

# From High-risk Sports to Sports as High Risk: Crisis, Capitulation and Creativity during COVID-19

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## 1 Introduction

This book is a response to COVID-19 and its impact on sport in society. COVID-19 has drastically altered daily life since the beginning of 2020 so it's not unusual that it would alter sports. This publication provides a scholarly contribution to the scant literature which is currently available on COVID-19 and sport in Southern Africa by focusing largely on South Africa and to a lesser extent on Zimbabwe (South Africa is host to the largest number of Zimbabwean immigrants) which has been instituting similar if not at times, the same social responses to the disease. Since the declaration of the pandemic, there has been limited literature published with the dual focus of COVID-19 and sport in this geographic region. What has been published, has centered on aspects of sport tourism, a huge financial contributor to destinations, in Southern Africa. Research has indicated that sport events have suffered the brunt of lockdown restrictions with travel bans, curfews and quarantines (Qukula 2020). Significantly, what has remained unreported, is a more localised approach to the impacts of COVID-19 on sport in this context of Southern Africa, tapping into participation and consumption debates and narratives. This book thus takes a more nuanced approach by mining into the phenomenon of sport within a framing of COVID-19 in South Africa and Zimbabwe with theoretical, methodological and empirical insights using an array of popular sport codes, ranging from low risk to high risk sports. All chapters in the book are underpinned by the axiom of sport as risk due to the pandemic, a notion articulated in the editorial. The book offers socio-cultural, political and economic insights into the role of sport at several levels in society

in both countries from the micro perspective of the individual, to the meso level of a group (club and community) and the macro level of a nation during this time of the pandemic. For example, the South African focus throws a wide net across individual, club and national level sport, covering several sport codes from low to high risk sports whilst the Zimbabwean focus covers urban and rural contexts, delving into the impact of COVID-19 for sport in schools and communities that depend on sport as a crucial part of the school curriculum and sport events to sustain their livelihoods respectively. The book thus concurrently unpacks the impacts of the pandemic on sports participation and consumption in several codes of sport. The chapters highlight the strengths, weaknesses and challenges experienced from several sport vantage points (athletes, clubs, community, business etc.) during the pandemic uncovering and exposing along the way, political pandering and socio-economic inequalities (such as poverty and gender) previously overlooked in pre-pandemic sport commentary and presenting arguments for social transformation in sport. Most significantly, this book provides a critique of selected sport codes with their pandemic afflictions providing creative avenues, physical and digital options, in sport participation and consumption, with a view to mitigating the effects of COVID-19 and facilitating a return to some semblance of 'safe' and transformed sports.

In this introductory editorial to the book, I frame the COVID-19 pandemic as a health hazard and this is aligned to the presidents of South Africa (Cyril Ramaphosa) and Zimbabwe (Emmerson Mnangagwa) announcing a state of disaster due to the pandemic. I then demonstrate the close relationship between the pandemic and sport in society. I present the theoretical shifts in risks and hazards research in sport scholarship that occurred before and during the pandemic. I argue that whilst the literature on sport has remained focused on health concerns, one strand has shifted from a preponderance of studies across two decades (from 2000-2019) on high risk sports with a physiological focus (participant identity aspects and issues, the risks of participation, the nature and assessment of injuries) to sports participation and consumption being perceived as high risk with a psychological focus (from 2020) due to the over-arching impacts and fears associated with the corona virus disease of 2019 (COVID-19). Thus, the nomenclature in sports scholarship related to the pandemic from 2020 has significantly shifted to that contained within risk and hazard management with concepts such as risks, hazards, vulnerabilities, mitigation and resilience regularly featuring in the current sports publications

on the pandemic. A seminal author in the environmental hazards' literature, Cutter, defines several key concepts related to hazards. The concept of 'risk' is perceived as the 'likelihood of an occurrence' (Cutter 1996: 536) whilst 'vulnerability' is seen as 'a potential for loss' (Cutter 1996: 529). Mitigation is explained as 'efforts to reduce the risk' (Cutter 1996: 536). These concepts are frequently utilized in the literature on the pandemic and sports.

