Research Assessment #11

Date: November 12, 2021

Subject: The Relationship between Sport-Related Concussion and Sensation-Seeking

MLA Citation:

Liebel SW, Van Pelt KL, Garcia GP, Czerniak LL, McCrea MA, McAllister TW, Broglio SP, On Behalf Of The Care Consortium Investigators. The Relationship between Sport-Related Concussion and Sensation-Seeking. Int J Mol Sci. 2020 Nov 30;21(23):9097. doi: 10.3390/ijms21239097. PMID: 33265913; PMCID: PMC7729784.

Assessment:

I wanted to know if there were any personality traits linked with the likelihood to sustain a sports-related head injury, so I decided to research the impact sensation seeking has on sports-related concussions. Also as sensation seeking research can be used to determine who is at a greater risk of sustaining a sports-related concussion, this research is pivotal, especially in the case of professional and collegiate athletes.

Most athletes resolve sports-related head injury symptoms within a few days, but there is a recognizable few who take longer than the anticipated time frame. As sports-related concussion management is currently very underdeveloped, despite current research efforts, sensation-seekers may be a group to narrow in on, especially as I have learned that experimental studies are the most impactful when the research findings are hypothesized to be true. In particular, I had previously never thought of personality traits such as impulsivity being linked to the possibility of sustaining a sports-related concussion, but now that I know this, this is an avenue I want to further delve into. In terms of sensation seeking, there are four levels: thrilling adventure seeking, experience seeking, disinhibition, and boredom susceptibility (Liebel SW et. al).

Through this people are categorized to have a higher risk of sustaining a sports-related head injury. Specifically, participants with two prior sports-related concussions had higher scores than those with only one sports-related concussion on the Brief sensation-seeking scale (Liebel SW et. al). Moreover, males were seen to be more of sensation seekers than females, resulting in a higher risk of sports-related head injuries.This did not surprise me as males are more likely to take risks in comparison to their female counterparts.

Likewise, athletes who played contact sports were more likely to be sensation seekers, again resulting in a higher risk of getting a sports-related concussion. This seems logical to me as I would presume athletes like American football players or rugby players, enjoy a sense of thrill in the sports they love and play. However, consequently they are putting themselves at higher risk for getting a sports-related concussion. In the future, this research potentially could use sensation-seeking as a guideline for which athletes need to receive baseline testing, and which athletes do not. By looking at factors beyond the medical scope, neuro-related professionals can better their understanding on sports-related head injuries and proper concussion management. Physicians may now be able to potentially intervene prior to injury through this research.

Knowing now that there is an association between sensation-seeking and history of sports-related concussions, I want to further direct my research beyond just medical literature on the matter, but to more of a psychological basis of concussion susceptibility. In doing so, I can better grasp concussions on a holistic scale, and better prepare myself for a concussion management role in the future as an aspiring neurologist. I truly now know the importance of figuring out what behavioral and personal factors influence risk of head injury in sports, apart from your typical cognitive risk factors.