

**COVID-19 Pandemic Impact on Local Recreational and Sport Activities in Minna,
Niger State, Nigeria**

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**In Partial Fulfillment of the Requirements for the Award of Degree of Master of Science
(M. Sc) in Tourism and Hospitality Management**

2022

Certification

This is to certify that this thesis "**COVID-19 Pandemic impact on Local Recreation and Sport Activities in Minna, Niger State, Nigeria**" was carried out and submitted by **Tsado, Beullah Teni** with Matric No **LCU/PG/001560** of the Department of Tourism and Hospitality, Faculty of Environmental Design and Management, Lead City University, Ibadan, Nigeria in partial fulfillment of the requirements for the degree of Master of Science (M.Sc) in Tourism and Hospitality Management and that this work has not been previously submitted.

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Dedication

This thesis is dedicated to Almighty GOD and my immediate family.

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Acknowledgement

I attribute the glory and success of my M.Sc. studies to the Almighty.

I would like to thank my Dean, Professor Grace Oloukoi of the Faculty of Environmental Design and Management, and all of my professors for their guidance throughout this project.

I am extremely grateful to Dr. Adesola Adediran of the Faculty of Environmental Design and Management at Lead City University Ibadan, Oyo State, who served as my project supervisor. I appreciate his continued support throughout my work. He was always attentive and provided accurate responses to my research-related questions. He consistently allows me to claim this paper as my own, Dr. Kehinde Olamiju, Mrs. Oyeyemi yfdSoretire are well appreciated.

My profound gratitude goes to the provost of the post graduate school, Prof. Afolakemi Oredeinde for making the thesis an error free one.

Mrs. Saka Anifat Bolatito of the Department of Hospitality, Leisure, and Tourism Management at Moshood Abiola Polytechnic Abeokuta, Ogun State, Nigeria, who stood by my side throughout the accomplishment of this great feat, I owe a great debt of gratitude.

Finally, I must extend my deepest appreciation to my family, friends, and coworkers for their unwavering support and constant encouragement throughout my program; you have all been my cheerleaders.

Thank you.

Beaullah Teni, TSADO

Abstract

The study examined the impact of COVID-19 on the local recreation and sporting activities in Minna, Niger State. The study was based on primary data collected from three hundred and forty-one (341) respondents using multi-stage random sampling techniques. The data were analysed by descriptive and inferential statistics techniques. The analysis revealed that majority of the respondents 96.2% were between 26- 35 years of age with an average of 26.5 years, (72.7%) were males and (78.3%) were single. The study revealed that (90.9%) of the respondents had NCE/OND, a fair number of the respondents about 9.1% had M.Sc/MBA. Substantial percentage of the respondents (31.7%) engaged in trading as the main occupation. Islamic practicing respondents (70.4%) being significantly higher. Majority (80.8%) of the respondents were members of social group(s). The results indicated first railway locomotive engine (97.9%) and Minna National Stadium (97.9%) with high level of awareness. The frequent patronized centres are Sultan Guara water falls (mean=2.09), Zuma rock (mean=2.13). There was significant difference ($p < 0.05$) between the socio-economic characteristics of the respondents and the patronage of recreation and sporting activities before and during period of COVID-19 and also the frequency of patronage of recreation centers and sporting activities before and during period of COVID-19. The study concluded that majority of the recreation centres were being patronized frequently before the period of COVID-19 compare to the period of COVID-19 in the study area. The following recommendations are made: the safety and security of employees and guests should be given clearly the highest priority and promotion of flexi-services. These strategies will positively impact on ensuring hygienically clean, safety and secure environment for guest stay. The recreation centre service providers should be continuously keep in touch with key customer base during the outbreak.

Keywords: COVID-19 Pandemic, Local Recreational, Sport Centre, Bida

Word Count: 277

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Chapter One

Introduction

1.1 Background to the Study

Through physical connection with the natural world¹, outdoor recreation provides vital recreational ecosystem services (such as stress release, socializing, and appreciation of nature). During times of crisis or calamity, outdoor enjoyment is also a crucial coping mechanism^{2,3}. The COVID-19 epidemic constitutes an unparalleled worldwide health emergency⁴. Most times, the global village is constrained by travel restrictive measures, which drastically hampers tourism development and growth⁵. Though required to prevent the spread of the virus, limited or restricted access to outdoor recreation settings reduces the potential of a community to react to a situation, especially for the subculture of adventure seekers that rely heavily on outdoor recreation as a leisure activity. Moreover, these limitations have impeded the role that parks and outdoor recreation perform towards aiding mental and physiological recovery amid moments of crisis⁶. Loss of access to opportunities for outdoor recreation hinders people's ability to engage with healing natural environments and escape the strains of the situation.

