Differences in Levels of Participation and Responses to the Lockdown among Selected Sporting Codes in South Africa

Urmilla Bob
ORCID iD: https://orcid.org/0000-0002-4256-2488

Abstract

The COVID-19 pandemic has had devastating and widespread impacts on the sports sector, ranging from professional and amateur to recreational sports as well as from local to global levels. Cancellations and rescheduling of sports events and activities, as well as the closure of sports facilities and gyms are aimed at enforcing social distancing measures to reduce and stop the spread of the virus. Different types of sports activities have had differential impacts and responses which have brought to the fore that the sports and exercise sector is a key job creator and contributes socially and economically in a number of ways. The general public has responded to the changes brought about by the pandemic in different ways. This study draws on primary research undertaken, based on public online survey results. A sub-set of 546 surveys where respondents indicate that they regularly participate in selected codes of sports was extracted. The sporting codes were purposively selected to represent codes that have high participation and consumption rates that are team and spectatorship-based (soccer and rugby), is a more individual-orientated sport (golf) and a sport that has high participation rates that include moving geographically (running). The demographic profiles of the respondents are presented. Thereafter, participation and consumption trends in relation to the different sporting codes are discussed. Thereafter, comparative analyses are undertaken to examine if and how participation rates have changed as a result of the COVID-19 pandemic disruptions. Thus, the study is aimed at exploring how the COVID-19 pandemic had impacted on different codes of sports in terms of participation and consumption patterns.

Keywords: COVID-19 pandemic, sport participation, sporting codes, South Africa

DOI: https://doi.org/10.29086/978-0-9869937-0-1/2022/AASBS9/11
Chapter URL pp 173 - 193: http://alternation.ukzn.ac.za/Files/books/series/09/09-bob.pdf

Introduction

Sports and other associated physical activities have become embedded in all dimensions of society, including the business sector. In addition to the economic value of sports, there are other multiple benefits such as health and well-being, social interaction and cohesion, recreation and leisure, entertainment, school and work productivity and performance, and stress relief (Dunton, Wang, Do & Courtney 2020; Heradstveit, Haugland, Hysing, Stormark, Sivertsen & Bøe 2020; Hulteen, Smith, Morgan, Barnett, Hallal, Colyvas & Lubans 2017). The COVID-19 pandemic, specifically disruptions associated with travel restrictions and social distancing protocols to curb the spread of the virus, has had devastating and widespread impacts on the sports sector. All sporting codes and types, ranging from professional and amateur to recreational sports as well as from local to global levels, have been impacted. The local to global cancellations and rescheduling of sports events and activities as well as the closure of sports facilities and gyms in most countries have been a key feature of lockdowns/ shutdowns/ stay-at-home orders and social distancing measures. This is mainly linked to the perceptions that the sports sector is associated with social gatherings and interactions that create high risk conditions for the spread of the virus.

Mutz and Gerke (2020) state that the COVID-19 pandemic resulted in the closure of sports clubs, fitness facilities as well as other activity-related clubs, which subsequently led to the disruption of people's leisure and recreational activities as well as participation in sports and exercise routines. While the cancellations and rescheduling of major sports events and activities (such as the Olympic Games and various leagues globally) have received significant media and increased academic attention, there is substantially less coverage and understanding of how the public who participate in sports activities are responding to the disruptions. This is a gap in knowledge that this Chapter addresses. Dunton Wang, Do and Courtney (2020) assert that COVID-19 restrictions are likely to decrease levels of physical activity, including sports participation that can impact on health outcomes. Additionally, sports codes and activities differ considerably. Thus, an additional contribution of this study is that comparisons between purposively selected sporting codes and levels of participation, disruptions experienced and responses are undertaken to examine whether differences exist that should be considered when restrictions are placed on the sports sector.

The next section undertakes a brief literature review of key issues pertaining to sports participation and consumption, with a special focus on South Africa, as well as COVID-19 pandemic impacts. The relevant documents are mainly sourced from websites since there are very few academic publications because research of this type is currently underway and takes longer to publish. Thereafter, an overview of the methodological approach adopted to collect the primary data is presented. This is followed by an analysis of survey results, adopting a thematic and comparative approach. Finally, concluding comments and recommendations are presented.

Literature Review: COVID-19 Impacts on Sports Participation

The sports sector contributes significantly to economic development, the health and well-being of the general public, and social interaction and cohesion. This section briefly provides an overview of the COVID-19 pandemic on sports events and, thereafter, looks at impacts on public participation, the focus of this study.

