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Vol. 11, No. 10, 2021, Pg. 397 - 411

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The Impact of COVID-19 on the Sport Industry

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Abstract

The outbreak caused by covid-19 led to the cancellation and postponement of many international sporting events. Like many sports organizations affected by the pandemic, athletes also have been severely impacted due to the restrictions made by the government to control the outbreak. Therefore, this study investigates the impact of COVID-19 on the sport industry by eliciting information on athletes' physical and mental wellbeing and the risk of virus transmission during sports events and training sessions. This research employed a quantitative method by distributing questionnaires to 109 respondents in Malaysia via Google Forms. The data were statistically analyzed using SPSS (version 27) to determine frequency, mean, and standard deviation. The findings revealed that most athletes agreed to return to their sporting activities after their professional coaches advised them because this approach had a significant impact on their physical and mental growth. Furthermore, results indicated that most athletes in this region found it difficult to stay motivated to exercise because of the restrictions on sporting activities during the pandemic. Many of the athletes in the study concurred that virus transmission increases during sporting events and training sessions. Some of the organizers, on the other hand, did not have any experience or training to deal with the pandemic. Finally, results showed that COVID-19 brought about physical, nutritional, and psychological effects that may impact athletes' ability to return to sports safely and improve their overall health. As a result of missed opportunities and uncertainty about their finances and future, athletes and the sports businesses could suffer severe consequences. This study concludes that the government and athletic federations must help athletes by formulating new and improved guidelines and enforcing them immediately to revive the sport industry during these trying times. Besides, medical, nutritional, and psychological care should be provided more closely during and after the lockdown

Keywords: Covid-19, Sport Industry, Athletes, Malaysia, Career Development, Restriction, Virus Transmission

Introduction

The COVID-19 outbreak shocked the world, and the virus has now spread to almost every country in the world. United Nations (2020) revealed that lockdowns of businesses, schools, universities, workplaces, shopping malls, and new measures such as mandatory mask wearing at public places and social distancing are implemented to prevent the spread of the COVID-19 virus. Many aspects of daily life, including outdoor physical activities and athletics have

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been impacted by this circumstance. The COVID-19 effects are experienced across the globe in all sectors, including health, finance, education, and commerce, and the sport industry is no exception (Jones et al., 2021). In fact, COVID-19 can be viewed as a barrier to sports athletes' pursuit of professional achievement.

Emphasis on sports in society has grown over time, not only for individuals such as athletes but also for the general public's health. The positive effects of sports are generally gained through physical activities, although the secondary effects or advantages such as psychosocial and personal growth cannot be overlooked. As a result, athletes who participate in numerous sporting arenas have a higher degree of physical activity later in life. Malm et al. (2019) reported that people who participate in sports have a higher degree of physical activity in everyday life and, the knowledge of diet, fitness, and health can be acquired through sport. Peng et al (2017) shared that sports participation has a boosting effect on self-esteem. They added that athletes also have regular training sessions based on given schedules to maintain their bodies' fitness and physical conditioning.

The World Health Organization (WHO) has established a set of guidelines for individuals dealing with the public health elements of huge crowds, which is especially applicable to athletic events (World Health Organization, 2020). The COVID-19 issue wreaked havoc on global sport in unexpected ways. Its effects, however, are not evenly distributed. Sport for girls and women, sport in low- and middle-income nations, and sport for people with disabilities, according to experts and campaigners, would be disproportionately affected (Nauright et al., 2020). Mulcahey et al (2020) also stated that the outbreak caused by covid-19 led to the cancellation and postponement of many international sporting events. Like many sports organizations affected by the pandemic, athletes also have been severely impacted due to the restrictions made by the government to control the outbreak. Athletes have no choice but to focus on individualized home training due to the halt in professional and recreational sporting activities.

Movement Control Order (MCO) was imposed on 18 March 2020 in Malaysia. As a result, sports activities involving large groups of gathering and contact sports such as rugby, football and all indoor sports events were restricted due to MCO (Daley et al., 2020). This restriction makes many sports events canceled and postponed such as the FINA Diving GP Malaysia Leg, Malaysia Open in May, Malaysia International Age-Group Championships and the Sea Age-Group Championships, and many more. As a result, the athletes' sports development was stunted because they were hoping to qualify for the Olympics by taking part in local and international competitions (Loheswar, 2020). Hence, this study aims to investigate the impact of COVID-19 in the career development of local athletes, their mental and physical effects as a result of restriction of sports activities due to the pandemic and the risk of virus transmission during sporting events and training sessions.

