



# The Effects of Concussions on Mental Health in Student-Athletes

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## Introduction

- Effects of concussions are complex and multidimensional
- Previous research shows concussions can have physical, cognitive, and emotional impacts
  - Physical Impacts**
    - Injury to the brain
    - Dizziness
    - Headache
  - Cognitive Impacts**
    - Confusion
    - Memory loss
    - Mental foginess
    - Difficulty concentrating
  - Emotional Impacts**
    - Anxiety
    - Irritability
    - Depressive symptoms
    - Difficulty coping
    - Low self-esteem
    - Loss of sense of identity
    - Personality changes
- Concussions disrupt valued occupations and increase risk for mental health concerns
- Post-concussion experience and mental health challenges in student-athletes are inadequately explored
- Occupational therapy practitioners (OTPs) can bridge the gap in student-athlete post-concussion mental health care
- OTPs are often excluded from the care of student-athletes due to limited awareness and institutional norms
- Holistic, client-centered care is vital in concussion recovery, but is currently lacking

## Methods

### Research Design

- Project conducted qualitative research
- Web-based survey created and distributed using Qualtrics platform
- Survey included multiple choice, Likert scale, and open-ended questions
- Responses analyzed to identify common themes among data

### Inclusion Criteria

- Active members of UAB women's basketball team
- Have obtained a concussion in the past or currently have a concussion
- Aged 18 years or older

### Recruitment

- Purposive sampling
- Word-of-mouth exposure
- Flyers
- Recruitment emails

### Participants

- 6 total respondents
- Participants who had previously obtained a concussion (n=4)
- Participants who had obtained recent concussions and were currently in concussion recovery at the time of study implementation (n=2)

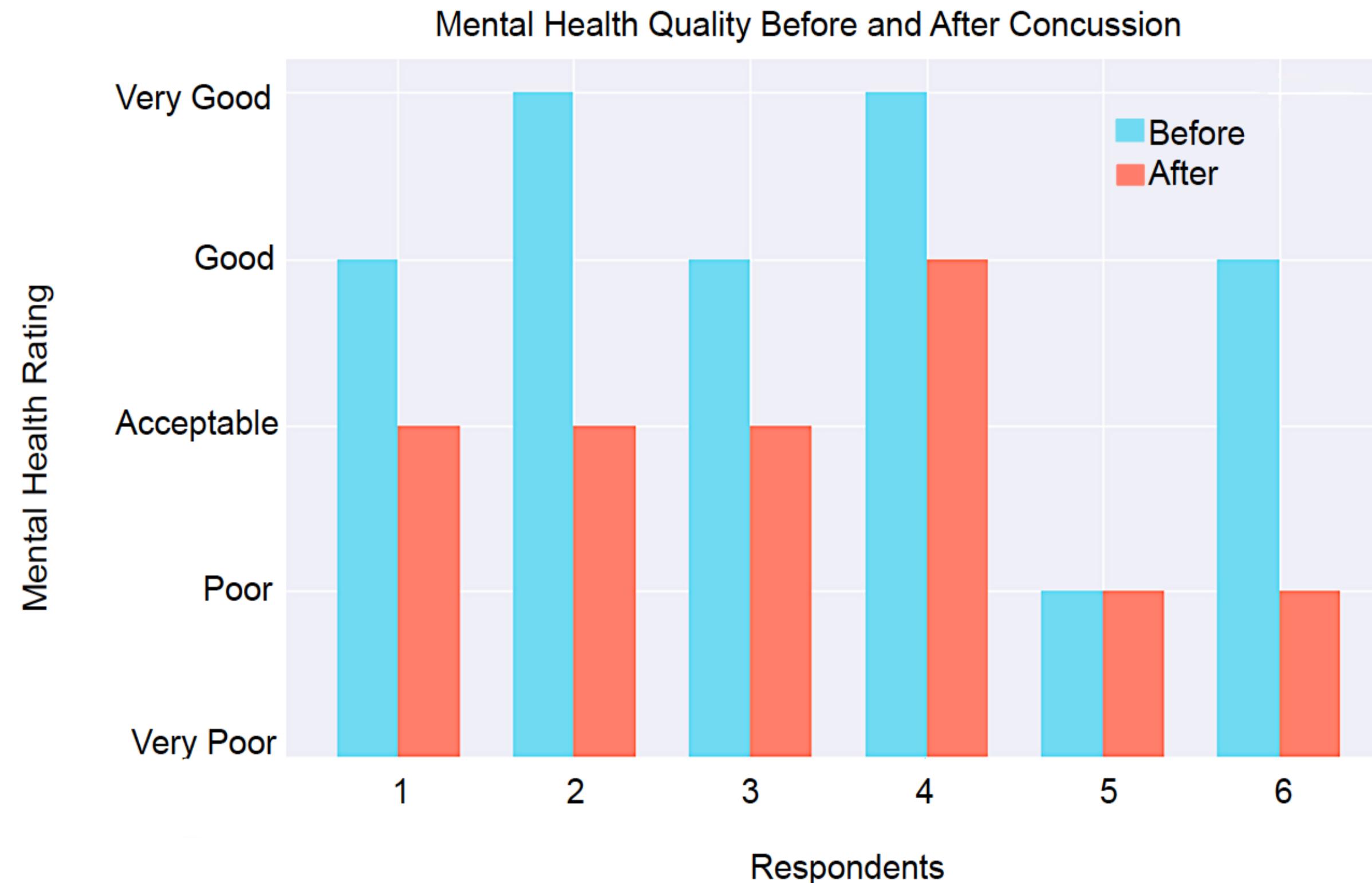
## Results

### Participants

- 83% aged 18-20 years (n=5)
- 17% aged 21-23 years (n=1)
- 67% had obtained one concussion (n=4)
- 33% had obtained 2-3 concussions (n=2)
- 83% reported most recent concussion as Grade I – Mild (n=5)

