

Research Matters: Special Educators Knowledge of Mild Traumatic Brain Injury

WHAT IS A MILD TBI?

- The American Congress of Rehabilitation Medicine defines mTBI as:
 - loss of consciousness up to 30 minutes,
 - amnesia less than 24 hours following trauma,
 - disorientation and confusion,
 - variable abnormal neurological characteristics, and/or
 - Glasgow Coma Scale score of 13-15

WHAT ARE THE SYMPTOMS OF A MILD TBI?

- Neurological symptoms: seizures, irritability, lethargy, vomiting, dizziness, fatigue, headache, vision and hearing difficulties, and consciousness loss
- Cognitive symptoms: difficulty concentrating, confusion, disorientation
- Emotional symptoms: increase in aggressive behaviors, attitude change toward family members or siblings, behavior changes, moodiness, personality and temperament changes

WHAT IS A SCHOOL-BASED MILD TBI MANAGEMENT TEAM?

- A school-based mTBI management team can be made up of various school personnel including but not limited to: general education teacher, school nurse, athletic director, administrators, speech language pathologists.
- The team's purpose is to monitor students return to school behaviors. These include impairments in memory, concentration, changes in exam scores, changes in social behaviors and emotional regulation (mood swings, temperament).

PURPOSE OF THIS STUDY

This survey study gathered information from special educators to better understand their knowledge and perceptions of mTBIs. A total of 260 special educators with at least 1 year of teaching experience completed the 39-question survey to identify their knowledge of mTBIs, how confident they are in what they know, and where they learned about TBIs.

FINDINGS:

Many special educators are knowledgeable about mTBIs:

- Concussions are mTBIs and do not require the student to have a loss in consciousness.
- Symptoms of a concussion may be delayed, difficult to identify, and occur even when the student feels “normal again”.
- Students may learn differently post mTBI.
- Most students who experience mTBIs do not receive an individualized education plan.

Other characteristics of mTBIs were not as commonly known by special educators:

- The specific length of loss of consciousness to be identified as a mTBI (i.e., up to 30 min).
- The recovery sequence and recommendations for treatment.
- That males more likely to experience mTBIs and have a higher incidence of repeat TBIs.

Special educators concluded:

- They were not confident in their skill set to recognize a mTBI or their general knowledge of TBIs.
- They were even less confident in a general educators mTBI knowledge or in their ability to adapt a student’s education in response to a mTBI.
- They received their information about mTBIs in pre-service coursework. A few reported knowledge gained by working with students who experienced a mTBI, workshops, conference sessions and in-service sessions. These opportunities were minimal.

Who is best prepared to support students with mTBIs?

- In previous studies, athletic trainers and school nurses rated themselves high in confidence related to mTBIs, yet in this study reported less confidence in planning for academic accommodations as a result of mTBIs.
- Students with mTBI benefit from: environmental arrangement accommodations (changes in lighting and seating), academic modifications (limited homework, written directions) which are common adjustments made by special education teachers to individualize learning for students.
- Despite special educators limited confidence in working with student's who experience mTBIs, they report having high levels of knowledge and implement appropriate accommodations with their students in general.

Study Recommendations

Special education teachers should participate in mTBI management teams as their training aligns with the treatment necessary to support these students. Special education teachers should receive training to increase their confidence and knowledge in mTBIs in order to maximize their skill set in instructional adaptations and social-emotional support for students who have TBIs.

REFERENCE:

Chleboun, S. M., King, A. M., Lukert, S. L., & Weber, W. H. (2021). Knowledge of mild traumatic brain injury among special educators. *The Journal of Special Education, 55*(1), 55-62.