Problem Statement

The sudden outbreak of COVID-19 caused a crisis in society, as well as in the sports industry. Mulcahey et al (2020) stated that the disruption caused by COVID-19 led to the cancellation and postponement of many international sporting events. Like many sports organizations affected by the pandemic, athletes also have been impacted due to the restrictions made by the government to control the outbreak (United Nations, 2020). Athletes

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have had no choice but to focus on individualized home training sessions due to the halt in professional and recreational sporting activities. In addition, the Movement Control Order (MCO) has been implemented since last year due to the sudden increase in the number of COVID-19-infected victims (Daley et al., 2020).

During MCO, sporting events have been prohibited due to the involvement of large gatherings of athletes and spectators. The Sports Commissioner's office also came out with circulars announcing the postponement of sporting events, both local and international (Daley et al., 2020). Hence, this study aims to investigate the impact of COVID-19 on the sport industry and to identify the effects of the pandemic on both athletes' physical and mental conditions.

This study aims to bridge the gap by answering the following research questions:

- 1. What is the impact of COVID-19 on the career development of those involved in the sport industry?
- 2. How has the restriction of sports activities due to the pandemic affected athletes' mental and physical health?
- 3. How high is the risk of coronavirus transmission during sporting events and training sessions?

Methodology

This study employed a quantitative method of research. A questionnaire was adapted from Pillay et al (2019) and distributed among 109 athletes via Google Forms for data collection. The questionnaire was distributed online through a Google Form link via WhatsApp. The questionnaire consists of four sections; Part A consists of the demographic profile; Part B covers the impact of COVID-19 in the career development of the sports industry; Part C is about the effects of sports restriction during the COVID-19 pandemic on athletes' physical and mental health; Part D is related to the risk of coronavirus transmission during sports events and training sessions. Except for the demographic questions, all the questions have two options, 'Yes' or 'No'. The data were analyzed using statistical analysis using SPSS and the descriptive results were obtained. According to the findings, the majority of the respondents fell in the category of 18 and 24 years of age. The athletes participated in two types of sports: indoor and outdoor. Football, netball, and volleyball are some instances of outdoor sports, while tennis, ping-pong, and taekwondo are some examples of indoor sports.

Results and Discussion

The COVID-19 pandemic has impacted the world's population including the sport industry with the continuous cancellations and postponements of sporting events, which greatly affected the whole sport industry (Nauright et al., 2020). This section analyzes the impact of COVID-19 on the sport industry and athletes and discusses the risk of virus transmission during sports events.

The Impact Of COVID-19 In the Career Development on The Sport Industry

Sports activities at all levels have been canceled due to the pandemic, as all sporting events require close contact between athletes, coaches and spectators, which allows sports to become an easy vector to the transmission of the virus. Therefore, the cancellation of many

events, sports organizations in Malaysia has halted all sports-related activities such as events and training sessions, which subsequently, had negative impacts on the industry.

Table 1. The Impact of COVID-19 on the Sport Industry

No.	ltem	Mean	SD
1	Are you willing to return to your regular sports activities and training if allowed so by the authorities during the COVID-19 pandemic, although it may not disappear any time soon?	1.74	0.439
2	Are you feeling constantly fatigued during the lockdown?	1.65	0.479
3	Are you using any supplements to boost your immune system?	1.60	0.493
4	Do your sleep soundly at night?	1.50	0.502
5	Have you been sleeping and waking up at your normal times as before the lockdown?	1.45	0.500
6	Has your diet worsened or improved during the lockdown?	1.30	0.462

Table 1 shows that a majority of the respondents mostly agreed that they were willing to return to sports if the regulations and authorities allowed them to return to sport even though they were aware, the COVID-19 virus would not simply "disappear" and maybe around for some time. In addition, it recorded the highest mean (M=1.74, SD=0.439). Most of the respondents agreed because as athletes, they needed to train for the upcoming competitions such as the Olympics. There is a need to balance and reschedule their training regime to balance the risk of deconditioning versus the risk of infection (Wong, et al., 2020).

Next, for the statement "feeling constantly fatigued during the lockdown", this item recorded the second-highest mean (M=1.65, SD=0.479). Therefore, it shows that more than half of the athletes feel constantly fatigued during the lockdown. Pillay et al (2019) shared similar findings, where almost half of the respondents reported feeling chronically fatigued during the lockdown period. Pillay et al (2019) also stated that social isolation, exercise reduction, sedentary behavior, and changes in nutrition could cause athletes to suffer from fatigue.

