



Do Concussions Impact IQ?

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Does a single concussion in childhood impact IQ? Previous studies are inconclusive due to small sample sizes, heterogeneity of the sample, choice of controls, and outcome measures variation. In a new study being released, Ware et al ([10.1542/peds.2022-060515](#)) compared IQ scores in children anywhere from 3 days to 3 months after a first concussion compared to children who had a mild orthopedic injury. The authors looked at 866 children between the ages of 8 and 17 years of whom 566 experienced a concussion and 300 an orthopedic injury prospectively emergency departments in the United States and Canada. No evidence of clinically meaningful differences in IQ score was associated with concussion in the first few months after an injury.

Why is the lack of finding a significant association between IQ and a single concussion important? To answer that question, we invited a commentary from Dr. Talin Babikian from UCLA, a clinical neuropsychologist with expertise in traumatic brain injuries ([10.1542/peds.2023-062182](#)). Dr. Babikian points out how too often the blame for a recognized cognitive change following a concussion is placed on the concussion instead of exploring other issues, such as a previously undiagnosed condition. Of course, cognitive changes have been associated with repeat concussions but that is not the subject of this study by Ware et al. Dr. Babikian also offers several suggestions for concussion management if concerns are raised about cognitive or intellectual deficits after experiencing this form of mild traumatic brain injury. Heads up on the importance of both the study and commentary that may change what you say and do regarding concerns raised about a cognitive deficit occurring in association with a first concussion.

