

# REASONS PEDIATRIC ATHLETES CONTINUE TO PLAY AFTER CONCUSSION

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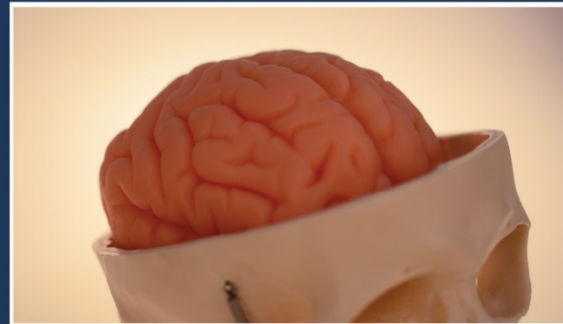
## INTRODUCTION

As sport-related concussion incidence has increased in the pediatric population, the risks of continuing to play while injured have become apparent. These risks include subsequent injury, prolonged recovery, and Second Impact Syndrome.<sup>1,2,3</sup>

In the last two decades, preventive measures have been established to help protect young athletes from these risks. Texas state law requires immediate removal from play and prohibits same-day return to play for any athlete who sustains a concussion while playing a public or charter school sport.<sup>4</sup> Medical organizations including the American Academy of Neurology have developed similar policies and recommendations that cover all sports.<sup>5</sup> Although these protections are in place, approximately 4 in 10 pediatric athletes return to play on the same day as their concussion.<sup>6</sup>

## PURPOSE

The purpose of this study was to determine why pediatric athletes continue to play following a concussion.



## METHODS

Prospectively collected data of participants enrolled in the North Texas Concussion Network Registry (ConTex) between December 2015 and April 2018 was reviewed. Participants were included in this analysis if they were diagnosed with a sport-related concussion, less than 19 years old at time of injury, reported whether or not they continued to play, and provided a reason for that decision.

Support for this study was provided by the Texas Institute for Brain Injury and Repair at UT Southwestern Medical Center. Participating ConTex sites include UT Southwestern Medical Center, Children's Health Dallas, Texas Scottish Rite Hospital for Children, and Texas Health Resources Ben Hogan Dallas Concussion Clinic. The authors have no additional relevant financial or consulting disclosures.

## RESULTS

258 participants met inclusion criteria. Mean age was 13.9 years (range: 7-18 years) and 130 (50.4%) participants were female.

142 (55%) participants reported they continued to play following their concussion. The reasons pediatric athletes reported for continuing to play following their concussion are listed in Table 1. No significant differences were noted in age, gender, or sport of the pediatric athletes amongst the reasons for continuing to play.

Table 1: Reasons pediatric athletes continued to play following concussion.

Reason	n (%)
Felt okay at the time of concussion	45 (31.7%)
Wanted to tough it out or play through concussion	41 (28.9%)
Did not realize it was a concussion	36 (25.4%)
Felt pressured by coach/teammates to play	17 (11.9%)
Cleared by athletic trainer to continue playing	3 (2.1%)

## CONCLUSIONS

- More than **half** of pediatric athletes continued to play following their concussion.
- Pediatric athletes most frequently continued to play because they were not experiencing symptoms at the time of the injury, wanted to play through it, and did not think their injury was a concussion.
- Future educational programs should take these reasons into consideration to prevent pediatric athletes from continuing to play following a concussion.

## REFERENCES

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