

# APTA CSM Boston 2024

## Katerina Renusch



THE HERBERT H. &  
GRACE A. DOW COLLEGE OF  
**HEALTH  
PROFESSIONS**  
CENTRAL MICHIGAN UNIVERSITY

# Optimizing Recovery : The Role of Adaptive Sports in the Rehabilitation of Active Duty Army Soldiers

Army Recovery Care Program

Authors:

Krystal Morris, PT, DPT, OCS

KeithAnne Halle PT, DPT, CBIS

Yvonne LaRoche PT, DPT, MHEd, AT

Casey Turner PT, DPT, CGS, OCS



THE HERBERT H. &  
GRACE A. DOW COLLEGE OF  
**HEALTH  
PROFESSIONS**  
CENTRAL MICHIGAN UNIVERSITY

# Background

- Soldiers with complex medical injuries sent to SRU
  - 14 SRU's in the country
- Participation in Adaptive Recovery (AR) Program is required (enrolled in SRU)
  - Individual sports: power lifting, swimming, archery, track/field
  - Team sports: w/c basketball, sitting volleyball
- Events
  - Army Trials
  - Warrior Games
  - Invictus Games



THE HERBERT H. &  
GRACE A. DOW COLLEGE OF

**HEALTH  
PROFESSIONS**

CENTRAL MICHIGAN UNIVERSITY

# Pilot Study : Outcomes from Large-Scale Adaptive Sporting Events on the Active Duty Army Soldier-Athlete- Bridging the Experience and Research

- Lack of research on the effects of adaptive sports (active duty population)
  - Small sample size, longitudinal data, control group



THE HERBERT H. &  
GRACE A. DOW COLLEGE OF

**HEALTH  
PROFESSIONS**

CENTRAL MICHIGAN UNIVERSITY

# Purpose/Objective

- Determine what measurable outcomes are reliable to capture change in participation through adaptive sports in the active duty recovery soldier population



THE HERBERT H. &  
GRACE A. DOW COLLEGE OF

**HEALTH  
PROFESSIONS**

CENTRAL MICHIGAN UNIVERSITY

# Methods

- Sample population standardized to soldiers/athletes enrolled in SRU
- Outcome measures
  - World Health Org. Quality of Life Measure (WHOQOL-BREF)
    - Higher score = better QoL
  - Tampa Scale of Kinesiophobia (TSK-17)
    - >37 indicate fear
  - Pittsburgh Sleep Quality Index (PSQI)
    - $\geq 5$  = *sleep disturbance*
    - $\geq 10$  = more appropriate to population



# Outcomes

- WHOQOL-BREF
  - No significant findings
  - First descriptive data set for measuring QoL
- TSK-17
  - Downward trend noticed (not significant)
- PSQI
  - Raise cut off to 10 (over 90% classify as sleep impaired)



# Results

- Adaptive sports improvement on QoL was NOT reflected in findings (limited research)

## Conclusion

- Consider... Further measures, length of time between assessments, response rate



# Relevance?

- Important... Yes or no?
  - Increases EBP!



THE HERBERT H. &  
GRACE A. DOW COLLEGE OF

**HEALTH  
PROFESSIONS**

CENTRAL MICHIGAN UNIVERSITY

# Influence on my future career as a Doctor of Physical Therapy?

- VA Physical Therapy?



THE HERBERT H. &  
GRACE A. DOW COLLEGE OF

**HEALTH  
PROFESSIONS**

CENTRAL MICHIGAN UNIVERSITY