## **2 COVID-19 as a Health Hazard**

The disease was announced as a global pandemic by the WHO in March 2020 (WHO 2020a). This should not have taken the world by surprise given that respiratory diseases have been on the increase for some time, for example severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS). The latest disease, coronavirus disease of 2019 (COVID-19), set off alarm bells internationally because of the rate of infection and transmission, the extent of its geographic reach and the severity of it as a fatal disease taking the world by storm. In early 2020, the world went on pause given the rising mortality rates; by 30 June 2020, the WHO (2020b) reported 503 862 deaths across the world despite countries going into various permutations of lockdown with regulations enforcing measures such as travel bans, quarantines, curfews, social distancing and promoting hygiene to curtail the spread of the virus (Duddu 2020). Locally, South African president Cyril Ramaphosa announced a national state of disaster for SA given the spread of the virus (Qukula 2020) and the need to contain it stating: 'It is a week since we declared the coronavirus pandemic a national disaster and announced a package of extraordinary measures to combat this grave public health emergency' (SA Government 2020). This status of a disaster has been extended into January 2021. Zimbabwean president Emmerson Mnangagwa similarly announced a state of disaster but it was long before a single case had been reported in an effort to institute measures in advance to prepare for the disease (Africanews 2020). Thus COVID-19 can arguably be perceived as a universal health hazard and one of the most affected spheres of daily life, sport, has been immensely impacted upon.

## **3 The Significance of Sport and Responses to the Pandemic**

Sport has always been associated with multiple benefits regardless of a per-

son's age: the pursuit of fitness and part of an appropriate lifestyle for human beings apart from maintaining the harmony needed for a work-life balance. For the youth, engagement in sport provides mental, physical and social development; sport for younger adults is about attaining 'personal success and future employment' if you are at university or for the older recreational athletes, sport participation is about 'a healthy lifestyle' and managing stressful living (Powell 2001: 307). Gouveia and Pereira (2020;02) maintain that 'the impact of the COVID-19 pandemic was felt across the sporting world'. Due to crowds of people at sport events (Evans *et al.* 2020), the continuation of the various codes (disciplines) of sport presents risks for players (or athletes) and spectators at live events during a pandemic. For this book 'sport codes' refers to 'sport disciplines' with the latter being alluded to by Perold, Hattingh, Bama, Bergh and Bruwer (2020; 02) to be 'types of sporting disciplines, such as cycling, cricket, netball, marathons, gymnastics, rugby, weightlifting, football, boxing, tennis, basketball, athletics ... as well as disability sport'. There have been varied responses globally relating to sports' participation and consumption over the past 11 months (this being January 2021) with changes to sports' participation and events being influenced by multiple waves of the corona virus, socio-economic and political sentiments and global health advice. COVID-19's impact on sport and fitness was immense and amenities immediately closed upon stringent lockdown measures being announced by countries due to fears of exposure to the virus and contracting the disease. Upon announcement of the pandemic, mega sport events such as the Olympics, Paralympics and Wimbledon amongst others were postponed in 2020 (Gouveia & Pereira 2020). League events in sport codes also ground to a halt and local events considered a boost to the South African economy, by being part of the sport tourism global calendar also followed suit, for example, the Two Oceans Marathon, Super Rugby and the Premier Soccer League (PSL) amongst others. The 'collateral damage' from COVID-19 for sport is phenomenal for example the financial losses due to broadcasting rights, direct and indirect employment (Ray 2020). It should be thus noted that there were varied views, behaviour and at times contradictions in the early days of the pandemic (February to April 2020) about national sports and how various sport codes could and should unfold during the pandemic, both in South Africa and abroad. In an attempt to control the transmission of the virus from one person to the next person, social distancing and other measures, like the use of masks were suggested but not always enforced. In the USA, President Donald Trump chose not to do either

measure in his regular briefings (to be ex-president in 2021) and he further expressed the view for a return to sport. By contrast, Dr Anthony Fauci (advisory expert on COVID-19 in the USA) stated that there should not be any spectators at sport events (SABC News 2020) announcing the need for ‘sports free of spectators’. Andrew Cuomo, governor of New York, similarly commented that he could envisage baseball being played in the summer without spectators as well (Eye Witness News 2020).