COVID-19 Pandemic Impacts on Sports Events

The COVID-19 pandemic has inflicted havoc on sporting calendars, activities and events from local to local levels. For example, Ahmed, Stefano and Nicolaou (2020) state that the Wimbledon tennis championships have been cancelled, the Tokyo 2020 Olympic Games have been postponed, and North America's National Basketball Association (NBA) and Europe's football leagues have been suspended. They further state that the American National Football League (NFL) season, which is due to start in September, is also at risk. Currently, some televised matches are underway with not spectators in the stadiums. At the local level, due to severe restrictions, sporting activities have generally stopped. Aziz (2020) and Hall (2020) assert that all aspects of the sports sector, including various sporting codes, athletes, businesses, sponsorships, media coverage, and entertainment activities have been impacted by this pandemic.

Impacts on sporting facilities and sites have also had detrimental consequences. Ramagole, van Rensburg, Pillay, Viviers, Zondi and Patricios (2020) and Wackerhage, Everett, Krüger, Murgia, Simon, Gehlert, Neuberger,

Baumert and Schönfelder (2020) indicate that the coronavirus has had negative impacts on sports and fitness facilities such as stadiums, sports clubs, gyms and swimming pools, as a result of the pandemic control measures such as the lockdown. Most of these facilities/ sites in South Africa had to close, had restricted access or were re-purposed as health care centres or to house the homeless.

Under Alert Level 3 many sports codes have been given the go ahead to resume training and activities, while adhering to social distancing and sports specific regulations. Luckhoff (2020) and the South African Government (2020) report that non-contact sporting codes such as archery, baseball, canoeing, golf and tennis are permitted to commence. Additionally, sports bodies can have events, only if there are closed to the public (that is, spectators are not permitted to attend the games). Furthermore, professional sports training can resume. However, even within the different non-contact sporting codes, regulations vary (Ray 2020; South African Government 2020). As the South African Government (2020) indicates, in relation to athletics, only leagues for Olympics qualification and international or major competitions are allowed to commence, no cross-border training is allowed for equestrian codes, and only outdoor (not indoor) volleyball is allowed to commence. In addition, certain sporting codes deemed to be contact-based (such as basketball, hockey, motorsport, figure skating and handball) have been given the permission to train under Alert Level 3 (South African Government 2020). Although sporting codes such as rugby, cricket and football are allowed to train, non-contact training methods are to be employed, and only players and support staff for local elite leagues are to participate (Ray 2020; South African Government 2020). Likewise, for netball, South African training is only allowed for leagues and for athletics, training is only permitted for the preparation of Olympics qualification and national championships (South African Government 2020).
However, there has been resistance to continued restrictions on certain sports codes due to the low risks associated with some of these activities. Additionally, Ray (2020) indicates that decisions to permit specific sporting codes to continue, restrictions on others and what levels of sports will be permitted have been received with some criticism, for example, limiting non-contact sports to only professional status means that there will be serious financial implications for amateur tournaments, leagues and competitions (which have significant impacts on local economies and participation). Contradictions are also discernible in the regulations by the government that continue

to impose restrictions on specific codes of sports (especially those that are non-contact in nature such as swimming) for Alert Level 3, for example, triathlon training is permitted while swimming is not, yet swimming is a component of triathlon and powerlifting and weightlifting is not allowed, yet these are non-contact sports. These decisions are a source of confusion for the sports industry as well as participants, affecting participation rates.

The resumption of specific domestic sports codes is not unique to South Africa. For example, the British Broadcasting Corporation (BBC) Sport (2020) and Tanner (2020) report that the United Kingdom government has approved the return of domestic competitive sport for some sporting codes such as the Premier Darts Championship tour which is said to resume behind closed doors with 5 one-day players championship events from the 8-12 July 2020. Additionally, horse racing resumed in England as well as the Snookers Championship League, both were hosted behind-closed-doors (BBC Sport 2020). Tanner (2020) states that this third stage of elite sport guidance in England provides a safe basis for the resumption of sports events behind closed doors (that is, no spectators will be allowed at live sporting events as well as strict protocols to make sure that social distancing is still observed at sporting venues), which is the approach adopted by South Africa as well. Additionally, for events such as the Snooker Gibraltar Open, some players had to referee their own games while playing behind closed doors (*Independent* 2020).

COVID-19 Impacts on Public Sports Participation

Cunningham, Fairley, Ferkins, Kerwin, Lock, Shaw and Wicker (2018) state that sports encompass individuals and/ or teams participating in physical activities that display some level of exertion and skill, which is usually competitive or recreational and also has entertainment/ consumption elements. TeamSouthAfrica (2020) indicates that there are different types of sporting codes, which include (in alphabetical order) aquatics, archery, athletics, badminton, baseball, basketball, boxing, canoeing, cricket, cycling, equestrian, fencing, football, gymnastics, handball, hockey, judo, karate, modern pentathlon, netball, rowing, rugby, sailing, shooting, squash, table tennis, taekwondo, tennis, triathlon, volleyball, water polo, weightlifting and wrestling. These sporting codes have different levels of participation as well as spectatorship and viewing interest. Eime, Harvey, Charity and Payne (2016) note that it is beneficial to understand sports participation in order to provide accurate,

evidence-based strategic planning and policy creation for the sports sector. Social position and socio-demographics are crucial factors that influence differences in sport participation (Hoekman, Breedveld & Kraaykamp 2017), as well as the specific sporting codes which this study focuses on.

