

STUDENT FEEDBACK FORM

This section details the *extent* to which the assessment criteria are demonstrated by you, which in turn determines your mark. The marks available for each category of skill are shown. Lecturers will use the space provided to comment on the achievement of the task(s), including those areas in which you have performed well and areas that would benefit from development/improvement.

Generic Assessment Criteria	Marks available	Marks awarded
1. Engagement with Literature Skills		
	20	
2. Knowledge and Understanding Skills		
	20	
3. Cognitive and Intellectual Skills		
	30	
4. Practical Application Skills		
	20	
5. Transferable Skills for Life and Professional Practice		
	10	

Assessment Mark (Assessment marks are subject to ratification at the Exam Board. These comments and marks are to give feedback on module work and are for guidance only until they are confirmed.)	Late Submission Penalties (tick if appropriate)		%
	Up to 1 week late (40% Max)		
	Over 1 week late (0%)		

When identifying current issues and hot topics in the areas of sport, health, nutrition and physical education, a key area which continually comes up for debate and addressed within the media is the concern surrounding head injuries in contact sports. Certainly, the issue encompassing the HIA protocol and how to prevent head injuries occurring is one of high importance to player welfare. World Rugby have presented their protocol in line with the laws of the game and state that:

The Head Injury Assessment (HIA) protocol is a three-stage process introduced by World Rugby for elite adult teams to assist with the identification, diagnosis and management of head impact events with the potential for a concussion.
(World Rugby, 2022).

Cantu (1996) states how an injury to the head must be taken as seriously as any other due to the brain being incapable of regeneration. Moreover, subsequent injuries can also occur directly after a concussion such as headaches and memory loss state Cross et al (2016), with 60% of those more likely after a diagnosed concussion. With this in mind, more must now be done to protect the players or risk contact sports disappearing from existence. The epidemiological trends in rugby union injuries have significantly changed the perception of rugby in society evokes Brooks and Kemp (2008), highlighting a worryingly higher incidence trend of injury in the sport, significantly concussions. A high proportion of said injuries occurs in the tackle (Brooks and Kemp, 2008), therefore, this is an area which the game and its unions must endeavour to explore and change.

This essay will intend to explore and identify the current issue of head injuries in sport, specifically Rugby Union and moreover, critically analyse what guidelines and protocols are already in place to prevent health concerns arising such as concussions predominantly. It will review current, peer reviewed articles and also current media topics to determine the issue at hand. Moreover, this essay will try to ascertain whether the game of rugby and its impact to the head whilst playing can hold its place within school sport and physical education, or whether removing components of the game like tackling will help in trying to combat head injuries from the game so many people enjoy.

Globally, this is a seismic concern, one which adds an immense pressure to the likes of governing bodies, unions, community sport and schools. Rafferty et al (2018) reveal how on average, rugby union players are more likely than not to suffer a concussion after only 25 games. An average rugby union season is around 34 matches (Rafferty et al, 2018, p. 4)

therefore, concerningly, it must be acknowledged that players will more than likely exceed this 25-game threshold, heightening the risk of concussion. Marshall and Spencer (2001) convey how there is a hidden epidemic linked to concussions in rugby, and questions the use of headguards in preventing this epidemic from growing at a rapid rate. McIntosh et al (2009) debate the efficacy of players wearing headgear to reduce the chance of sustaining a serious head injury, however, found that wearing headguards does not “reduce the rate of head injury or concussion” (McIntosh et al, 2009, p. 310). Pettersen (2002) brings the argument that the primary purpose of wearing a headguard is to prevent and lessen the risk of concussions occurring in a game, however, this does not seem to be the case for rugby currently. Therefore, headguards as a preventative method cannot categorically be seen to eradicate head injuries from rugby but can be worn to decrease the force of impact and help to distribute it over a larger area of the head (McIntosh et al, 2009). Moreover, a perhaps likely prevention suggested by Rafferty et al (2018) is the introduction of shorter seasons to limit the number of games played which then decreases the prolonged exposure to concussion.

