



The Effect of Ethnicity and Socioeconomic Factors on Reporting of Concussions among NCAA Student-Athletes



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Does ethnicity and/or socioeconomic factors play a role in an athlete's concussion reporting behavior?

Table 1- Preliminary Concussion Data

	Average # of Medically Diagnosed Concussions	Average # of unreported concussions
Females	0.61905	0.47619
Males	0.16667	1.66667
Total	0.39024	0.97561

Preliminary data confirms that a large number of concussions go unreported to a coach or medical professional

Methods

We developed a survey designed to determine the influence of ethnicity and SES factors on the underreporting of concussions among NCAA athlete. The survey consisted of questions to:

- Record ethnicity
- Measure SES
- Gauge general knowledge of concussions
- Determine experience with concussions
- Determine discrepancies between ideal and actual behavior relating to concussion reporting

Surveys were distributed to Division I, II and III institutions in each state of the US.

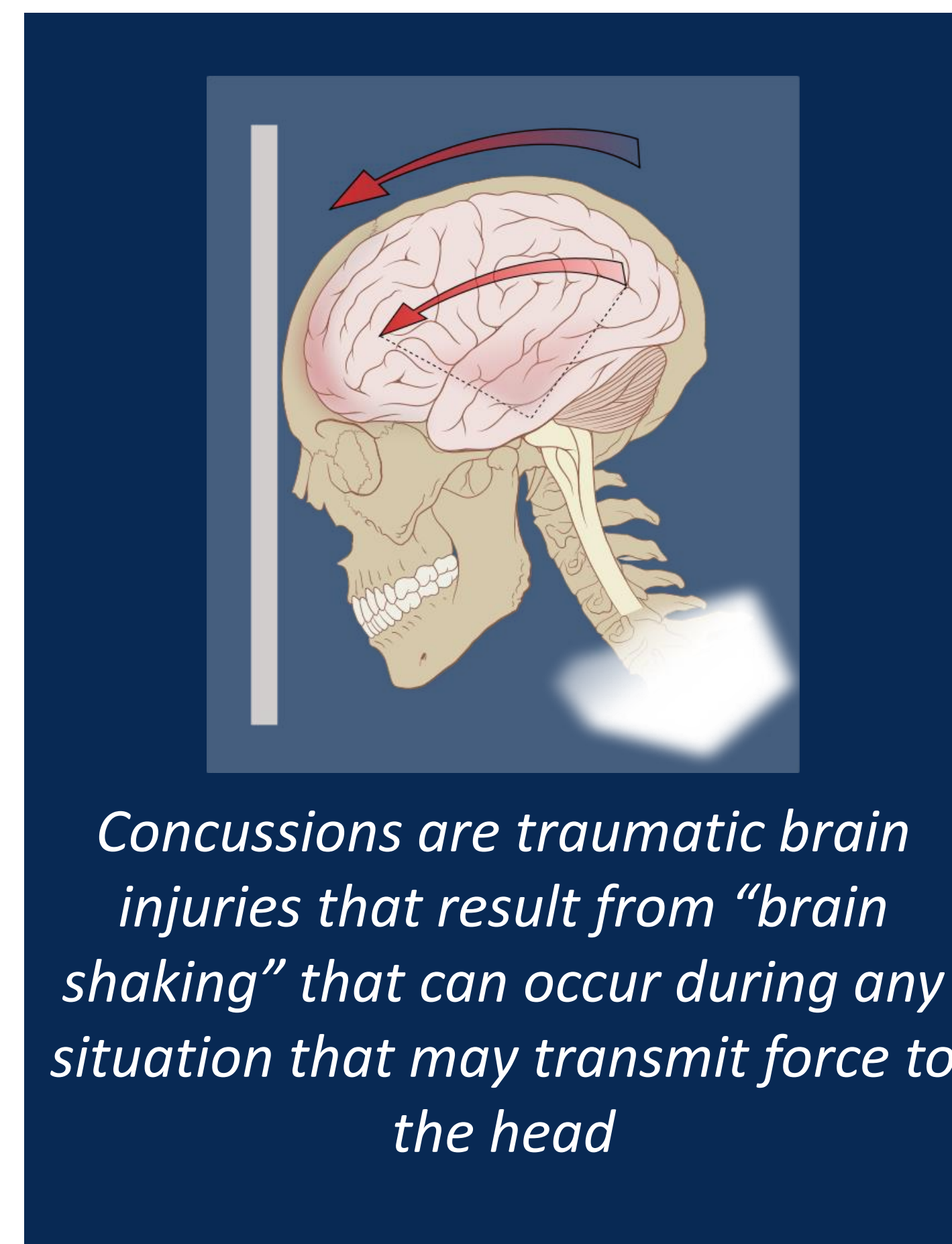
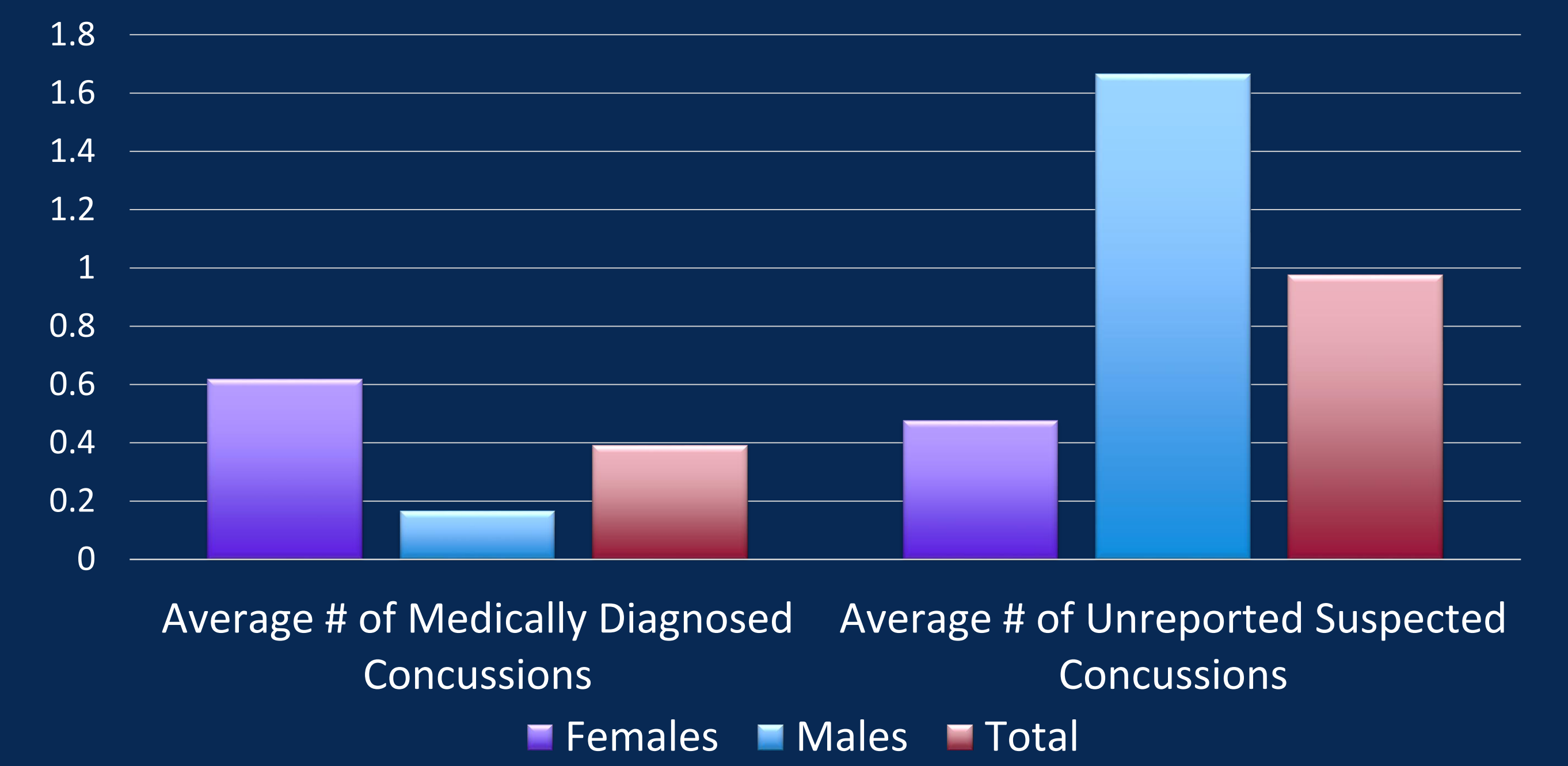


