Do children who sustain a mild traumatic brain injury lose confidence in returning to physical activity?



Glossary of terms

Self-efficacy: An individual's estimate of his ability to cope with a situation, and outcome expectancy; an individual's estimate of the likelihood of certain consequences occurring such as the ability to be successful in performing an activity or task.

Summary

Little is known about how a mild traumatic brain injury might impact a child's performance in physical activities. Some children appear to lack confidence in their performance of physical activities following a mild traumatic brain injury. The objective of this study was to document children's levels of self-efficacy related to their practice of physical activities prior to and after having sustained a mild traumatic brain injury, compared to a group of non-injured peers. A group of children were assessed immediately after injury and 12 weeks later using a selfefficacy questionnaire. Non-injured children underwent the same assessments. At 12 weeks post-injury, self-efficacy scores of children with mild traumatic brain injury were significantly lower than immediately after injury. Furthermore, their scores were lower than their noninjured peers. It should be noted that the children with mild traumatic brain injury had returned to their pre-injury level of participation in physical activities and maintained their athletic competence. Overall these results revealed that after mild traumatic brain injury, children appear to lack confidence in their ability to perform well during physical activities as compared to before their injury and also as compared to their non-injured peers. This occurs even though the children are still participating in physical activities at comparable levels to before injury.

What families should know

Having sustained a MTBI may affect children's confidence in their performance of specific physical activities, even though they appear to be fully recovered.

What practitioners should know

Clinicians may want to pursue strategies such as providing information, education or counseling sessions targeting children and their parents that could potentially minimize the impact of the MTBI on children's confidence in their performance of physical activities.

Reference

Gagnon, I., Swaine, B., Friedman, D., & Forget, R. (2005) Mild traumatic brain injury affects children's self-efficacy related to their physical activity performance. Journal of Head Trauma Rehabilitation, 20, 446-459.