### Mental Health

- 100% reported never utilizing mental health resources available through UAB (n=6)

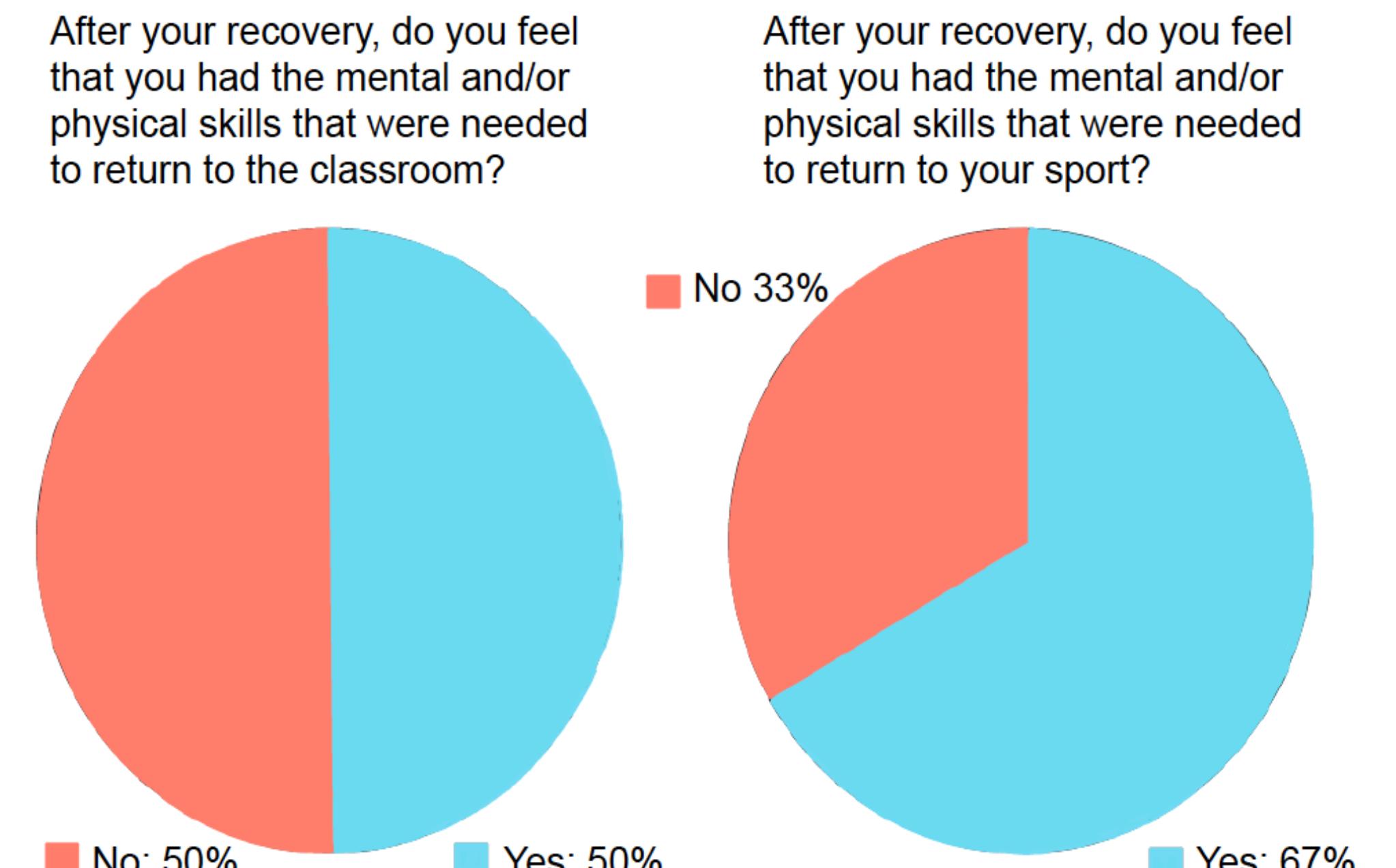


### Daily Routine

- 67% reported that their routine was sometimes affected by their concussion (n=4)
- 33% reported that their routine was often affected by their concussion (n=2)
- 50% reported a decline in social participation during recovery (n=3)

### Occupational Reintegration

- 100% reported difficulty with aspects of occupational reintegration (n=6)



## Discussion

### Survey Responses

- Majority reported a decrease in overall quality of mental health following concussion, yet all reported never utilizing resources
- Themes: feelings of anxiety, stress, and low self-confidence as contributing factors to declining mental health
- All reported that their concussion affected their daily routine either sometimes or often
- Themes: not being able to attend practices or classes and difficulty concentrating impacted routine
- Half reported a decrease in social participation due to not being able to attend practices
- All reported difficulty with occupational reintegration due to lacking physical and/or mental skills
- Themes: ongoing difficulty focusing, adjusting to physical demands of practice, and adjusting to mental demands of academics

### Limitations & Areas for Improvement

- Small sample size
- Limited diversity in participant demographics
- Reliance on self-reported data

## Conclusion

### Implications

- Student-athletes have ongoing mental health concerns post-concussion due to declining quality of mental health, underutilization of resources, disruption of occupational roles and performance, social isolation, and occupational reintegration challenges
- OTPs can address these issues and should be utilized in the care of student-athletes

### Future Research

- Examine effects of concussions in student-athletes who have existing, pre-injury mental health issues
- Continue to bring awareness to issue and advocate for OT profession in athletic community

## References

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