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Concussions, Why They Go Unreported

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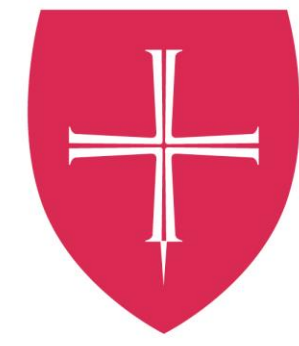
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“Concussions, Why They Go Unreported”

Authors

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Introduction

- In the world today, concussions are a major health risk in sports and many other physically demanding activities.
- Everyday, we see former athletes who have experienced multiple concussions complain of cognitive impairment and memory loss.
- It is the risk every athlete takes when they participate in a sport they love, however, when an individual plays through a concussion that is when a line is crossed.
- People playing through a concussion lead to the foundation of this study, which is to find out why individuals play through their concussions, why they fail to report, and the core cognitive reasons.

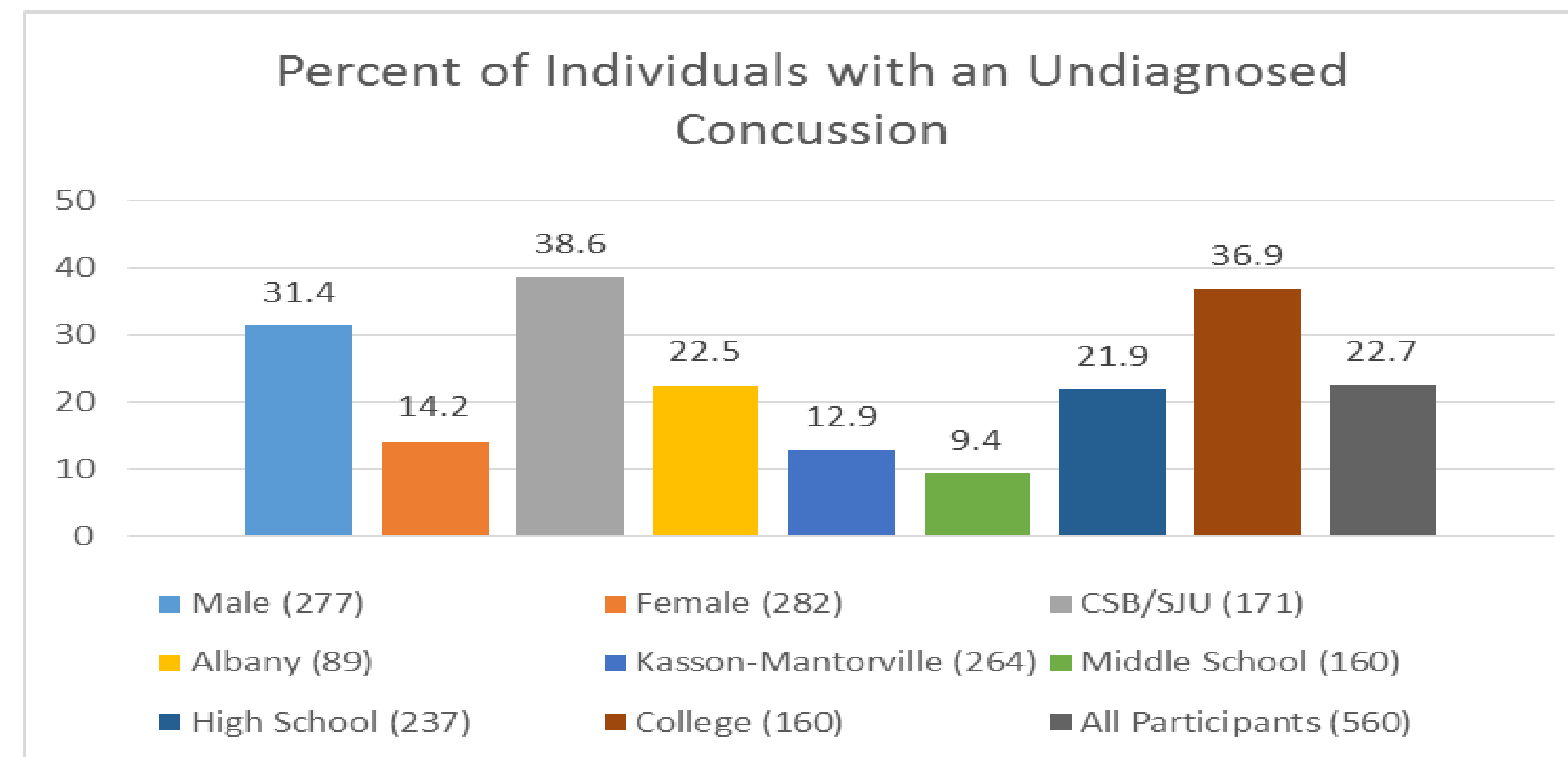
Purpose

- The purpose of this study is to answer the underlying question of, "Why do individuals fail to report concussions?"
- This research could serve as a stepping stone into discovering how we can minimize additional concussive injuries by shedding light into the reasons why they initially go unreported.
- This data will allow a greater focus on solving the primary issues, whether it's educating individuals on what a concussion is, the danger of playing with a concussion, or teaching medical staff to better recognize and assist with concussions.

Materials and Methods

- Identified middle school, high school and collegiate student-athletes as target participants for the study.
- Developed a 3 part survey asking students about concussions. They were:
 - Their own experiences with undiagnosed concussions and why they did not report them.
 - Undiagnosed concussions in others and why they did not report them.
 - A general opinion of why someone would not report a concussion.
- Analyze data of the 560 participants to obtain significant statistical findings.

Results



Where did the most severe undiagnosed concussion happen?

	Sporting Practice	Sporting Event	Accident	Other
Male	27.6	56.3	10.3	5.7
Female	17.9	30.8	43.6	7.7
CSB/SJU	22.7	62.1	10.6	4.5
Albany	26.3	36.8	21.1	15.8