In terms of socio-demographics, age, gender and income are the main factors that influence levels of participation (Eime, Harvey, Charity & Payne 2016; Dunton, Wang, Do & Courtney 2020; Heradstveit, Haugland, Hysing, Stormark, Sivertsen & Bøe 2020; Hulteen, Smith, Morgan, Barnett, Hallal, Colyvas & Lubans 2017; van Oostrom, Slobbe, van den Berg, Verschuren & Picavet 2019). Eime, Harvey, Charity and Payne (2016) indicate that sports participation is at its peak level with children and young adolescents, and it steadily decreases as an individual reaches adulthood. More specifically, studies showed that whilst sports participation did not decrease for young females, the levels of participation started to decline amongst older females between the ages of 16 to 18 years as this group changed their sports participation types to less structured and less competitive types of sports activities (Eime, Harvey, Charity & Payne 2016). An example provided by Van Dyck, Cardon, De Bourdeaudhuij, De Ridder and Willem (2017), who did a study on running events, showed that the average age of participants increased within the group of 30 to 50 years, and it was also shown that men were the dominant participants at 57% compared to women at 43%. However, whilst there is proof that males have a higher likelihood of participating in sport, Eime, Sawyer, Harvey, Casey, Westerbeek and Payne (2015) assert that it must be noted that participation by women has increased significantly.

Economic status is also a factor that influences participation and consumption rates, especially influencing the amount of resources available to purchase products and services (including paying trainers, gym membership/ club fees, entrance fees) as well as access sporting facilities and activities. Access to disposable income (since for the general public, sports participation is a luxury or additional activity) is particularly important to consider during the pandemic with disruptions are negatively impacting on people's income, with people losing jobs, experiencing pay cuts, and being uncertain about future employment prospects and security. The shift to online training and participation also incurs costs in relation to internet connectivity, procuring data, and for some sports, procuring the necessary facilities and equipment. Hoekman, Breedveld & Kraaykamp (2017) state that research shows that persons in higher socio-economic groups generally had increased sports

participation rates. They further assert that the main reasons for this include the safety of the community, better sports facilities and infrastructure, and easier access to sports activities and facilities.

Dunton, Wang, Do and Courtne (2020) found that lower income and ethnic minority groups in the United States of America had lower levels of participation in sports and physical activity. They assert that this may have long-lasting consequences for their health and that there is a need to pay attention to vulnerable groups whose participation in physical activities (including walking and jogging in neighbourhoods) have been severely disrupted by the pandemic. Drummond, Elliott, Drummond and Prichard's (2020) assessment of youth participation in sport is more dire, predicting that this could be a 'generation lost'. This is not only in relation to exposure to sports and lack of opportunities to encourage physical and mental fitness, but also not experiencing the roles that sports play in developing a sense of community culture and being able to volunteer. Talent pathways and training for youth, especially at the local level, is likely to be compromised and if economic conditions do not permit these activities to resume, youth may not have opportunities to participate at amateur and professional levels (Drummond, Elliott, Drummond & Prichard 2020).

Pillay, van Rensburg, van Rensburg, Ramagole, Holtzhausen, Dijkstra and Cronje (2020) examined the impacts of the COVID-19 pandemic on elite and semi-elite South African athletes. They found that among the mainly male respondents, most trained alone, daily, at moderate intensity and for 30-60 minutes. Of concern, is that many of the athletes interviewed felt depressed, consumed excessive amounts of carbohydrates and required motivation to keep fit. They conclude that the pandemic has psychological, nutritional and physical consequences. Additionally, they assert that lost opportunities, as well as uncertain financial and sporting futures, may have significant effects on athletes and the sports industry more generally. The need to provide support to athletes, especially by the government and sports federations, was underscored by the authors.

People who participate in sports activities have been impacted by the pandemic, as indicated earlier, and have responded to the changes brought about by the pandemic in different ways. Mutz and Gerke (2020) state that to counter the disruptions associated with the pandemic, many people have resorted to home-based and online workouts as a substitute to organised sporting activities (Mutz & Gerke 2020). However, Mutz and Gerke (2020) state

that this is usually easier for those people with enough space, the necessary equipment and are able to workout in the absence of an instructor. Many people, without the necessary space or because of other responsibilities and dynamics in the home, attempts to find innovative may have stopped participating. However, there are few studies that empirically assess how people are responding, which this study does.