However, Raftery, Tucker and Falvey (2020) question the laws of the game and suggest adopting law changes such as tackle technique to improve player safety. In 2016, these rules and laws were introduced, underlining the issue of tackling and moreover, how players must learn to tackle lower to protect both ball carrier and tackler (Raftery, Tucker and Falvey, 2020). Interestingly, a recent media article by Tomas (2022) in The Telegraph is encouraging male rugby players to adopt the tackle techniques of women rugby players. Surprising to most, Tomas (2022) echoes the opinion of World Rugby deputy chief medical officer Dr Martin Raftery who explains how even though women are at double the risk of suffering a trauma to the brain, the HIA protocol was only used once during the first six games of the women’s World Cup this year. Even with this increased risk of head injuries, somehow the women’s game is combating the number of concussions seen per game. How does this differ to the men’s game, even with World Rugby’s HIA protocol in place? Has the men’s game reached a point in which they now need to look at this situation with more seriousness? Significantly, this navigates back to the laws of the game as expressed by Raftery, Tucker and Falvey (2020). Dr Martin Raftery makes a statement in the article by Tomas (2022) in which he explains the reason behind this lower number of concussions and HIA’s in the women’s game is that there is a prominence of performing the basics correctly; perhaps missing from the men’s game currently.

With this in mind, many are now advocating for changes of laws within the youth game and significantly, in school sport and physical education. In terms of holding its place within

the school curriculum, the safeguarding of children is paramount for rugby to still occur within PE lessons. Turkeri-Bozkurt and Bulgu (2020) digest how injury is a common part of any sport but question this alongside the rights of a child in terms of lifelong health and injury concerns. There must, therefore, be this awareness of how to protect children during contact sports like rugby state Turkeri-Bozkurt and Bulgu (2020) moreover, children must have the right to feel safe and confident when participating in such activities or sport, and ones which do not risk physical problems for health further on in their lives. The question posed here is whether rugby in schools and youth rugby is actively ensuring that the rugby played is protecting children's health. Hislop et al (2017) discuss the need for preventive measures to prevent significant head injuries occurring in school rugby. Similarly, Turkeri-Bozkurt and Bulgu (2020) reiterate how there is an ever-growing debate about removing the tackle from school level rugby which is further echoed by governments. However, many schools feel compelled to keep rugby and the tackle within the curriculum due to its tradition and familiarity within physical education and the game.

A solution to the problems discussed here has been advocated by Hislop et al (2017) in the use of more strength training and movement control to prepare young people for the forces felt by tackling and being tackled. Enhancing neck strength was also an intervention discussed by Hislop et al (2017) as this may reduce the likelihood of sustaining a concussion. However, the efficacy of such training must be questioned as to whether these types of interventions can be implemented for school use. Contradicting this view, White and Lang (2018) strongly advocate for the removal of the tackle from school PE due to rugby having a high incidence of injuries, mostly relating to concussions. White and Lang (2018) have called on governments to intervene and invest socially and morally into child welfare and safeguarding to ensure the prevention of injury within young people. Interestingly, White and Lang (2018) emphasise the irrelevance of including the tackle into physical education rugby lessons, furthermore, they convey how there is no benefit to including tackling into PE rugby sessions, implying that there are no educational benefits for young children to develop these skills (White and Lang, 2018).

Critically, a solution must be debated and implemented by World Rugby to prevent and eradicate head injuries in the game of rugby, to ensure its survival as a sport within schools, communities and the professional game. It is a sport which is loved by many and shapes communities and the society we live in, whether we are a fan or not. Jones (2020) describes rugby as being at a crossroads and the direction it takes next will determine whether health is perceived as the leading priority for the game amongst leading unions and governments. Many scholars are now undertaking research into the health repercussions linked to head injury in

contact sports. Rugby was seen to have the highest incidence of concussion density (Prien, 2018, p. 954) compared to other contact sports like American football and Ice hockey. These long-term health affects relating to head injury are certainly increasing the amount of ex-rugby union players now coming forward and speaking openly about their personal health struggles with head injury leading to the significant prevailing factor of developing a neurodegenerative disease like Chronic Traumatic Encephalopathy (CTE) explains Prien et al (2018).