In Europe, an outbreak of the disease in Spain and Italy was attributed to a super spreader event – the live event of a Champions League football match between Atalanta and Valencia in Milan (Kappel 2020); a second event followed in Valencia behind closed doors and despite this, numerous players were also infected with the virus. In South Africa, Minister Nathi Mthetwa was convinced by the PSL to have events within closed doors which he announced but the head of the South African Football Association (SAFA), Danny Jordaan stopped it from happening a day after the announcement, after receiving health advice about events thus averting a possible outbreak (Ray 2020). As the curve in the spread of the disease flattened after several months of isolation due to lockdown restrictions, sports’ role in society was revisited by numerous countries. Hence where some events were initially postponed, they were re-ignited to curb socio-economic losses but with certain restrictions and undertakings of risk management assessments. An example of such was the resumption of the English Premier League on the 17 June 2020 after a 100 day pause. Sports training and facilities such as gymnasiums similarly re-commenced activities across the world depending on a country’s health status. With regards to South Africa, re-opening procedures were governed by national legislation accompanied by localised restrictions for hotspots and other areas. Zimbabwe followed similar practices to combat the spread (Daniel 2021). However, months after re-opening, sports was dealt repeated blows due to additional outbreaks of the virus, with waves of the disease more potent than previously leading to further country wide lockdowns and restrictions with extended curfews (Both South Africa and Zimbabwe are experiencing a second wave of the virus in January 2021 with some countries in the global north experienced a third wave) with repercussions for sport inviting fear about the risks of engagement.

## **4 From Players’ Physiology to Fear Psychology**

A question that needs to be responded to relates to how risks and hazards in

sport have been previously framed in the literature and what is the current shift? The utility value of current sports knowledge in these times of the pandemic is also valuable. A google search reveals that over the past twenty years, a substantial body of literature has emerged on risks and hazards related to sport codes either when played socially or competitively focusing on players' physiology (especially concerning the participation professional athletes) in the sport (Powell 2001; Bachynski & Goldberg 2014; Barlow, Woodman, Chapman, Milton, Dodds & Allen 2015) with injury reduction and prevention occupying centre stage in the scholarship. These risks and hazards emanate from internal factors related to the nature of athletes' participation, the condition of facilities etc. The research studies steeped in internal factors within the sport, dominates the field of participant/athlete health because of athletes's training schedule and participation in competition. Hence there is a concentrated focus on sports injuries and prevention to maximize athletic ability. Much of the research centers on high risk sports such as ice hockey, American football, downhill skiing, mountaineering, sky diving and the martial arts. High risk sports according to Breivik (1999:100) 'entail all sports wherein the participants are exposed to the possibility of serious injury or death as an inherent part of the activity'. Examples of such studies include Powell's (2001) research which centred on risks of injury specifically cerebral concussion- its causes, effects and risks in sport. A later study by McIntosh (2005) also explored impact injury risks, that is again the concept of concussion/ brain injury. This health hazard is linked to a number of contact sports and Meuwisse *et al.*'s study (2007) two years later was a progression from the previous two studies, namely on the reduction of injuries due to repeated exposure. Bachynski, Castanier, Le Scanff & Woodman's (2010) study explored risk taking behaviour in high risk sports and Goldberg's study (2014) focused on prevention in the sport: a risk assessment of the hazard of brain injury during ice hockey and American Football. Thus, research conclusions in several studies were generally developing and furthering scholarship on the ways to reduce the risks of injury to athletes who participate in high risk sports (Powell 2002; Bachynski & Goldberg 2014).

What is noticeably limited in the literature prior to 2020, is the impact of external factors especially that deriving from environmental conditions. Where there is evidence of studies (see Kellet & Turner 2009; Wicker, Filo & Cuskelly 2013), these have been ringfenced to include the impact of floods, droughts and other such natural disasters impacting on sport participation and

consumption. In a 2018 article, Shipway (2018) draws attention to powerful external influences that can undermine sport. He called for more studies given the global security threats to sports tourism (steeped in terrorist activity to attract world- wide attention) and the limited literature following disasters linked to mega sport events. Citing the Boston Marathon and Paris attacks, he noted several vulnerabilities and honed in on commentary around athlete participation and spectator events. Most valuable was his call on how resilience for sport tourism is a neglected area of research in need of development. Resilience as a key concept in risk assessment and disaster management has once again come to the fore during the pandemic. Resilience has been explained by Cutter (2008: 599) as ‘a systems’ capacity to absorb disturbance and reorganize into a fully functioning system’.