Mutz and Gerke (2020) state that more generally, trainers and coaches have moved to online training that has seen an increased uptake. Online training has become the main source of income for many trainers and coaches, which is enabling persons who have internet connectivity to participate from home. Additionally, several sports organisations have developed virtual sports and exercise programmes for their members to assist with training from home (Mutz & Gerke 2020).

The sports sector has responded to create opportunities for public participation and consumption which includes, according to Hall (2020), attempts to find innovative means to engage consumers. Specific examples provided by Hall (2020) are broadcasters showing or streaming archived content, classic games, niche competitions and e-sports to try to keep sports fans watching; and having e-game nights and hosting social media virtual parties for the public to engage with former and current players.

Methodology

This study draws on primary research undertaken, based on public online survey results. The study was part of a broader project undertaken by the South Africa Cultural Observatory on behalf of the Department of Sports, Arts and Culture to examine the impacts of the COVID-19 pandemic on the sports sector. The author is the project leader and full ethical approval was granted by the University of KwaZulu-Natal's Human and Social Sciences Ethics Committee. A screening question was used to ensure that potential respondents provided informed consent to participate (if they declined, they could not continue with the survey). Their anonymity was assured. Email and telephonic invitations (with the survey link) were sent to individuals; universities; sports federations and clubs; local, provincial and national departments involved in sports; personal trainers and coaches; etc. to forward to their networks. It is important to note that a limitation of online surveys is that internet connectivity is required to participate in the study and that using networks to invite persons

may compromise representation in relation to the population. Nevertheless, given the current restrictions, the online survey approach is being widely used. The results do, however, provide valuable insights into trends and public perceptions.

A sub-set of 546 surveys where respondents indicated that they regularly participate in selected codes of sports was extracted. The sporting codes were purposively selected to represent codes that have high participation and consumption rates that are team and spectatorship-based (soccer and rugby), is a more individual-orientated sport (golf) and a sport that has high participation rates that include moving geographically (running/ jogging).

Data Analysis

The data analysis is undertaken thematically and comparatively in relation to the selected sporting codes and the demographic profile of the respondents, sports participation and consumption prior to the COVID-19 pandemic, and COVID-19 impacts. The Table below indicates the proportionate distribution of respondents in relation to the sporting codes selected for analysis. Most respondents participated in running (38.6%) followed by golf (24.5%), soccer (22.4%) and rugby (14.5%).

Table 1: Proportion of respondents participating in selected sport codes

	Frequency	Percent
Running	211	38.6
Golf	134	24.5
Soccer	122	22.4
Rugby	79	14.5
Total	546	100.0

Demographic Profile of the Respondents

Respondents were from different age groups with most being 36-45 years (24%) and 46-55 years (23.8%), followed by 56-65 years (15.6%), 26-35 years (15.4%) and 18-25 years (15.2%). A few respondents (6%) were 65-75 years old. Older respondents participated in running and golf with younger respondents participating in the team-based sports (rugby and golf). In terms

of gender, most respondents were males (67.4%), with larger proportions of male participants for rugby and soccer, again the more team-oriented sports. The gender imbalance is in keeping with research presented earlier that indicates that males dominate in relation to sports participation. It is important to further note that soccer and rugby, in particular, has a masculine bias. In terms of population group, most of the respondents were Africans (35.9%) or Whites (31.3%). It is important to note that the percentage of respondents in terms of population group is not reflective the South African population, which could be attributed to adopting the online survey approach. However, in relation to sporting codes, the association of different population groups is evident with more Africans (50.8%) participating in soccer, compared to rugby (40.5% compared to 32.9% for Africans) and golf (48.5% compared to 26.9% for Africans) where more White participation was evident.

Almost all respondents (91.6%) had post schooling qualifications, with 20.1% having undergraduate and 48.4% having postgraduate degrees. Most respondents were also either employed on a full-time basis (54.6%) or self-employed (20%). Close to a third of the respondents (30.6%) declined to provide their monthly income or regarded this information as confidential. Among the rest, most of the respondents (42.5%) had a monthly income of more than R30 000. Those who indicated none were either students or retirees. Most respondents were located in Gauteng (46.9%), KwaZulu-Natal (26.7%) or the Western Cape (18.5%), the three most populated and urbanised provinces in South Africa. These results could be because of the online survey approach adopted, but also reflects sports participation rates being higher among higher income groups as noted by Hoekman, Breedveld and Kraaykamp (2017).