In addition, more than half of the respondents with a mean value of 1.60 and a standard deviation value of 0.49 said that they were consuming supplements to help boost their immune system. The results show that they are taking steps to prevent themselves from being infected with the virus during the pandemic. Table 1 depicts that almost the majority of the athletes do not sleep soundly or have a restful sleep during the lockdown, which covers a mean value of 1.50 and a standard deviation of 0.502. These findings are consistent with

data obtained by Pillay et al (2019), where a large number of the athletes reported a change in their sleep routine, compared to before lockdown.

When asked if they have been sleeping and waking up at their normal times as before the lockdown, more than half of the respondents indicated that they sleep soundly during the lockdown period (M=1.45, SD=0.500). It was found that those who responded with a "No" is due to social isolation, less physical activity, sedentary behavior, and dietary changes, all of which have a psychological consequence on sleep and fatigue. Thus, athletes need to be educated regarding the psychological impact on sleep and fatigue and re-adjust their sleeping patterns (Pillay et al., 2020).

Many of the respondents have improved their diet during the lockdown. Meanwhile, some of the respondents agreed that their diet worsened during the lockdown. Therefore, it can be concluded that most of the respondents have improved their diet during lockdown (M=1.30, SD=0.462).

Next, Table 2 consists of two questions, where researchers used multiple-choice questions in the questionnaires. These questions were employed in this study to triangulate the findings to improve the credibility and validity of research findings.

Table 2. The Impact of COVID-19 in the Career Development on the Sport Industry

No.	Item	Mean	SD
1	If your diet has worsened, in what way?	2.19	0.897
2	If yes to the above question, what supplements do you take?	2.10	1.575

Many of the respondents reported that they consumed excessive carbohydrates such as sweets, chocolates, rice and bread, followed by respondents who had processed food which records the highest mean. Meanwhile, some of the respondents had poor hydration during or after exercise, and the remaining of the respondents consumed an excessive amount of red meat (M=2.19, SD=0.897). Therefore, it can be concluded that most of the respondents consume excessive carbohydrates intake. Imbalanced nutrition may result in a myriad of issues upon returning to sports including deteriorated performance in all sports especially weight category sport. Given the significant inadequacies in nutrition during the lockdown, it seems appropriate to provide athletes with nutritional guidance by a qualified sports nutritionist, both during and post lockdown (Pillay et al., 2020).

The next item represents the respondents who consumed supplements during the pandemic. Vitamin C is the most common supplement consumed among the respondents (M=2.10, SD=1.575). This is followed by some of the respondents not taking any supplements at all. Several respondents were reported to consume protein powder and the remaining respondents were taking multivitamins as their supplements. Out of the 109 people who took part in the study, Vitamin C was mentioned by 72 of them as a way to improve their immune system. During the COVID-19 pandemic, Pillay (2020) stated that some experts recommended taking vitamin C as a supplement to boost immunity. Given the significant inadequacies in

nutrition during the lockdown, it seems appropriate for athletes to be provided proper nutritional guidance by sports nutritionists, both during the lockdown and afterwards (Pillay, 2020).

Therefore, research question 1 indicates that athletes agreed that COVID-19 impacted their career development in many ways. For example, cancellations of sporting events caused them to experience physical deconditioning and fatigue. The next section will present the findings for research question 2.

The Effects of Sports Restriction on Athletes' Physical and Mental Health

Many athletes' mental and physical health has been severely impacted by the widespread effects of the COVID-19 pandemic, with rising cases of depression and anxiety symptoms. Some athletes described the suspension of competitions as a tragic loss that has caused them significant grief, frustration, and stress (Davis et al., 2020).