The high frequency of concussions now dominating the game makes this a primary concern and unequivocally a priority concern for the sport to attempt to resolve. Cross et al (2019) debate how there are concussion initiatives in place to help tackle this ever-growing issue such as the HIA protocol of World Rugby, however, with an increasing number of HIA's occurring during games, it must be questioned as to whether the HIA protocol is as effective in decreasing the number of concussions or is it simply hindering the momentum of play during a rugby match? Cross et al (2019) speak of the need for having primary preventions in place such as changing the tackle law and a study was carried out to determine whether the tackler or ball carrier were at a higher risk of sustaining a head knock. Unsurprisingly, the tackler was seen to be associated with 70% of the concussions compared to the ball carrier (30%). This is clearly significant and a major concern in terms of the tackle technique. Improving the tackle technique, therefore, must be a primary prevention method conveys Cross et al (2019) to avoid it having a detrimental impact on the game of rugby. As discussed previously by Raftery, Tucker and Falvey (2020) a lower tackling technique must be adopted and brought into training to ensure the safety of players when playing the game. The most significant prevention would be to remove the tackle as a component of rugby; however, this raises much debate and many doubts as it would quite simply risk the existence of rugby union beyond recognition as we know it in society today. Rather, an alternative method must be identified, and quickly which must be cautiously considered to avoid changing the game of rugby and no longer recognising it. Cross et al (2019) have identified an alternative method which has been welcomed into the game and that is the reinforcement of player behaviour. Educating our players to tackle correctly and safely must play a role in the survival of the game, moreover, by reinforcing laws and techniques during physical education lessons it can hopefully bring the emphasis back to doing the basics correctly as mentioned by Tomas (2022) in the article by The Telegraph. The men's professional game can certainly learn from the women's game and how they strive to perform the basics like tackling correctly, resulting in less head injuries and HIA's per game.

This concept of player education must begin in schools and community clubs where players can train, practice and improve their overall performance and technique through high

quality teaching of the sport in physical education lessons. However, the policy implemented in schools currently is framed as “Rugby is compulsory, but contact Rugby is not” (Rollings, 2021, p. 4). This statement questions then how players are able to learn how to tackle properly if they are not able to learn it through their PE. Unless they are members of a club in their community, many young players will not have learned how to tackle correctly, some not at all. The threat of parents removing their child from rugby sessions is also a concern highlights Rollings (2021) and may be a detrimental factor in a child’s development in the game if they want to continue rugby at a professional level. The game of rugby can no longer be classed as life-enhancing and certainly not a positive health factor due to the growing negativity surrounding its main component of tackling (Rollings, 2021).

This negativity surrounding the game is currently being dominated by many health concerns, none more so than the degenerative disease of Motor Neurone Disease (MND). There has been a significant rise in cases amongst many rugby union players, moreover, Mahase (2022) stating how former players are 15 times as likely to suffer from the disease, stemming from their time playing rugby. This neurodegenerative disease linked to prolonged exposure to head knocks is a build-up of continuous head injury and concussion throughout a season of rugby, and now Mahase (2020) among many other scholars have called for the removal of contact training during the season, further exposing the preventive method of reducing the length of a season as previously mentioned by Rafferty et al (2018) to prevent the dominance of continuous head injuries in rugby union players. With this in mind, Roberts et al (2016) highlight the focus now is to try and control the number of concussions seen in the community game but questions a lack of research in this particular area. In Robert et al (2016) research, their analysis of head injury in the community game found that 60% of head injuries were indeed concussions, further highlighting the need once again for players to be more educated on the basics of the game, including tackling technique to hopefully avoid removing tackling as a component of Rugby Union.

In conclusion, the emphasis on concussion and the HIA protocol as a perspective in the media and within the domains of sport, health, nutrition and physical education is one which many scholars, researchers and the public have differing opinions and perspectives on. Certainly, in regard to the research conducted for this essay, there has been a seismic shift in the way in which Rugby Union is now perceived in society. Enniss et al (2018) convey how concussion in contact sport “has come to the forefront of both scientific and public awareness” (Enniss et al, 2018, p. 1). Looking towards the future of Rugby Union, the prevalence of women’s rugby is now currently dominating the media, due to the recent success of the

women's Rugby World Cup in New Zealand. It is plausible to state how this area is an entirely separate concept which certainly needs to be revised and studied further. In terms of the women's game and head injury, there is a significant discussion around the decreased amount of HIA protocol seen within the game and the lower prevalence of head injuries. However, King et al (2022) depict the reportedly higher rate of risk of injury for women rugby players as being an area of concern, perhaps linked to the physiological differences of speed, strength and power compared to male rugby players.