Pre-COVID-19 Sports Participation and Consumption Trends

Respondents were asked to describe their interest and involvement in sports activities. The Table below shows that most respondents participate in sports activities recreationally/ socially (including going to a gym, having a personal trainer, etc.) (73.3%), followed by participating in sports activities at an amateur level (player/ athlete) (54.9%), being an avid fan of sports events/ activities and always trying to attend or watch it on television/ online/ social media (54.8%) and being interested in sports events/ activities and seeing it when they can (44%). Fewer respondents (10.3%) stated participating in sports activities at a professional level (player/ athlete), which is understandable

given the professional sports are at a higher elite level. The responses reflect that participants in a variety of sporting codes also consume sports on different mediums. Furthermore, multiple interests in sports are noted, ranging from social/ recreational to professional interests. Slight differences in sporting codes are also evident with the team-based sports (soccer and rugby) having higher participation associated with recreational/ social interests. Interesting, more respondents participating in the online survey indicated that they were involved at amateur level in relation to running and golf, the more individual-orientated sports (with many persons participating in these sporting codes are also club members). This could be attributed to the number of tournaments/ marathons that individuals can participate in as amateurs.

Table 2: Interest and involvement in sports activities (in %): Multiple responses

	Running (n=211)	**Golf (n=134)**	**Soccer (n=122)**	**Rugby (n=79)**	**Total (n-546)**
I participate in sports activities recreationally/ socially (including going to a gym, having a personal trainer, etc.)	66.4	73.9	79.5	81.0	73.3
I participate in sports activities at an amateur level (player/ athlete)	59.2	67.9	39.3	45.6	54.9
I am an avid fan of sports events/ activities and always try to attend or watch it on television/ online/ social media	35.5	64.2	66.4	72.2	54.8

I am interested in sports events/ activities and see it when I can	33.6	53.0	49.2	48.1	44.0
I participate in sports activities at a professional level (player/ athlete)	9.5	11.9	10.7	8.9	10.3

The Table below indicates the reason/s respondents participate in or watch sports events/ activities. Various reasons were forwarded with most respondents indicating multiple responses which resonate with sports having several associated benefits that motivate people's participation and consumption as indicated by Dunton, Wang, Do and Courtney (2020), Heradstveit, Haugland, Hysing, Stormark, Sivertsen and Bøe (2020), Hulteen, Smith, Morgan, Barnett, Hallal, Colyvas and Lubans (2017). The main reasons forwarded were health and well-being (88.8%), socialising with friends and family (75.5%) and relaxation (66.5%), entertainment purposes (62.8%) and wanting to support the development of sport (42.7%). Fewer respondents stated to earn an income/ source of income (13.9%) and sports betting (2.7%). While lower, the contribution of sports to job creation is evident. Some differences in relation to the sport codes are noted. Specifically, proportionately more rugby respondents indicated a desire to support the development of sport and to earn and income. Additionally, more golf participants identified health and well-being and socialising with friends and family.

Table 3: Reasons for participating in and watching sports (in %): Multiple responses

	Running (n=211)	**Golf (n=134)**	**Soccer (n=122)**	**Rugby (n=79)**	**Total (n-546)**
For health and well-being	82.5	85.1	77.0	74.7	80.8
Socialising with friends and family	72.0	83.6	72.1	75.9	75.5
Relaxation	60.2	73.1	70.5	65.8	66.5

Entertainment purposes	56.4	68.7	66.4	64.6	62.8
Want to support the development of sport	35.1	47.0	41.8	57.0	42.7
Earn an income/ source of income	9.5	13.4	15.6	24.1	13.9
Sports betting	.9	3.0	4.1	5.1	2.7

COVID-19 Sports Participation and Consumption Impacts

Respondents were asked how they personally experienced disruptions in relation to their sports participation/ interest. The Table below indicates that multiple disruptions were experienced with the main ones (with more than 40% responses) being: unable to take part in sports activities (59.5%), stopped attending games/ matches (50.4%), stopped/ decreased socialising with friends and family when watching sports (48%) and less time exercising/ taking part in physical activity (46.3%). Responses between 30% and 40% included stopped going to pubs/ restaurants to watch games (39.6%), stopped watching sports on television/ online/ social media (33.9%), reduced time watching sports on television/ online/ social media (33.7%) and reduced participation in sports activities (30.8%). Close to a quarter of the respondents (25.3%) stated changed from face-to-face interactions to online/ virtual interactions. Only a few respondents (6.8%) stated more time exercising/ taking part in physical activity. Disruptions to physical participation, sports consumption and social interactions are evident. In terms of sporting codes, rugby appears to be the most impacted across all the aspects, which could be linked to rugby being a much more physical contact sport than the other sporting codes. More golf participants also identified higher levels of social disruptions. Soccer had the lowest responses for reduced participation in sporting activities, which could be linked to soccer having less equipment and physical site requirements (can be played in an open field).

The relatively low participation on online platforms (ranging from 14.8% for soccer to 35.4% for rugby) is noted. The assumption that high levels of online sports participation and training, as noted by Mutz and Gerke (2020), is occurring may be misplaced or maybe in relation to other types of sporting codes or activities. It is more likely the online shift is taking place in exercise

and training programmes such as functional, crossfit, strength and conditioning, high intensity interval and aerobic training rather than specific sporting codes. Thus, the results indicate that participants in some of the main sporting codes in South Africa have not been able to shift to online participation/ training. Both the prevalence of and ability of online training to fill the gap may be exaggerated and needs further investigation to examine if this is by choice or whether participants are facing challenges to participate online.