Table 3. Impact of Restriction of Sports Activities on Athletes' Physical and Mental Health

No.	ltem	Mean	SD
1	Do you struggle to keep yourself motivated to exercise?	1.93	0.262
2	Do you feel you have a loss of "energy" daily?	1.83	0.381
3	Are you able to exercise outside without breaking the law? (e.g., in your backyard)	1.79	0.410
4	Have you re-adapted to developing a new exercise routine daily with lockdown?	1.75	0.434
5	Have you reduced your training load and intensity during this lockdown period?	1.72	0.449
6	Are you aware of the psychological and mental health programs available online?	1.61	0.491
7	Do you have any of the following sport-specific equipment at home to assist you with exercise? e.g. • Resistance bands • Free weights • Swimming pool • Stepper • Treadmill	1.61	0.489
8	Would you compete in events behind closed doors without spectators but televised?	1.57	0.498
9	Do you feel depressed during the COVID-19 pandemic?	1.52	0.502

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Table 3 demonstrates how the restriction of sports activities affects the athlete's physical and mental health. The table shows that a majority of the respondents shared that they struggle to keep motivated to exercise during the pandemic. It recorded the highest mean response (M=1.93, SD=0.262). This shows that most of the respondents strongly agreed that they experience a lack of motivation to train or exercise at home due to the pandemic. These findings were complemented by Maria et al (2021) who discovered that amateur and recreational athletes were more stressed as a result of closed sporting facilities and limited social contacts. However, research also stated that athletes have several coping strategies during the lockdown period, such as relying on online platforms for exercise and keeping connected with their trainers (Maria et al., 2021). A study by Pillay et al (2019) also discovered that one in two athletes experience a lack of motivation to train.

When asked if they feel a loss of energy daily during the lockdown period, most of the respondents agreed to have 'a loss of energy' daily while some disagreed. This item recorded the second-highest mean response (M=1.83, SD=0.381). These findings concur with a previous study conducted by Pillay et al (2019), where it was found that one in two athletes was depressed. Athletes felt a lack of motivation to train with constant loss of energy daily. His research indicated that female athletes were more affected than male athletes, which may potentially pose severe negative effects on their mental health. Furthermore, Liu (2020) revealed that many student-athletes were experiencing a lack of initiative with energy loss and lack of motivation to train during isolation to maintain social distancing.

The majority of respondents can exercise outside without breaking the law, while some of the respondents are unable to do so. The mean response (M=1.79, SD=0.410) was obtained for this item. This shows that most athletes can exercise outside without breaking the law. Sports and recreation in open spaces that do not involve close physical interactions are allowed in Malaysia. The Youth and Sports Ministry said permitted activities include jogging, cycling, and other forms of exercise, but these should be conducted in neighborhoods or within the same district subject to the current Movement Control Order (MCO) that is currently being enforced in the area. Contactless activities in open areas must comply with the minimum physical distancing of 1.5m along with the existing SOP for that area, said the Youth and Sports Ministry.

In addition, most of the respondents agreed and some of them disagreed that they have re-adapted to developing new exercise routines daily during the lockdown (M=1.75, SD=0.434), which corresponds to a study done by Pillay et al (2019) where most of the athletes shared that they adapted to the new routine. Andreato et al (2020) stated that the abrupt changes in athletes' daily routine may cause athletes to experience conditions that affect their mental and physical health. Lim and Pranata (2021) stated that changes to daily routines due to the COVID-19 cause negative consequences to all individuals, including professional and recreational athletes. The suspension of all sporting activities causes athletes to train at home and modify their exercise programs. However, their research also stated that several athletes reportedly have fitness equipment or a mini gym at home to maintain their fitness level (Lim & Pranata, 2021). Therefore, athletes should include training sessions at home as a way to adapt to the current restrictions imposed.

Vol. 11, No. 10, 2021, E-ISSN: 2222-6990 © 2021 HRMARS

Next, most of the respondents reduced their training load and intensity during the lockdown period, whereas the remaining did not cut their training load and intensity. The mean response (M=1.72, SD=0.449) was collected for this item. This shows that the majority of athletes have reduced their training load and intensity during the lockdown period. According to Gabbett (2016), the proper grading of high training loads by the trained coaches and experts should increase players' fitness, which may protect them from injury, resulting in higher physical outputs and competitive resilience, as well as a larger percentage of the squad eligible for selection each week. In this context, most athletes need to reduce the training due to the lack of communication with their coaches. It may harm the athletes if they train based on incorrect training load and intensity during the lockdown period.

In addition, when asked if they were aware of several psychological and mental health programs available online, the mean response was recorded at 1.61 with a standard deviation of 0.491, which is higher than 1.50, indicating that the respondents mostly gave a positive response to the question. Similarly, Pillay et al. (2019found that female athletes were more aware of online psychological and mental health programs compared to male athletes. Hurley (2021) shared that there are many mental well-being apps that can be used by athletes to record or monitor their psychological states. Also, sports organizations should discuss with the government on the strategies to help athletes, such as getting mental performance consultants to help the athletes during the pandemic (Schinke et al., 2020).