Consequently, it is essential that policymakers and stakeholders get access to data regarding outdoor leisure behavior. On 11 March 2020, the World Health Organization (WHO) proclaimed the coronavirus disease 2019 (COVID-19) a pandemic. In an official statement, the WHO Director-General urged all nations to identify, test, treat, isolate, trace, and mobilize their populations in the response and reduction of transmission⁷. In an effort to prevent the spread of the extremely contagious virus, a number of nations have imposed limits on travel⁸. The example of Scotland became illustrative where non-local travel for recreation and leisure purposes was expressly outlawed. The transmission of COVID-19

increases with the size of a city, resulting in more rapid and destructive outbreaks in bigger metropolitan areas. Consequently, cities have implemented stringent physical separation measures and restrictions on public green space⁸. Although these policies became necessary towards nipping the spread of COVID-19, they may have unforeseen adverse outcomes affect the well-being of urban inhabitants, since access to urban environment is particularly vital when stress levels are high among communities who are abruptly requested to shelter in place and feel anxiety owing to uncertainty and fear of infection.

Sport has also been affected similarly. The worldwide response has led to the near-total suspension of all levels of competitive sport as a result of state responses via restrictive measures. This shutdown has resulted in the postponing of many mega-events, including the Olympic Games and the European Football as well as various sporting activities. Moreover, despite early reluctance from organizations such as UEFA and the IOC, their subsequent choices to postpone or reschedule such events have been positively received by a variety of stakeholders⁹. Despite the fact that the epidemic has restricted the ability of people, especially athletes and the general public, to move around, exercise, and socialize with one another¹⁰, contradicting research suggests that more people than ever are aware of the benefits of physical activity¹¹. The effects of the virus on sport began to emerge with time. The influence became threatening that stakeholders could not predict the outcome of the virus on the sporting industry.

Outside the context of the present crisis, outdoor recreation has been significantly linked to physical, mental, and social health and well-being through ecosystem services. In cities, provision of these design and planning initiatives that promote exposure to natural elements in leisure settings may boost biodiversity¹². To adopt enhanced park management, planning, and design, it is vital to comprehend how recreation habits are altering in response to

COVID-19 and how the supply of recreational ecosystem services may be affected. As has been highlighted¹³, the present study is particularly critical for people limited to the accessibility to recreation amenities as it is believed that the pandemic have major effects on their movement patterns.

1.2 Statement of the Problem

To protect the health of athletes and other participants, the majority of significant international, regional, national, and local athletic events were canceled or postponed. The earlier planned Olympics and Paralympics were postponed to 2021 for the first time in the history of the modern games. The expanding impact of COVID-19 on multiple industries, particularly the sports industry, flipped the world on its head. With tournaments being canceled or postponed, millions of dollars in anticipated revenue were wasted. Not only are sports companies under pressure, but also industries associated to leagues and events, such as travel, tourism, infrastructure, transportation, catering, and media broadcasting.

As of July 2020, when soccer resumed in four of Europe's five major leagues, matches were played in empty stadiums with fan chanting blasted over the airways to simulate a match-day environment for viewers. The Open Golf Championship in the United Kingdom was canceled, while the US Masters was relocated from the spring to the fall. Similarly, countless other sports were restricted to participants exclusively, and individual physical exercises were performed behind closed doors. There is compelling evidence that the pandemic had a negative impact on risk-tolerant households' recreational visits and property values. As the spread of the virus was observed to be on the rise, corporations, including banks, ministries, and multinationals, were placed under complete lockdown.

The recreation and athletic activity centres were among the businesses and industries hit hardest by the pandemic. With the advent of the covid-19 epidemic, however, recreation and

sporting activities facilities have observed a substantial decline in patronage, ranging from rescheduled training to paucity of professional sponsors. This circumstance resulted in low attendance in recreation and sports centers. This study examines the specific consequences of the covid-19 pandemic on recreation and sporting activity centers, as well as how this unfortunate condition affected their patronage.