Table 4: Disruptions experienced by respondents in relation to sports participation/ interest (in %): Multiple responses

	Run-ning (n=211)	**Golf (n=134)**	**Soccer (n=122)**	**Rugby (n=79)**	**Total (n-546)**
Unable to take part in sports activities	54.0	65.7	50.8	77.7	59.5
Stopped attend-ing games/ matches	45.0	59.0	40.2	65.8	50.4
Stopped/ de-creased sociali-sing with friends and family when watching sports	42.2	58.2	36.9	63.3	48.0
Less time exercising/ tak-ing part in phy-sical activity	47.9	46.3	34.4	60.8	46.3
Stopped going to pubs/ restau-rants to watch games	33.2	53.0	30.3	48.1	39.6

Stopped watching sports on television/ online/ social media	33.6	28.4	33.6	44.3	33.9
Reduced time watching sports on television/ online/ social media	26.5	41.8	26.2	50.6	33.7
Reduced participation in sports activities	33.2	32.1	17.2	43.0	30.8
Changed from face-to-face interactions to online/ virtual interactions such as online classes and games	29.9	21.6	14.8	35.4	25.3
More time exercising/ taking part in physical activity	8.1	6.0	5.7	6.3	6.8

Respondents were asked to indicate how the COVID-19 pandemic is likely to change their participation in and consumption of sports events/ activities in the future, when lockdown ends. The Table below indicates that only 28.8% (ranging from 20.5% among soccer participants to 34.2% among rugby participants) believed that there will be no change and conditions will revert to normal. This indicates that most respondents aligned to sentiments expressed by Dunton Wang, Do and Courtney (2020), Hall (2020) and Mutz and Gerke

(2020) who that the COVID-19 will have long-term and enduring impacts. Close to a third of the respondents (31.1%) stated more online watching/ consumption of sport and 29.9% indicated more online participation in sports activities. Thus, for a substantial proportion of the respondents, increased online participation and consumption of sports will continue, even when the virus is brought under control. The lowest proportion of respondents stated not attending matches/ games physically (21.8%), which suggests that for some respondents behaviour change to limit physical contact will persist post the pandemic. Again, more rugby respondents noted long-lasting changes compared to the other sporting codes.

Table 5: How the COVID-19 pandemic is likely to change participation in and consumption of sports events/ activities in the future (in %): Multiple responses

	Running (n=211)	Golf (n=134)	Soccer (n=122)	Rugby (n=79)	Total (n-546)
No change – revert to normal	30.3	30.6	20.5	34.2	28.8
More online participation in sports activities	28.4	23.9	25.4	44.3	28.9
More online watching/ consumption of sport	28.0	26.9	31.1	46.8	31.1
Not attending matches/ games physically	19.9	21.6	14.8	38.0	21.8

Conclusion

The findings of this study indicate the impacts that the COVID-19 pandemic is having on sports participation and consumption in relation to different sporting codes. All sporting codes have generally experienced disruptions

associated with the pandemic, although differences are noted, especially in relation to individual-orientated and team-orientated sporting codes. The selected sporting codes are among those that are more popular in South Africa. Additional research is required to examine impacts in relation to smaller and more specialised sporting codes. The multiple benefits of sports also emerge from this study. Thus, strategies and programmes need to be developed to encourage people to continue to participate in sports and physical activities to stay fit and connect to others. As Pillay, van Rensburg, van Rensburg, Ramagole, Holtzhausen, Dijkstra and Cronje (2020) indicate, the isolation experienced by many as a result of the COVID-19 containment measures are raising concerns about the psychological well-being of people, and sports (through participation and consumption) can play a major role in helping people stay mentally and physically fit.

A key finding emanating from this study is the importance of understanding differences in relation to sporting codes to inform decisions taken to impose restrictions. It is critical that specific sporting codes and sports sector organisations and federations are consulted since they are better positioned to understand the nature and extent of sports participation in relation to specific codes. Additionally, internet connectivity and access to data may create opportunities for increased participation, training and consumption. Thus, the government should develop strategies to improve internet connectivity, access and affordability in the country. Sports is an important vehicle for socio-economic development as well as health and well-being. The COVID-19 pandemic has severely impacted participation in and consumption of sports. This study shows that participants are responding to the conditions but that there is a need for support as well as sensitivity to differences in the sports sector in relation to social distancing protocols and lockdown regulations.

References

Ahmed, M., M. Di Stefano & A. Nicolaou 2020. Can the Sports Industry Survive the Coronavirus Shutdown? Available at: https://www.ft.com/content/fd7e58ec-7438-11ea-95fe-fcd274e920ca (Accessed on 27 June 2020.)