Thus, whilst there has been this preponderance of health-oriented studies on physiological risk factors in sport activities especially amongst high risk sports athletes, less research attention has been devoted to psychological risk factors in sport. This was cited early as a gap in a physiologically oriented study where Yang, Chen, Zhang, Covassin, Heiden & Peek-Asa (2014:147) concluded that ‘injury prevention efforts need to include strategies targeting psychological risk factors’. However, this was six years before the COVID-19 pandemic and the psychological risk factors did not extend to the fear of contracting and spreading fatal respiratory diseases. The outbreak of diseases, infectious and contagious has not attracted research attention for their impact on sport participation until the arrival of COVID-19. Now there are concerns about participants’ and spectator safety and welfare. Sport itself has also not been previously perceived or researched as a risky undertaking from a psychological perspective but due to the spread of the disease globally, psychological risks especially elements of fear in sports participation and consumption has clearly taken precedence sports decision-making and it is an emerging area of sports scholarship. There is now this fast-growing body of literature on the juxtaposed phenomena of sport and COVID-19 from a host of perspectives responding to psychological risks, local, regional and global impacts (with numerous papers, special edition journals and books dedicated to this goal- see for example Nauright and Zipp’s 2020 special edition, apart from this current contribution). A recent publication by Choi and Bum (2020) focus of sports activities and disease phobia underpinned by whether there would be ‘continuous participation’ given the continuing pandemic. The forms of sport participation and the ages of the participants, their previous participation in

sport and their perceptions of hypochondriases (healthy people feeling anxious about contracting the virus) were analysed. They found that the patterns for sport activity of people was correlated to their age and the type of sport which they engaged in as a result of their participants' fear of corona virus infections.

## 5 Developing Resilience in Sports

This fear (disease phobia due to the pandemic) has forced sports organisations and associated sports stakeholders to reinvent the nature of sports, to breathe new life into participation and consumption. Thus, in the wake of COVID-19, one strand of the literature has focused on alternative sport options for participation and consumption due to the pandemic. For example, Mastromartino, Walker, Ross and Naraine's (2020) study focuses on how the closure of sports stadiums has been impacted upon from three aspects, namely the fan, the organisation and society. He concludes that organisations will have to communicate with their consumers and alter their marketing to adjust to a 'new normal'. They thus present factors for successful online fan communities (Mastromartino *et al.* (2020: 1707). Ludvigsen and Hayton (2020) similarly propose ideas to re start sport events. They suggest organizational aspects focusing on subjects such as volunteering and security. Planning for a future which includes sport rather than excludes it has become a common narrative and Parnell *et al.* (2020) have warned about the need to be 'better prepared in sport and society for similar events in the future'. These studies indicate a positive trajectory in the scholarship aiming to find innovative ways to resume sport.

## 6 The Chapters

The first chapter by **Francois Cleophas** and **Lesley Le Grange** is a dive into an intense critique. In their '**Critique of Neoliberalism in Sport: Towards Optimistic Sport in the Wake of the COVID-19 Pandemic**', they assert that sport is interwoven into a global order underpinned by neoliberalism. They reflect on both sport and society, providing an historical analysis of neoliberalism in SA by focusing on several mega sport events. They maintain and argue that sport is part of the neoliberal project which has become entrenched in SA and they demonstrate how participation in sports is skewed socially and how participation by SA sport heroes keep neoliberalism alive.



They present creative ideas advocating for a re-imagined sport in a post pandemic context free from the bondage of inequality in sports participation.

The second chapter continues the critical stance with a focus on sports media. In **‘The Conundrum of COVID-19 and the Sports Industry: When Saving Lives is More Important than Entertainment’**, Sabelo Nxumalo argues how COVID-19 has exposed neoliberalism in the current sports industry in terms of sports consumption. He hones in on how the sports industry favours the principles of neoliberalism with its emphasis on principles such as free trade and competition. He presents evidence of how sport is elitist. He draws attention to the extent to which sport has become exclusionary by denying access to the average and poor in SA citing the costs of live matches and broadcasted matches on particular television channels. Similar to Cleophas and Le Grange, he also calls for a new paradigm but to address sports’ consumption in SA.

