBLEM**

OT practitioners and people with SCI lack knowledge of adapted outdoor recreational activities that people with SCI can engage in.

## **PURPOSE**

The purpose of this project was to create an educational video series to promote participation in adapted outdoor recreational activities among people with SCI.

## **METHODS**

#### **Theoretical Frameworks:**

The Person-Environment-Occupation-Performance (PEOP) model and the rehabilitative framework were used in the development of this educational video series:

## 1. Organizing research

 Organized research from the literature review and communications from stakeholders regarding precautions, equipment, and client factors for cervical and thoracic level SCI.

## 2. Data gathering

 Collected data on participant's level of SCI, equipment, transfers, and task analysis in archery, cycling, kayaking, and paddleboarding. As well as opportunities in Colorado in outdoor recreation for people with SCI.

## 3. Video series development

- Developed scripts and created initial educational video series.
- Sent educational video series to capstone coordinator, mentor, and site supervisor for review and feedback.

#### 4. Evaluation/Revision

 Revisions made to educational video series based on capstone team's feedback.

#### 5. Dissemination

- Published on YouTube.
- Educational video series sent to Lone Star Paralysis Foundation for publication on their website.
- Poster presentation

This project did not involve human subjects of research and did not require IRB approval.

## **EDUCATIONAL VIDEO SERIES**

#### 1. Welcome

- About me
- Purpose of capstone project

# 2. Introduction: Outdoor Recreation and SCI

- What is SCI?
- Adapted outdoor recreation activities description

#### 3. Precautions

- Thermoregulation
- Decreased endurance, cardiac output,
  and maximum heart rate
- Vulnerability to dehydration
- Upper extremity orthopedic injuries
- Autonomic dysreflexia

## 4. Archery

- Equipment
- Draw Length and Weight
- Participation for C1-C5 SCI
- Participation for C6-T1 SCI
- Participation for T2-T9 SCI

## 5. Cycling

- Equipment
- Participation for C1-C5 SCI
- Participation for C6-T1 SCI
- Participation for T2-T9 SCI

#### 6. Kayaking

- Equipment
- Participation for C1-C5 SCI
- Participation for C6-T1 SCI
- Participation for T2-T9 SCI

## 7. Paddleboarding

- Equipment
- Transfers for tetraplegia and paraplegia

## 8. Opportunities in Colorado

- Adaptive Programs
- Accessible state parks
- Websites

## **Educational Video Series**



References



Acknowledgements: Special thanks to Ryan Sproull