The majority of respondents agreed that they had training equipment at home, such as a treadmill, stepper, swimming pool, resistance bands, or free weights (M=1.61, SD=0.489). Professional athletes prefer working out in the gym as they find it more effective (Peng et al., 2017). During the MCO however, gyms are not open. The gyms and other sporting facilities in districts under the Movement Control Order (MCO) must temporarily suspend operations, as announced by the Youth and Sports Ministry (KBS). Thus, athletes need to train indoors to maintain their fitness. It all depends on the individual, as some prefer to see others working out to find the motivation to train or exercise. However, for others, the prospect of going to a gym is daunting, and therefore exercising in the comfort of their own home is much more appealing (Realbuzz Team, 2019).

It was also clear that during the pandemic, most of the athletes would like to compete behind closed doors, but with no spectators, on television (M= 1.57, SD=0.498). A study conducted by Carmody et al (2020) claimed that by following the risk assessment, event organizers should look at mitigating strategies to determine where these strategies might be implemented into the event planning to further reduce the risk of COVID-19 spreading. For example, if an event is played behind closed doors, significant but attainable mitigations such as improved hygiene and social distancing are possible. He added that if testing and contact tracing were implemented, the risk of being exposed to the virus could be reduced to a low level. Before the resumption of matches, players would need time to regain fitness. The government, local health authorities, event organizers, and attendees may discuss whether it's safe to proceed and what extra precautions can be taken. The overall risk can be very low if community transmission is limited, and proper risk mitigation methods are in place and the participants are below 65 years old and in good health (Carmody et al., 2020).

Half of the respondents experienced the feeling of depression throughout the COVID-19 (M=1.52, SD=0.502). The detrimental effects of a sedentary lifestyle on both physical and mental health are beyond dispute. Realistic changes to decrease sedentary behavior during the lockdown needs to be advocated by health care professionals. Athletes are also exposed to the negative psychological consequences of COVID-19 including anxiety and stress as reported across the wider society, where people are overwhelmed by the constantly changing alerts and media reports about the spread of the virus. Home confinement not only affects the physiological status of athletes, but the inability to compete may also influence athletes' mental health (Xiangyu et al., 2020). Therefore, access to psychological support to maintain their mental health during and after lockdown is paramount (Pillay et al., 2019). Isolation causes feelings of hopelessness, boredom, loneliness, and depression, according to the Australian Institute of Sport (AIS). Furthermore, there is fear of becoming ill, losing jobs, having difficulty obtaining the necessities (such as groceries and personal care goods), and being socially shunned or quarantined. All the feelings and worries that adults encounter during COVID-19 may impact their mental health (Xiangyu et al., 2020).

Next, Table 4 consists of two questions which researchers use multiple-choice questions in the questionnaires. The researchers established this research further by using multiple-choice questions because researchers want to triangulate the findings.

Table 4. Impact of Sports Restriction during the COVID-19 Pandemic on Athletes

No.	Item	Mean	SD
1	When do you think you will be competing again?	2.85	1.087
2	At what intensity do you exercise?	2.31	0.588

When asked if they would be competing again as a multiple-choice question, the data shows that the respondents majorly perceived that they would be competing again within one month (M = 2.85, SD=1.087)? The main reason why most of the respondents thought that they would compete again is that they were ready to return to sports if permitted by the authorities though Pillay et al (2020) stated that most of the respondents were even willing to compete behind closed doors. According to Peña, et al (2020), if the respondents do not return to sports, the loss of performance capacity reduces their future competitiveness, damaging their physical, technical, and psychological abilities.

Table 4 revealed that most of the respondents answered "Moderate" (M = 2.31) when asked at what intensity they exercise. This finding has been highlighted by Pillay et al (2020) that most of the respondents indicated "Moderate" as a response due to moderate training loads would allow for recovery and, this is important during the COVID-19 pandemic to avoid weakening of the immune system.

In sum, all the items recorded a mean value below one means that most respondents chose 2 (Yes). Thus, COVID-19 has negative impacts due to the restriction of sports activities during pandemics and, it affects the athletes' mental and physical conditions. The next section will present the findings for research question 3.

The Risk of Virus Transmission During Sports Events or Training Sessions

Life during lockdown has been difficult and it has forced the world's population to alter daily routines, including physical activities because everyone has to stay safe and healthy, while at the same time abiding by new norms. Thus, the risk of opportunistic infection is more likely to be influenced by physical exercise (Lim & Pranata, 2021).