Aziz, S. 2020. Global Sports Face 'Unprecedented' Test Amid Coronavirus Outbreak. Available at:

https://www.aljazeera.com/news/2020/03/global-sports-face-unprecedented-test-coronavirus-outbreak-200303195953135.html?xif=tml (Accessed on 20 June 2020.)

BBC Sport 2020. *Coronavirus: How the Circus has Impacted Sporting Events Around the World*. Available at: https://www.bbc.com/sport/51605235. (Accessed on 28 June 2020.)

Cunningham, G.B., S. Fairley, L. Ferkins, S. Kerwin, D. Lock, S. Shaw & P. Wicker 2018. eSport: Construct Specifications and Implications for Sport Management. *Sport Management Review*, 21,1: 1 - 6. Available at: https://reader.elsevier.com/reader/sd/pii/S1441352317301705?token=9B9665C82C2996F91D2CD696C2790B72667ED69D7A84419560F4859FAFEF7A88B0029DF60BD5CC3DADF20CC1350B65E9. (Accessed on 3 June 2020.)

Dunton, G., S. Wang, B. Do & J. Courtney 2020. Early Effects of the COVID-19 Pandemic on Physical Activity in US Adults. Available at: https://www.cambridge.org/engage/coe/article-details/5ebc9163597aba001941b1fe (Accessed on 29 June 2020.) https://doi.org/10.33774/coe-2020-kx2rq

Drummond, M., S. Elliott, C. Drummond & I. Prichard 2020. Youth Sport and COVID-19: A Potential Generation Lost. *Emerald Open Research* 2,27: 27. Available at: https://emeraldopenresearch.com/articles/2-27 (Accessed on 21 June 2020.) https://doi.org/10.35241/emeraldopenres.13661.1

Eime, R.M., N. Sawyer, J.T. Harvey, M.M. Casey, H. Westerbeek & W.R. Payne 2015. Integrating Public Health and Sport Management: Sport Participation Trends 2001–2010. *Sport Management Review*, 18,2: 207 - 217. Available at: https://doi.org/10.1016/j.smr.2014.05.004; https://www.researchgate.net/publication/263284006_Integrating_public_health_and_sport_management_SPORT_participation_trends_2001-2010 (Accessed on 27 June 2020.)

Eime, R.M., J.T. Harvey, M.J. Charity & W.R. Payne 2016. Population Levels of Sport Participation: Implications for Sport Policy. *BMC Public Health*, 16,1: 752. https://doi.org/10.1186/s12889-016-3463-5 PMid:27506922 PMCid:PMC4977647 https://www.researchgate.net/publication/306019824_Population_levels_of_sport_participation_implications_for_sport_policy (Accessed on 27 June 2020.)

Hall, S. 2020. This is how COVID-19 is Affecting the World of Sports. Available at: https://www.weforum.org/agenda/2020/04/sports-covid19-coronavirus-excersise-specators-media-coverage/ (Accessed on 27 June 2020.)

Heradstveit, O., S. Haugland, M. Hysing, K.M. Stormark, B. Sivertsen & T. Bøe 2020. Physical Inactivity, Non-participation in Sports and Socio-economic Status: A Large Population-based Study among Norwegian Adolescents. *BMC Public Health* 20,1: 1 - 9. Available at: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-09141-2 (Accessed on 20 June 2020.) https://doi.org/10.1186/s12889-020-09141-2 PMid:32590961 PMCid:PMC7318733

Hoekman, R., K. Breedveld & G. Kraaykamp 2017. Sport Participation and the Social and Physical Environment: Explaining Differences between Urban and Rural Areas in the Netherlands. *Leisure Studies* 36, 3: 357 - 370. Available at: https://www.researchgate.net/publication/302555553_Sport_participation_and_the_social_and_physical_environment_explaining_differences_between_urban_and_rural_areas_in_the_Netherlands (Accessed on 2 June 2020.)

Hulteen, R.M., J.J. Smith, P.J. Morgan, L.M. Barnett, P.C. Hallal, K. Colyvas & D.R. Lubans 2017. Global Participation in Sport and Leisure-time Physical Activities: A Systematic Review and Meta-analysis. *Preventive Medicine*, 95: 14 - 25. Available at: https://doi.org/10.1016/j.ypmed.2016.11.027; PMid:27939265 https://pubmed.ncbi.nlm.nih.gov/27939265/ (Accessed on 2 June 2020.)

Independent 2020. *Sport-by-sport Look at the Impact of Coronavirus Around the World*, Available at: https://www.independent.co.uk/sport/sport-football-basketball-rugby-olympics-cancelled-coronavirus-impact-around-the-world-a9398186.html (Accessed on 28 June 2020.)