Looking forwards, women rugby players are implementing a positive aspect to their game and the concern around injury by being able to perform the basics such as tackling correctly, highlighting how the men's game should take a leaf out of the women's game. The significance of the rise in the women's game is threatening to pose a concern for public health says West (2022), instigating once again how the sport of rugby can hold its place within youth rugby and physical education. Calls for the removal of the tackle still remain dominant, and in Canada, a high school in Nova Scotia cancelled their whole season of rugby due to the safety surrounding it as a sport to be learned. In the coming years, more changes will evidently be drafted into the game (West, 2022) due to the overpowering evidence linked to tackling and concussions, which is sadly seeing more and more cases of neurodegenerative disease for many ex-rugby union players. West (2022) expresses the desires of many to keep the game of rugby as it is now, and to implement more preventive methods such as law changes encompassing the tackle to ensure player welfare and to keep normality in a sport so many people respect and enjoy.

Word Count – 2,751

Reference List

- Brooks H M, J; & Kemp P T, S. (2008). Recent Trends in Rugby Union Injuries. *Clinics in Sports Medicine*, 27(1), 51-73, ELSEVIER. Retrieved from <https://www.sciencedirect.com/science/article/abs/pii/S0278591907000737>.
- Cantu C, R. (1996). Head injuries in sport. *Br J Sports Med*, 30, 289-296. Retrieved from <https://bjsm.bmj.com/content/30/4/289>
- Cross, M., Kemp, S., Smith, A., Trewartha, G., & Stokes, K. (2016). Professional Rugby Union players have a 60% greater risk of time loss injury after concussion: a 2-season prospective study of clinical outcomes. *Br J Sports Med*, 50, 926-931. doi:doi:10.1136/bjsports-2015-094982
- Cross J, M; Tucker, R; Raftery, M; Hester, B; Williams, S; Stokes A, K; Ranson, C; Mathema, P; & Kemp, S. (2019). Tackling concussion in professional rugby union: a case-control study of tackle-based risk factors and recommendations for primary prevention. *British Journal of Sports Medicine*, 53 (16), 1021-1025. Retrieved from <https://bjsm.bmj.com/content/bjsports/53/16/1021.full.pdf>
- Enniss M, T; Basiouny, K; Brewer, B; Bugaev, N; Cheng, J; Danner K, O; Duncan, T; Foster, S; Hawryluk, G; Jung, H S; Lui, F; Rattan, R; Violano, P; & Crandall, M. (2018). Primary prevention of contact sports-related concussions in amateur athletes: a systematic review from the Eastern Association for the Surgery of Trauma, *Trauma Surgery & Acute Care Open*, 3(1), 1-8, BMJ. Retrieved from <https://tsaco.bmj.com/content/tsaco/3/1/e000153.full.pdf>.
- Hislop D, M; Stokes A, K; Williams, S; McKay D, C; England E, M; Kemp P T, S; & Trewartha, G. (2017). Reducing musculoskeletal injury and concussion risk in schoolboy rugby players with a pre-activity movement control exercise programme: a cluster randomised controlled trial. *British Journal of Sports Medicine*, 51, 1140-1146. Retrieved from <https://bjsm.bmj.com/content/bjsports/51/15/1140.full.pdf>
- Jones, S. (2020). The brain injury crisis has brought rugby to a crossroads [Online]. Available at: https://www.thetimes.co.uk/article/the-brain-injury-crisis-has-brought-rugby-to-a-crossroads-bzsspgn26?gclid=Cj0KCQIAveebBhD_ARIsAFaAvrHaDtzFaeDKR94fpXcM9PGIBkl8FGbToommoREgeXXwuXcakiZ6KI8aAj_VEALw_wcB (Accessed November 20, 2022).
- King A, D; Hume A, P; Hind, K; Clark N, T; & Hardaker, N. (2022). The Incidence, Cost, and Burden of Concussion in Women's Rugby League and Rugby Union: A Systematic Review and Pooled Analysis. *Sports Med*, 52(8), 1751-1764, Springer. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9325800/>.
- Mahase, E. (2022). Former rugby players may be 15 times as likely to develop motor neuron disease, study finds. Retrieved from <https://www.bmj.com/content/379/bmj.o2392>.
- Marshall W, S., & Spencer J, R. (2001). Concussion in Rugby: The Hidden Epidemic . *Journal of Athletic Training*, 36(3), 334-338.
- McIntosh S, A; McCrory, P; Finch F, C; Best P, J; Chalmers J, D; & Wolfe, R. (2009). Does Padded Headgear Prevent Head Injury in Rugby Union Football? *Medicine & Science in Sports & Exercise*, 41(2), 306-313, American College of Sports Medicine. Retrieved from https://journals.lww.com/acsm-msse/Fulltext/2009/02000/Does_Padded_Headgear_Prevent_Head_Injury_in_Rugby.7.aspx.

