Returning to Learn Post-Concussion: Invisible Struggles of an Invisible Injury

A Phenomenological Investigation of College Student Experiences

The Issue: Academic Challenges

• Symptoms
• Initial steps
• **Self-advocacy**
• Resource awareness
• Symptom management - no protocol
  • ADA Constraints

*A(A) An individual meets the requirement of 'being regarded as having such an impairment' if the individual establishes that he or she has been subjected to an action prohibited under this Act because of an actual or perceived physical or mental impairment whether or not the impairment limits or is perceived to limit a major life activity.

*B(B) Paragraph (1)(C) shall not apply to impairments that are **transitory and minor**. A transitory impairment is an impairment with an actual or expected duration of 6 months or less.*
The Current Study

Research Aims

• Student experiences
• Student care pathways
• Possible avenues of improvement

Qualitative Design

• Phenomenology
  • Emergent hypothesis
  • Holistic description of phenomena
  • Commonalities among participants

Data Collection and Sample

Participants

• Purposefully selected
• Non-athletes
• 1 male, 11 females
• Colvin et al., 2009
• Harmon et al., 2016
• Various academic levels

Data Collection

• Academic dysfunction survey (Wasserman et al., 2017)
• Learning and Study Strategies Inventory (LASSI; Weinstein et al., 2016)
• Semi-structured interviews
• Audio recorded
Aim 1: To Describe College Student Experiences of Concussion

Concussion Consequences

- Physical effects
- Cognitive effects
- Sleep effects
- Social effects
Academic Effects

- Primarily cognitive effects
  - 11 students
  - 49 statements
- Physical effects
  - 7 students
  - 38 statements

Aim 2: To Describe Student Care Pathways Following Concussion
Pathways of Care

- 10 sought care
- 4 sought immediate care on recommendation of someone else
- 4 delayed care (+48 hours post)
- 8 received imaging
- 3 to urgent cares
- Others to ER or MD
- 2 thought they could manage on their own

Limited knowledge of concussions
Conflicting recommendations from care providers
Limited knowledge of campus resources

Care Pathway
Interaction Effect

- *Interaction* of factors & impact on RTL
- Contributions to experience + student reaction
- Recommendations generated from experiences

Aim 3: To Identify Avenues to Improvement of Care for Students with Concussion on Campus
Recommendations

Concussion knowledge

Self-Advocacy

Resource knowledge

Short term accommodations

Conclusions and Implications

Significant impact of effects on academics

Limited knowledge impaired pathway of care

Complex interaction of factors impaired academic, social, and functional outcomes
Return to Learn: What Now?

Two Populations of Learners

- Mod-Severe
  - Self-Learning
  - Self-Management
  - Nervous
  - Self-Advocacy

- Multiple Mild
  - Conkussion
  - Knowledge
  - Resource knowledge
  - Short term accommodations

- Single Mild
  - Concussion
  - Advocacy
  - Resource knowledge
  - Short term accommodations
CDC HEADS UP

HEADS UP to Youth Sports

To help ensure the health and safety of young athletes, CDC developed the HEADS UP Concussion in Youth Sports Initiative to offer information about concussions to coaches, parents, and athletes involved in youth sports. The HEADS UP initiative provides important information on preventing, recognizing, and responding to a concussion.

Specific Concussion Information for...

- Coaches
  - Concussion resources for youth sports coaches

- Parents
  - Concussion resources for parents of youth athletes

- Sports Officials
  - Concussion resources for youth sports officials

- Young Athletes
  - Concussion resources for youth athletes

https://www.cdc.gov/headsup/youthsports/index.html

CDC Pediatric mTBI Guidelines

Key Recommendations from the CDC Pediatric mTBI Guideline:

1. Do not routinely image patients to diagnose mTBI.
2. Use validated, age-appropriate symptom scales to diagnose mTBI.
3. Assess evidence-based risk factors for prolonged recovery.
4. Provide patients with instructions on return to activity customized to their symptoms.
5. Counsel patients to return gradually to non-sports activities after no more than 2-3 days of rest.
Return to Play

- Five step progression
- No activity to full activity
- Progress through each step unless symptoms return
- Return to previous step, wait 24 hours and repeat
- Based on symptom reporting

**Graduated Return to Play Protocol**

**Step 1. Total rest.**
- No mental exertion (computer, texting, video games, or homework), stay at home, no driving.

**Step 2. Light mental activity.**
- Up to 30 minutes of mental exertion but no prolonged concentration, stay at home, no driving.
- Progress to next level when able to handle 30 minutes of mental exertion without worsening of symptoms.

**Step 3. Part-time school.**
- Maximum accommodations (shortened day/schedule, built-in breaks, provide quiet place for mental rest, no significant classroom or standardized testing, modify rather than postpone academics, and provide extra time, extra help, and modified assignments).
- Progress to next level when able to handle 30–40 minutes of mental exertion without worsening of symptoms.

**Step 4. Part-time school.**
- Moderate accommodations (no standardized testing, modified classroom testing, moderate decrease in extra time, help, and modification of assignments).
- Progress to next level when able to handle 60 minutes of mental exertion without worsening of symptoms.

**Step 5. Full-time school.**
- Minimal accommodations (no standardized testing, but routine testing ok; continued decreasing extra time, help, and modification of assignments; might require more supports in academically challenging subjects).
- Progress to next level when able to handle all class periods in succession without worsening of symptoms AND medical clearance is given for full return to academics.

**Step 6. Full-time school.**
- Full academics with no accommodations (attends all classes, full homework).


**https://cbirt.org/back-school**
Current Work

• Coaching has been manualized for other researchers' and clinicians' use (Kennedy, 2017)

• Developing coaching program at UGA to support students with concussion and TBI
Our goal is to develop a peer mentoring program for college students seeking care at Shepherd Center’s Complex Concussion Clinic (CCC) that supports short and long term success.
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