The third chapter, **‘The Impact of COVID-19 on Chess in South Africa’** by Omar Esau centers on the sport code, chess which is an Olympic sport, from the vantage point of player, club and organizational administrator. Using an array of chess metaphors intersecting with pandemic impacts, Esau outlines the impacts of the pandemic on the game and advances online chess as a viable option for players. He presents a multitude of detailed ideas to protect the sport from crumbling as a result of the pandemic.

The fourth chapter by **Renuka Ramroop and Jesika Singh** takes a narrative approach to unpacking the training programme of two fencers (from the South African national team) which included their team members. The participants’ home environment is underpinned by natural learning, an approach to life and living which lends itself to absorbing stressors. In **‘Natural Learning and Fencing: A Case Study of Two Fencers’ Lockdown Training Programme during the COVID-19 Pandemic’** they argue for the fencers’ success due to the constructivist philosophy of the natural learning approach which promotes autonomy in learning and development.

The fifth chapter by Sadhana Manik uses an autoethnographic lens into individual and club training and participation by a ranked South African karate athlete. In **‘An Auto Ethnographic Optic: Experiences of Migration to Multiple Modes of Training and Participation in Karate during COVID-19’**, she provides insights pre-pandemic and during the pandemic focusing on the best practices trialled, tested and honed for individual and group training. She notes the constant challenges affecting the karate ecosystem given the

realities of the pandemic and a lack of digital infrastructure in South Africa.

The sixth chapter by **Bellita Banda Chitsamatanga, Wayne Malinga and Nqobile Sikhosana**, is titled, “**Life without Sports”: Socio-Economic Impacts of COVID-19 on South African Society from a Football Lens**’. It focuses on the impact of the pandemic on football (also called soccer) for South Africa which has had a rich history of attracting mega events pre-COVID-19. They highlight the popularity of soccer as an international sport that lends itself to sport tourism. Using desktop research and the theoretical insights of functionality, they delve into the role and functionality of sports in society, specifically focusing on the socio-economic impacts of the pandemic .

The seventh chapter by **Kimara Singh and Rachael Jesika Singh** is a lesson on government’s financial relief promises for athletes and players and the gaps in supporting promising developmental athletes during the pandemic. In ‘**The Experiences of Selected Professional Women Rugby and Soccer Players, and Sport Administrators during COVID-19**, Singh and Singh note issues of vulnerability during COVID-19, and select two professionalized codes of sport in South Africa, soccer and rugby, which are still at developmental level for female athletes to explore from the perspective of impacts due to COVID-19. Using questionnaires and a twitter poll, they delve in at the microlevel of female athletes and sports administrators and reveal the pandemic outcomes for female athletes such as a lack of job security whilst drawing attention to a sports administration caught in the headlights of a disease.

The eighth chapter by **Everjoy Munyaradzi, Kudzayi Savious Tarisayi and Alphonse Shoshore**, addresses a gap in the scholarship on COVID-19 regarding school sports and Physical education as a subject in high school. In ‘**The COVID-19 Pandemic and Sport in High Schools: A Case of Selected Schools in Masvingo District**’, they distil from sports organisers and physical education teachers, using a range of online data generation methods, and zoom, determining the impact of the pandemic on school sports in Masvingo, a community in Zimbabwe, which simultaneously experienced malaria at the time of the pandemic.

The final, ninth chapter by **Joshua Risiro** centers on the consequences of the lockdown for stakeholders in sport and the community. In ‘**Impact of Covid-19 on Sporting Activities and Society in the Mutare Community, Zimbabwe: Negotiating a Bumpy Playground**, he pulls together the ripple socio-cultural and economic effects of COVID-19 on one community in

Zimbabwe where sport came to a grinding halt as a result of the pandemic. Using a sample drawing on stakeholders from a diversity of associated businesses, affected community members and sports participants, he details the impacts for Mutare community. He then suggests strategies that could reduce risk and promote safer sport activities in light of the pandemic given the debilitating effects of the sudden pause on sports for this poor Zimbabwean community.