Figure 2
Concussion Information from Athletes



Visual Representation of average # of concussions, both reported and unreported

Introduction

Concussions are traumatic brain injuries that result from “brain shaking” that can occur during any situation that may transmit force to the head. Concussions are defined as a clinical syndrome characterized by immediate and transient post-traumatic impairment of neural functions which lead to a complex grouping of both psychological and physiological symptoms. As knowledge of the long-term implications of these injuries grows, concussions are becoming more of a major health concern worldwide. One subset of concussion classifications, sports-related concussions, is receiving an increasing amount of attention from scientists and health-care practitioners alike. It is estimated that more than 3.8 million sport-related concussions occur annually in the United States alone, and some studies suggest that up to 43% of these go unreported and untreated.

Results

Preliminary data confirms that male athlete's are more likely to leave a possible concussion unreported than to notify a medical profession or coach about his symptoms, while female athletes show a greater likelihood to report concussive symptoms to a medical professional or her coach. Further investigation is being conducted to identify a correlation between SES and/or ethnicity and reporting behavior.

Conclusion

Data collected from the survey confirms that many sports-related concussions go unreported and therefore untreated, indicating a potentially significant health threat to NCAA student-athletes. With further research, we hope to:

- Determine a correlation between ethnicity/SES and concussion reporting behavior
- Identify groups that are potentially “at-risk” of intentionally failing to report potential concussive injuries