Table 5. Risk of Virus Transmission during Sport Events

No.	Item	Mean	SD
1	Do sports organizers provide hand sanitizer dispensers during sporting events?	1.89	0.314
2	Do sports organizers perform infrared thermometer screenings of athletes or spectators?	1.80	0.403
3	Do you have easy access to your healthcare professionals?	1.72	0.449
4	Do spectators always wear their masks throughout the duration of the sporting events?	1.61	0.489
5	Do you perform infection-risky behaviours such as touching your face during games?	1.39	0.489
6	Do you have close body contact with another player less than 1.5 m?	1.32	0.469

The highest mean, M=1.89, SD=0.314, shows that the respondents admitted that most of the sports organizers offered adequate hygiene equipment and supplies during sporting events. Good hygiene practices by organizations and individuals are essential in preventing the spread of the coronavirus and allowing us to continue sports and physical activity as soon as possible (Hygiene for Sport and Physical Activity, n.d)

The respondents said that most organizers provided a screening thermometer before the training session (M=1.65, SD=0.403). COVID-19 risk factors varied based on the type of sporting event attended or how the athlete participated in the sporting event. At the entrances, temperature checks were conducted, and masks were required among spectators and athletes to reduce the spread of the COVID-19 virus during any sporting activities (Traub, 2021). This study has found that most respondents had access to their healthcare professionals during this pandemic (M=1.72, SD=0.449). The majority of respondents choose to see their health professionals to maintain their mental health during this pandemic (Pillay, 2020).

Next, where the statement asked if spectators always wear their masks throughout the duration of the sporting events was found to have positive feedback where respondents agreed that the spectators always kept their masks throughout the sporting events (M=1.61, SD=0.489). According to Traub (2021), the indoor event capacity is gradually increasing,

especially after recent recommendations on mask-wearing requirements for all spectators at the competition.

Based on the data obtained in Table 5, it is shown that respondents mostly disagreed that they perform infection-risky behaviors such as touching their face during games (M = 1.39, SD=0.489). Avoiding physical contact with others and practicing good personal hygiene is key to preventing infection transmission during this COVID-19 pandemic. Thus, according to Statista (2020), infection-risky behaviors such as spitting and touching the face are not uncommon during games. This could be the reason why many respondents chose "No" as their answer.

Most of the respondents disagreed when asked if they have close body contact with another player less than 1.5 m during a sports event or training session. They disagreed because bodily contact is inevitable only in certain sports, for example, close combat sports (M = 1.32, SD=0.469) (Statista, 2020).

Next, Table 4 consists of two questions which researchers use multiple-choice questions in the questionnaires. The researchers established this research further by using multiple-choice questions because researchers want to triangulate the findings.

Table 6. The Risk of virus transmission during sport events

No.	Items	Yes Mean	SD
1	Do you have access to general practitioner professionals?	2.87	1.241
2	If yes, you access a professional health via: (Telehealth, WhatsApp, social media, Physical Consultations)	2.60	0.610

In this part of the question, the researchers use multiple types of questions, based on Table 6, the respondents were asked which professionals they have consulted for their healthcare. The majority of the respondents chose a general practitioner as their healthcare provider (M=2.87, SD= 1.241). We discovered that one out of every two athletes were depressed, with low energy and a lack of desire to train. Females were disproportionately affected in all these areas, with potentially serious consequences for their mental health. The athletes need to be provided by psychological support from experts to protect their mental health during and after lockdown. Health care practitioners should push for realistic improvements to reduce sedentary behavior during the lockdown (Pillay, 2020).

It was shown that most of the respondents used WhatsApp to access professional healthcare. Following that, 26.8% communicate with their healthcare provider via social media platforms such as Facebook, Instagram, and Twitter. Next, 6.3 % preferred physical consultations, and no one has received professional healthcare through Telehealth, due to a lack of familiarity with the platform. The mean obtained for this multiple-choice question is (M=2.60, SD=0.610) because healthcare providers did not reach out to the athlete population,

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which indicates that doctors or other evidence-based platforms were neglected for this purpose (Pillay, 2020).

Therefore, research question 3 indicates that the majority of the athletes agreed that the risk of virus transmission did not increase during sporting events or training sessions. However, the athletes' overall health, especially their mental health was neglected during the pandemic, and as such, more psychological support from experts was needed to help them cope during the lockdown.