Luckhoff, P. 2020. Contact and Non-contact Sport Training to Resume. Golfers, Surfers Seek Clarity, Available at: https://www.capetalk.co.za/articles/385330/contact-and-non-contact-sport-training-to-resume-golfers-surfers-seek-clarity (Accessed on 27 June 2020.)

Mutz, M. & M. Gerke 2020. Sport and Exercise in Times of Self-quarantine: How Germans Changed their Behaviour at the Beginning of the Covid-19 Pandemic. *International Review for the Sociology of Sport* 1012690220934335. Available at: https://journals.sagepub.com/doi/pdf/10.1177/1012690220934335. (Accessed on 28 June 2020.) https://doi.org/10.1177/1012690220934335

Pillay, L., D.C.J. van Rensburg, A.J. van Rensburg, D.A. Ramagole, L. Holtzhausen, H.P. Dijkstra, & T. Cronje 2020. Nowhere to Hide: The Significant Impact of Coronavirus Disease 2019 (COVID-19) Measures on Elite and Semi-elite South African Athletes. *Journal of Science and Medicine in Sport* 23,7: 670 - 670. Available at: https://reader.elsevier.com/reader/sd/pii/S1440244020306022?token=5B73C5E3B16A22877D1745F719A93701D6D5DD046362B8E46267DFB9046EA314D53C03C2396F8757389903A5A2ACFDA1. (Accessed on 27 June 2020.)

Ray, C. 2020. Level 3 Regulations Edge SA Sports Federations to the Brink. Available at: https://www.dailymaverick.co.za/article/2020-06-01-level-3-regulations-edge-sa-sports-federations-to-the-brink/#gsc.tab=0. (Accessed on 25 June 2020.)

Ramagole, D., D.C.J. van Rensburg, L. Pillay, P. Viviers, P. Zondi & J. Patricios 2020. Implications of COVID-19 for Resumption of Sport in South Africa: A South African Sports Medicine Association (SASMA) Position Statement. *South African Journal of Sports Medicine* 32,1: 1 - 6. Available at: https://doi.org/10.17159/2078-516X/2020/v32i1a8454 https://journals.assaf.org.za/index.php/sajsm/article/view/8454 (Accessed on 25 June 2020.)

South African Government 2020. Frequently Asked Questions – Coronavirus Covid-19, Available at: https://www.gov.za/coronavirus/faq#:~:text=Non%2Dcontact%20sporting%20codes,HockeyMotorsportNetball%20(Leagues%20only) (Accessed on 27 June 2020.)

Tanner, J. 2020. Coronavirus: UK Government allows Live Sport to Return behind Closed Doors from June 1. Available at: https://www.skysports.com/football/news/11095/11997488/coronavirus-uk-government-allows-live-sport-to-return-behind-closed-doors-from-june-1 (Accessed on 20 June 2020.) https://doi.org/10.4324/9781003085607-1

TeamSouthAfrica 2020. Sports Codes. *TeamSouthAfrica.* Available at: https://www.teamsa.co.za/sports/. (Accessed on 20 June 2020.)

Van Dyck, D., G. Cardon, I. De Bourdeaudhuij, L. De Ridder & A. Willem 2017. Who Participates in Running Events? Socio-demographic Characteristics, Psychosocial Factors and Barriers as Correlates of Non-participation – A Pilot Study in Belgium. *International Journal of Environmental Research and Public Health* 14,11: 1315. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5707954/ (Accessed on 2 June 2020.)

van Oostrom, S.H., L.C. Slobbe, S.W. van den Berg, W.M. Verschuren & H.S.J. Picavet 2019. Do Generations Differ in Sports Participation and Physical Activity over the Life Course? Evidence from Multiple Datasets. *European Journal of Sport Science* 19,10: 1395 - 1403. Available at: https://pubmed.ncbi.nlm.nih.gov/30978151/. (Accessed on 2 June 2020.) https://doi.org/10.1080/17461391.2019.1600587 PMid:30978151

Wackerhage, H., R. Everett, K. Krüger, M. Murgia, P. Simon, S. Gehlert, E. Neuberger, P. Baumert & M. Schönfelder 2020. Sport, Exercise and COVID-19, the Disease Caused by the SARS-CoV-2 Coronavirus. *Dtsch Z Sportmed* 71: E1 - E12. Available at: https://www.germanjournalsportsmedicine.com/fileadmin/content/archiv2020/Heft_5-6/DtschZSportmed_Review_Wackerhage_Sport_Exercise_and_COVID-19_the_Disease_Caused__by_the_SARS-CoV-2_Coronavirus_2020-5.pdf (Accessed on 27 June 2020.) https://doi.org/10.5960/dzsm.2020.441

Urmilla Bob
University Dean of Research, and
School of Agriculture, Earth and Environmental Science
University of KwaZulu-Natal
Westville Campus
Durban
bobu@ukzn.ac.za