ABSTRACT

Background: The diagnosis of a sports-related concussion (SRC) relies heavily on self-report from the athlete; therefore, the true percentage of those sustaining an SRC is not readily known. Concussed athletes are at higher risk for permanent or more catastrophic injury, especially without a diagnosis. Limited research has been done to determine the factors associated with concussion reporting behaviors in high school athletes.

Purpose: To determine the intrapersonal factors affecting concussion reporting behavior in high school athletes based on the Theory of Planned Behavior (TPB).

Study Design: Cross-sectional design.

Methods: A convenience sample of 40 high school football players (age: 15.6 ± 1.0 years) who played during the fall 2017 season and had not been diagnosed with a sports-related concussion two weeks prior to data collection completed a previously validated questionnaire. Of these, 58% were underclassmen and 65% were skill players. An ordinal regression was used to analyze the association between the intention to report and four variables (attitudes of reporting, reporting self-efficacy, symptoms and behavior, subjective norms, and concussion knowledge). Before data collection, it was hypothesized that these factors could be used to form a model to determine the athletes' intention to report, which can then be related to their reporting behavior.

Results: Self-efficacy was the only TPB variable significantly associated with reporting intention.

Conclusion: Reporting self-efficacy was significantly associated with intention to report, where participants with a high self-efficacy score were 3.15 times more likely to report an SRC than those with a lower score. Freshmen athletes had higher reporting intentions than juniors, and participants that identified as ‘white’ had higher intentions than those who identified as ‘other’. Concussion knowledge, subjective norms, attitudes of reporting, and symptoms and behavior were not significantly associated with intention to report.

Level of Evidence: 2b, retrospective cohort study

Key words: adolescents, head injury, intentions, self-efficacy, sports