Conclusion and Recommendation

The spread of COVID-19 has led to a halt in sporting activities. COVID-19 has significant physical and mental effects on athletes including physical deconditioning, altered sleep patterns, worsening nutrition, and many more. Furthermore, COVID-19 has prohibited sports organizers from conducting any sports events or training sessions for athletes. Athletes are well-informed on COVID-19, but there is still a need to give them simple access to trustworthy evidence-based materials. Medical, nutritional, and psychological care should be provided more closely during and after the lockdown (Pillay, 2020).

Everyone in the sport industry must be more informed about the ways to reduce the risk of virus transmission during major events, including the athletes and sports organizers. The study revealed that most organizers were responsible in preparing a good and safe environment during training sessions or when organizing sports events. Hand sanitizers were provided, and body temperatures were measured before the events started to reduce the risk of spreading the virus during sporting events.

However, more empirical evidence on the impact of COVID-19 on the sport industry will aid all those involved in sporting events to reduce virus transmission and lower the negative physical and mental effects due to restrictions imposed during the pandemic. Comprehensive results that focus on reversing the negative consequence of the pandemic will support the sport industry to continue organizing sporting events or training sessions despite the pandemic. The government and athletic federations must help athletes by formulating new and improved guidelines and enforce them immediately to revive the sport industry during these difficult times.

References

- Andreato, L. V., Coimbra, D. R., & Andrade, A. (n.d.). Challenges to athletes during the home confinement caused by the COVID-19 pandemic. www.who.int/emergencies/
- Are Home Training Workouts Effective? (2019). Retrieved from RealBuzz Team: https://www.realbuzz.com/articles-interests/fitness/article/are-home-training-workouts-effective/
- Carmody, S., Murray, A., Borodina, M., Gouttebarge, V., & Massey, A. (2020). When can professional sport recommence safely during the COVID-19 pandemic? Risk assessment and factors to consider. *British Journal of Sports Medicine*, *54*(16), 946-948. doi:10.1136/bjsports-2020-102539
- Daley, P., Ho, K., Greyling S., & Haley, G. (2020). COVID 19 Hong Kong, Singapore and Malaysia: Postponement or cancellation of sports events Force majeure clauses and other relief. https://www.bclplaw.com/en-GB/insights/covid-19-hong-kong-singapore-

- and-malaysia-postponement-or-cancellation-of-sports-events-force-majeure-clauses-and-other-relief.html
- Gabbett, T. J. (2016). The training-injury prevention paradox: Should athletes be training smarter and harder? *British Journal of Sports Medicine*, *50*(5), 273-280. doi:10.1136/bjsports-2015-095788
- Hurley, O. A. (2021). Sport Cyberpsychology in Action During the COVID-19 pandemic (Opportunities, Challenges, and Future Possibilities): A narrative review. Frontiers in Psychology, 12(March), 1–15. https://doi.org/10.3389/fpsyg.2021.621283
- Hygiene for sport and physical activity. Sport England. (n.d.). https://www.sportengland.org/campaigns-and-our-work/hygiene-sport-and-physical-activity.
- Jones, D., Switzer, A., Rawnsley, P., & Bridge, T. (2021). Understanding the impact of COVID-19 on the sports industry. https://www2.deloitte.com/uk/en/pages/sports-businessgroup/articles/understanding-the-impact-of-covid-19-on-the-sports-industry.html
- Lim, M. A., & Pranata, R. (2021). Sports activities during any pandemic lockdown. *Irish Journal of Medical Science*, 190(1), 447–451. https://doi.org/10.1007/s11845-020-02300-9
- Liu, I. Q. (2020). The impact of COVID-19 pandemic on high performance secondary school student-athletes. The Sport Journal, 2020(July), 1–11. https://doi.org/10.1016/j.heliyon.2020.e04315
- Loheswar, R. (2020). A look back at 2020: Major sports events planned for Malaysia, and cancelled due to Covid-19.