Kasson-Mantorville	29.4	26.5	41.2	2.9
Middle School	14.3	21.4	50.0	14.3
High School	34.6	34.6	25.0	5.8
College	18.6	67.8	10.2	3.4
All Participants	24.6	48.4	20.6	6.3

Did any of these factors contribute to your Undiagnosed Concussion?

	A	B	C	D	E
Male	42.5	4.6	16.1	43.0	78.2
Female	41.0	10.3	35.9	41.0	64.1
CSB/SJU	48.5	7.6	24.2	46.2	87.9
Albany	15.8	10.5	31.6	42.1	63.2
Kasson-Mantorville	47.1	2.9	17.6	38.2	61.8
Middle School	21.4	0.0	21.4	35.7	50.0
High School	38.5	5.8	21.2	40.4	67.3
College	49.2	8.5	23.7	44.8	84.7
All Participants	42.1	6.3	22.2	42.4	73.8

*Each factor was asked individually as a Yes or No question.

- A=Lack of Understanding of what a Concussion is
- B=Fear of Teammate Ridicule
- C=Inadequate Assistance from Trainer, Doctor, or Parent
- D=Wanted to Show Teammates they were Tough
- E=Wanted to keep Playing for their "Love of the Game"/Teammates

Discussion

- From the results, you can see how individuals tend to have a greater risk of an undiagnosed concussion as they age.
 - Remarkably, we found that female and middle school participants received their worst undiagnosed concussion during an accident as opposed to when playing a sport.
 - Further analysis of the data tables indicate how most individuals continue to play through a concussion due to their "Love of the game" or teammates.
 - Also noted is that in 40% of the cases an individual's "Lack of Understanding" of what a concussion is, played a role in not being diagnosed.
 - This data indicates that schools should do more to educate kids on the dangers of playing through concussions.
- Additional Data from Survey:
- 50% of undiagnosed concussions in sports happen during football, with hockey next at 13.6%
 - In undiagnosed concussion seen in others, 43.5% of people similarly said the person they saw did not report their concussion due to their "Love of the Game" and teammates.
 - However, the following response were given when asked their opinion on why others would not report their concussions;
 - "Love of the Game" (36.6%)
 - "Lack of Understanding" (28.7%)
 - "Wanting to Show they were Tough" (27.2%)

Conclusion

In conclusion, we found that most concussions go undiagnosed due to an individual's "Love of the Game" and their teammates.

Acknowledgements

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