## References

- Africanews 2020. Despite Zero Case, Zimbabwe Declares National Emergency over COVID-19. Available at: <https://www.africanews.com/2020/03/17/despite-zero-case-zimbabwe-declares-national-emergency-over-covid-19//> (Accessed on 10 January 2021.)
- Bachynski, K. & D.S. Goldberg 2014. Youth Sports & Public Health: Framing Risks of Mild Traumatic Brain Injury in American Football and Ice Hockey. *The Journal of Law, Medicine and Ethics* 42, 3: 323-333.
- Barlow, M.D., T. Woodman, C. Chapman, M. Milton, T. Dodds & B. Allen 2015. Who Takes Risks in High-risk Sport? The Role of Alexithymia. *Journal of Sport and Exercise Psychology* 37, 1: 83 - 96.
- Breivik, G. 1999. Personality, Sensation Seeking and Risk-taking among Top Level Climbers, Parachute Jumpers and White-water Kayakers. In Breivik, G. (ed.): *Personality, Sensation Seeking and Arousal in High Risk Sports*. Oslo: The Norwegian University of Sport and Physical Education.
- Castanier, C., C. le Scanff & T. Woodman 2010. Beyond Sensation Seeking: Affect Regulation as a Framework for Predicting Risk-taking Behaviors in High-risk Sport. *Journal of Sport and Exercise Psychology* 32, 5: 731 - 738.
- Choi, C. & C.H. Bum 2020. Changes in the Type of Sports Activity due to COVID-19: Hypochondriasis and the Intention of Continuous Participation in Sports. *International Journal of Environmental Research and Public Health* 17, 13: 4871. <https://doi.org/10.3390/ijerph17134871>
- Cutter, S.L. 1996. Vulnerability to Environmental Risks. *Progress in Human Geography* 20,4: 529 - 539.
- Daniel, L. 2021. Zimbabwe's Lockdown. *Business Insider SA*. 4 January.

- Available at: <https://www.businessinsider.co.za/zimbabwes-lockdown-is-far-harsher-than-sas-featuring-12-hour-curfew-2021-1>. (Accessed on 08 January 2021.)
- Dimitriadi, A. & S. Dimitriadi 2007. A Conceptual Model of Risk Management and its Importance for Sport & Leisure. *Choregia* 3,1:19 - 25.
- Duddu, P. 2020. Coronavirus Outbreak: Safety Measures at Major International Airports. Available at: <https://www.airport-technology.com/features/coronavirus-measures-world-airports>
- Euronews 2020. English Premier League will Resume on June 17. 28 May. Available at: <https://www.euronews.com/2020/05/28/english-premier-league-will-resume-on-june-17-after-100-day-absence> (Accessed on 10 January 2021.)
- Evans A.B., J. Blackwell, P. Dolan, J. Fahlen, R. Hoekman, V. Lenneis, G. McNarry, M. Smith, & L. Wilcock 2020. Sport in the Face of the COVID-19 Pandemic: Towards an Agenda for Research in the Sociology of Sport. *European Journal for Sport and Society* 17,2: 85 - 95. <https://doi.org/10.1080/16138171.2020.1765100>
- Eye Witness News 2020. 27 April. <https://abc7ny.com/coronavirus-nyc-update-corona-virus-cases/6131388/>
- Gouveia, C. & R. Pereira 2020. Professional Football in Portugal: Preparing to Resume after the COVID-19 Pandemic. *Soccer & Society*. <https://doi.org/10.1080/14660970.2020.1796653>
- Kappel, D. 2020. Football Match blamed for COVID-19 Spread in Italy and Spain. 26 March. Available at: <https://www.soccerladuma.co.za/news/articles/international/categories/coronavirus/football-match-blamed-for-coronavirus-spread-in-italy-spain/675818> (Accessed on 12 January 2021.)
- Kellett, P. & P. Turner 2009. Managing Sport in Drought – New Stakeholders and New Governance Issues: A Case Study. Abstract book of the 2009 Annual Conference of the North American Society for Sport Management in Columbia.
- Ludvigsen, J.A.L. & J.W. Hayton 2020. Toward COVID-19 Secure Events: Considerations for Organizing the Safe Resumption of Major Sporting Events. *Managing Sport and Leisure*. Available at: <https://doi.org/10.1080/23750472.2020.1782252> (Accessed on 05 January 2021.)
-