Pettersen A, J. (2002). Does rugby headgear prevent concussion? Attitudes of Canadian players and coaches. *British Journal of Sports Medicine*, 36(1), 19-22, BMJ Journals. Retrieved from <https://bjsm.bmj.com/content/36/1/19>

Prien, A; Grafe, A; Rossler, R; Junge, A; & Verhagen, E. (2018). Epidemiology of Head Injuries Focusing on Concussion in Team Contact Sports: A Systematic Review. *Sports Med*, 48, 953-969, Springer. Retrieved from <https://link.springer.com/content/pdf/10.1007/s40279-017-0854-4.pdf>.

Rafferty, J., Ranson, C., Oatley, G., Mostafa, M., Mathema, P., Crick, T., & Moore S, I. (2018). On average, a professional rugby union player is more likely than not to sustain a concussion after 25 matches. *British Journal of Sports Medicine*, 53(15), 969-973.

Raftery, M., Tucker, R., & Falvey C, E. (2020). Getting tough in concussion: how welfare-driven law change may improve player safety - a Rugby Union experience. *British Journal of Sports Medicine*, 55(10), 527-529.

Roberts P, S; Trewartha, G; England, M; Goodison, W; & Stokes A, K. (2016). Concussions and Head Injuries in English Community Rugby Union Match Play. *The American Journal of Sports Medicine*, 45(2), 480-487, SAGE. Retrieved from <https://journals.sagepub.com/doi/epub/10.1177/0363546516668296>

Rollings, N. (2021). Challenging for the Future of Rugby Football in Schools. *Professional Association of Directors of Sport in Independent Schools*. PADSIS, 1-20. Retrieved from <https://www.independentcoachededucation.co.uk/file/43490/download?token=DLxJpBGq>.

Tomas, F. (2022). *Men's rugby players told: Tackle more like women*. Retrieved from The Telegraph: <https://www.msn.com/en-gb/health/fitness/men-s-rugby-players-told-tackle-more-like-women/ar-AA12S4oc?ocid=msedgdhp&pc=U531&cvid=085ff17b3d944ec8a8e15094b92f4985>

Turkeri-Bozkurt, H; & Bulgu, N. (2020). Is Injury part of sports? A children's rights perspective. *International Review for the Sociology of Sport*, SAGE, 55(1), 98-114. DOI: 10.1177/1012690218778536

West, S. (2022). Prevention is better than cure when it comes to high concussion rates in girls' rugby [Online], *The Conversation*. Available at: <https://theconversation.com/prevention-is-better-than-cure-when-it-comes-to-high-concussion-rates-in-girls-rugby-183202> (Accessed November 22, 2022).

White, A; & Lang, M. (2018). Removing the tackle from schools' rugby: A safeguarding perspective. [Blog] *British Journal of Sports Medicine*. Retrieved from <https://blogs.bmj.com/bjbm/2018/03/22/removing-the-tackle-from-schools-rugby-a-safeguarding-perspective/> (Accessed November 18, 2022)

World Rugby (2022) HIA Protocol. Available at: <https://www.world.rugby/the-game/player-welfare/medical/concussion/hia-protocol> (Accessed: 20 November 2022).