

Knocked In the Head:

An Analysis of Concussions in High School Sports



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Abstract

High school sports are an integral part of a student's high school learning experience however certain injuries can be life changing and detrimental to their learning experience as well as the rest of their life. Concussions are traumatic brain injuries that occur when the head is impacted by an outside physical force strong enough to rattle the brain. Recent studies show that females tend to be more prone to concussions than males, however based on the data collected, it was questionable.

The first hypothesis test done was with the hypothesis of males getting more concussions than females in high school sports, with the consideration of football being a part of the data, the hypothesis was tested. Football was an outlier in the data set, so the data was analyzed in a statistical manner, and the number of concussions for football was removed. The second hypothesis test was done with the hypothesis that males get the same number of concussions as females without the factor of football.

A realization that came about was that there was a need to keep athletes better protected, by looking into high-quality equipment. Another solution for high school sports is to have informative discussions about concussions and their consequences. Everyone should be aware of the significance of a concussion and what it can do to the brain.