- Mastromartino, B.J., H.W. Walker, M.L. Ross & M. Narain 2020. Thinking Outside the 'Box': A Discussion of Sports Fans, Teams, and the Environment in the Context of COVID-19. *Sport in Society* 23, 11: 1707 - 1723.
- McIntosh, A.S. 2005. Impact Injury in Sport. In *Gilchrist, M.D. (ed.): IUTAM Proceedings on Impact Biomechanics: From Fundamental Insights to Applications*. Netherlands: Springer.
- Meeuwisse, W.H., H. Tyreman, B. Hagel & C. Emery 2007. A Dynamic Model of Etiology in Sport Injury: The Recursive Nature of Risk and Causation. *Clinical Journal of Sport Medicine* 17, 3:215 - 219.
- Nauright, J. & S. Zipp 2020. The Evolving Sportsworld: Sports and Physical Activities in the Time of COVID-19. *Sport in Society* 20: 11.
- Parnell, D., P. Widdop, A. Bond & R. Wilson 2020. COVID-19, Networks and Sport. *Managing Sport and Leisure* 1 - 7.
- Perold, I., C. Hattingh, H. Bama, N. Bergh & J.P. Bruwer 2020. The Forced Cancellations of Four Selected Annual Sport Events (ASEs) due to COVID-19 and its Socio-economic Influence on South Africa: A Literature Review Working paper BRS/2020/005.  
<https://ssrn.com/abstract=3634508>
- Powell, J.W. 2001. Cerebral Concussion: Causes, Effects and Risks in Sports. *Journal of Athletic Training* 36, 3: 307 - 311.
- Qukula, Q. 2020. President Cyril Ramaphosa Implemented Travel Bans with Immediate Effect after Declaring the Covid-19 Outbreak a National Disaster. Available at: <http://www.capetalk.co.za/articles/377878/10-interventions-announced-by-president-cyrramaphosa-to-curb-covid-19-spread>
- Ray, C. 2020. Future of SA's Big Three Sports is Precarious in a Covid-19 World. Available at: <https://www.dailymaverick.co.za/article/2020-03-23-future-of-sas-big-three-sports-is-precarious-in-a-covid-19-world/> (Accessed on 10 January 2021.)
- SABC News 2020. 16 April 18h50.
- Shipway, R. 2018. Building Resilience and Managing Crises and Disasters in Sport Tourism. *Journal of Sport and Tourism* 22, 3: 265 - 270.
- South African Government 2020. President Cyril Ramaphosa: Escalation of Measures to Combat Coronavirus COVID-19 Pandemic. 23 March.  
<https://www.gov.za/speeches/president-cyrramaphosa-escalation-measures-combat-coronavirus-covid-19-pandemic-23-mar>
-

- Swart, K. & D. Maralack 2020. COVID-19 and the Cancellation of the 2020 Two Oceans Marathon, Cape Town, South Africa. *Sport in Society* 23:11, 1736 - 1752. <https://doi.org/10.1080/17430437.2020.1805900>
- Yang, J., G. Gang Cheng, Y. Zhang, T. Covassin, E.O. Heiden & C. Peek-Asa 2014. Influence of Symptoms of Depression and Anxiety on Injury Hazard among Collegiate American Football Players. *Research in Sports Medicine* 22, 2:147 – 160.
- Wicker, P., K. Filo & G. Cuskelly 2013. Organizational Resilience of Community Sport Clubs Impacted by Natural Disasters. *Journal of Sport Management*, 27: 510 - 525.
- World Health Organisation 2020a. Available at: <https://www.who.int/> (Accessed on 08 January 2021.)
- World Health Organisation 2020b. Coronavirus disease (COVID-19) Situation Report – 162. [https://www.who.int/docs/default-source/coronaviruse/20200630-covid-19-sitrep-162.pdf?sfvrsn=e00a5466\\_2](https://www.who.int/docs/default-source/coronaviruse/20200630-covid-19-sitrep-162.pdf?sfvrsn=e00a5466_2)

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