1.3 Aim and Objectives of the Study

The primary aim of this study is to examine Covid-19 Pandemic impact on Local Recreation and Sport Activities in Minna, Niger State, Nigeria. Specifically, the study seeks to:

- i. examine the socio-economic characteristics of the respondents
- ii. examine the frequency of recreation and sporting activities during covid 19 period.
- iii. evaluate the effect of covid 19 measures on patronage of recreation centre
- iv. recommend measures that could bring recreational centre to its sustainable level

1.4 Research Questions

The following research questions are put forward

- i. What are the socio-economic characteristics of the respondents?
- ii. What are the frequency of recreation and sporting activities during covid 19 period?
- iii. What are the effects of covid 19 measures on patronage of recreation centre?
- v. What are the measures that could bring recreational centre to its sustainable level?

1.5 Hypotheses of the Study

Two hypotheses tested for the study are:

H₀₁: There is no significant difference between the socio-economic characteristics of the respondents and the patronage of recreation and sporting activities before and during period of Covid-19.

H₀₂: There is no significant difference in the frequency of recreation and sporting activities before and during period of Covid-19.

1.6 Significance of the Study

As a result of the epidemic, changes in the lives and practices of sports participants, including athletes, have had to adapt, pause, or even quit. This has necessitated a major reorganization of how coaches and instructors interact with and instruct sports participants. The distance between coach and athlete, warrants coaches to address a number of important issues, such as how to monitor athletic performance, injury, and other training-related feedback. In sports, where technique and physical ability are of the utmost importance, this could reduce the efficacy of several coaching practices and athlete activities.

Likewise, the capacity of coaches and educators to promote cohesiveness and a feeling of belonging among squads and teams will evolve. Considering the significance of outdoor recreation on some groups (i.e. outdoor enthusiasts) in adapting with crisis and the travel rules imposed in reaction to the COVID-19 disease outbreak, it is essential that authorities and policymakers fully comprehend how the disease outbreak is impacting active leisure enthusiasts and those who highly depend on outdoor recreation for lifestyle. Outdoors constitute a considerable portion of the consumer market. As suggested by, the effects of the COVID-19 pandemic on leisure activities need rapid investigation. In addition, based on the data on the spread of COVID-19, it is essential to understand which kinds of communities are most impacted by the pandemic in terms of their outdoor leisure behaviors.

Consequently, this study seeks to illustrate the influence of COVID-19 epidemic on recreation behaviors of outdoor enthusiasts. This report will be of interest to government agencies, sporting groups, sport governing bodies, and others. In addition, the findings will be valuable to students, researchers, and the general public since they expose the damages caused by Covid-19 and provide recommendations that could be used to regulate sports in the current era of the Covid-19 pandemic. The study will be valuable for recreation site managers and policymakers in the development of creative methods to prevent the covid-19-related decline in the welfare of outdoor recreation participants.

1.7 Scope of the Study

The study mainly covered the recreational centre in Minna, Niger State.

1.8 Limitation of the Problem

The limitation of this research are time, fund and distance of the research area.

1.9 Operational Definition of Terms

The terms used was operationally defined as it was used in the study

Pandemic: A pandemic is basically a global pandemic, an epidemic that can spreads to more one continent.

Recreation: Activity done for enjoyment when one is not working.

Sport: A game, competition or activity needing physical effort and skill is played or done according to rules for enjoyment and/or as a job.

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Chapter Two

Literature Review

2.1 Conceptual Review

2.1.1 COVID-19 Pandemics

Disease outbreaks are not uncommon and have occurred at various times throughout in our lives¹. Even though numerous outbreaks and human catastrophes exist, the frequency of outbreaks has increased significantly in this millennium. The increased emergence of viral diseases among animals had been attributed to the influx of these outbreaks². Numerous researchers, including and most recently, contend that a large-scale global pandemic was inevitable given the rise in pandemic occurrence. According to the COVID-19 Response Team at Imperial College London, COVID-19 is the most severe outbreak since the 1918 Spanish Influenza pandemic. Despite the comparisons, three researchers conclude that the non-pharmaceutical interventions implemented during the Spanish Influenza pandemic of 1918 were ineffective at reducing overall mortality³. This was due to the interventions not being maintained for a sufficient length of time. He estimates that the average length of school closures and bans on public gatherings was only 36 days, while the average length of quarantine/isolation was only 18 days (0.05 years). Compared to the number of days the 1918 Spanish influenza pandemic was active, these numbers were quite small⁴.