 https://www.malaymail.com/news/malaysia/2020/12/30/a-look-back-at-2020-major sports-events-planned-for-malaysia-and-cancelled/1935914
- Maria, J. D., Greve, A., Rogaleva, N. L., Brand, R., Timme, S., Lautenbach, F., Leisterer, S., Walter, N., Kronenberg, L., Manges, T., Leis, O., Pelikan, V., Gebhardt, S., & Elbe, A.-M. (2021). in collaboration with reviewer RB Amateur and Recreational Athletes' Motivation to Exercise, Stress, and Coping During the Corona Crisis. https://doi.org/10.3389/fpsyg.2020.611658
- Malaysia allows outdoor sports and recreational activities in MCO areas after public furors. (2021).https://www.straitstimes.com/asia/se-asia/malaysia-allows-outdoor-sports-and-recreational-activities-in-mco-areas-after-public
- Memish, Z. A., Steffen, R., White, P., Dar, O., Azhar, E. I., Sharma, A., & Zumla, A. (2019). Mass gatherings medicine: public health issues arising from mass gathering religious and sporting events. The Lancet, 393(10185), 2073–2084. https://doi.org/10.1016/S0140-6736(19)30501-X
- Mulcahey, M. K., Gianakos, A. L., Mercurio, A., Rodeo, S., & Sutton, K. M. (2021). Sports medicine considerations during the COVID-19 pandemic. *American Journal of Sports Medicine*, 49(2), 512–521. https://doi.org/10.1177/0363546520975186
- Nhamo, G., Dube, K., & Chikodzi, D. (2020). Impact of COVID-19 on the global sporting industry and related tourism. Counting the Cost of COVID-19 on the Global Tourism Industry, 225-249. https://doi.org/10.1007/978-3-030-56231-1 10
- Nauright, J., Zipp, S., & Kim, Y. H. (2020). The sports world in the era of COVID-19. Sport in Society, 23(11), 1703–1706. https://doi.org/10.1080/17430437.2020.1834196
- Peña, J., Altarriba-Bartés, A., Vicens-Bordas, J., Gil-Puga, B., Piniés-Penadés, G., Alba-Jiménez, C., . . . Casals, M. (2021). Sports in time of COVID-19: Impact of the lockdown on team activity. Apunts Sports Medicine, 56, 1-17. doi:10.1016/j.apunsm.2020.100340
- Peng, X. T., Chen, Y. J., and Zhu, X. W. (2017). Effect of social network site appearance

- comparison on depression: the chain mediating role of body image satisfaction and self-esteem. Chin. J. Clin. Psychol. 25, 959–962.
- Pillay, L., Van Rensburg, J. D. C. C., Jansen van Rensburg, A., Ramagole, D. A., Holtzhausen, L., Dijkstra, H. P., & Cronje, T. (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), 670–679. doi:10.1016/j.jsams.2020.05.016
- Statista. (2020). *Coronavirus: impact on the sports industry worldwide*. 157. https://www.statista.com/study/71572/the-sports-industry-impact-of-the-covid-19-pandemic-2020/
- Schinke, R., Papaioannou, A., Henriksen, K., Si, G., Zhang, L., & Haberl, P. (2020). Sport psychology services to high performance athletes during COVID-19. *International Journal of Sport and Exercise Psychology*, 18(3), 269–272. https://doi.org/10.1080/1612197X.2020.1754616
- Taku, K., & Arai, H. (2020). Impact of COVID-19 on athletes and coaches, and their values in Japan: repercussions of postponing the Tokyo 2020 Olympic and Paralympic Games. *Journal of Loss and Trauma, 25*(8), 623–630. https://doi.org/10.1080/15325024.2020.1777762
- Traub, M. (2021). Sports and COVID-19: The impact on the sports-event industry. https://www.sportstravelmagazine.com/sports-and-covid-19-what-happened-earlier-this-summer/
- United Nations. (2020). The impact of COVID-19 on sport, physical activity and well-being and its effects on social development. https://www.un.org/development/desa/dspd/2020/05/covid-19-sport/
- Wong, A. Y. Y., Ling, S. K. K., Louie, L. H. T., Law, G. Y. K., So, R. C. H., Lee, D. C. W., Yau, F. C. F., & Yung, P. S. H. (2020). Impact of the COVID-19 pandemic on sports and exercise. *Asia-Pacific Journal of Sports Medicine, Arthroscopy, Rehabilitation and Technology*, 22, 39–44. doi: 10.1016/j.asmart.2020.07.006
- World Health Organization (OMS). (2020). Overview of public health and social measures in the context of COVID-19. *World Health Organization 2020.*, 1-8.
- Xiangyu, K., Kailian, Z., Min, T., Fanyang, K., Jiahuan, Z., Le, D., Yuchao, D. (2020). Prevalence and Factors Associated with Depression and Anxiety of Hospitalized Patients with COVID-19. *medRxiv*. doi:10.1101/2020.03.24.200430