2.2 The Economic and Financial effects of COVID-19

2.2.1 The Transmission Channel

To understand the possible adverse economic effect of COVID-19, it is essential to understand the economic paths ways via which the disruptions negatively influence the economy. It was opined that there are three significant consequences^{5,6}. The first impact is the reduced consumption of goods and services, which is the direct effect. Protracted durations of the disease outbreaks and the social distancing measures diminish consumer confidence by keeping consumers at home, wary of discretionary spending, and pessimistic about the long-

term economic outlook. Secondly, the pandemic result to indirect effects of financial market shocks on the real economy. Almost certainly, household wealth will decline, savings will rise, and consumption expenditures will decrease further.

Finally, as COVID-19 persists to impede operation, it will have a detrimental effect on supply chains, labor demand, and employment, resulting to protracted severance spells and rising inequality. It was argued that this is typical in uncertain economic environments, where there is less confidence in markets and economic transactions. In the end, the magnitude of the shock is determined by the underlying epidemiological characteristics of COVID-19, consumer and business responses to adversity, and public policy responses¹⁹⁸.

Summarizing the effect on the economy it was stated that a modern economy is a complex web of interconnected parties, including employees, firms, suppliers, consumers, and financial intermediaries⁷. Everyone is someone else's employee, customer, lender, etc." Due to the extremely high levels of interdependence and specialization of productive activities, a disruption in the supply chains and circular flows will have a domino effect. The effect of COVID-19 on the economic flow of income was highlighted⁸. First, because households are not paid, they reduce their consumption and savings. The decline in savings decreases investment and, consequently, the capital stock. Second, households reduce their demand for imports, which reduces the rest of the world's income; consequently, the nation's exports decrease. Thirdly, the domestic and global supply chains are disrupted by the demand/supply shocks. All of the prior uncertainties and delays have resulted in a drop in productivity, hence decreasing the use of factor of production. Owing to decreased operating time or layoffs, labor is harmed more than capital, resulting in lower profits.

In addition, it is essential to comprehend the mechanisms that generate recoveries from economic crises. The various types of recovery following shocks was explained⁹ using the concept of shock geometry. Three major economic recovery possibilities, detailed in

escalating severity exist. First, is the most hopeful scenario, labeled 'V-shaped,' where aggregate production is momentarily displaced before resuming its trajectory before the crisis. Second, is the 'U-shaped' route, in which production declines quickly but does not recover to its trajectory before the crisis. The gap between the old and new output routes remains substantial.

Thirdly, in the extremely bleak "L-shaped" scenario, output falls and growth rates continue to decline. The difference between the old and new output paths continues to grow. Notably, it was claimed that economies have experienced 'V-shaped' recoveries following previous pandemics, such as the 1918 Spanish Influenza, the 1958 Asian influenza, the 1968 Hong Kong influenza, and the 2002 SARS outbreak⁵. However, it is not anticipated that the COVID-19 economic recovery will be straightforward. This is because the effects of social distancing measures and lockdowns on employment are anticipated to be much greater⁷. Moreover, even if no containment measures were implemented, a recession would still occur due to the precautionary and/or panic behavior of households and businesses faced with the uncertainty of dealing with a pandemic and an inadequate public health response¹⁰.

2.2.2 Susceptible-Infected-Recovered (SIR) Epidemiological Models

The seminal SIR model created by 8 is a crucial tool used by epidemiologists. Numerous studies estimate and predict disease scenarios for COVID-19 using the SIR pandemic model. The models propose three health states: i) susceptible (S), ii) infected (I), and iii) recovered/resistant (R) (previously infected). Those who have passed away due to the disease are no longer infectious. These models predict vulnerable and infected people interact at a preset pace. Infected individuals heal at a set pace and build immunity over time. As people gain "herd immunity" to COVID-19, the vulnerable population declines over time. The basic parameters of SIR models are the varied infection rates, recovery rates, and their corresponding probability.

The SIR models enable the simulation of the effect of social isolation indexes on the propagation of the virus. If only sick people are isolated, the virus rises within four months and then drops fast. With social distance measures, the infection peaks at the same time, but much fewer cases are documented. There is a possibility that the virus may reappear if ways to reduce the amount are abandoned prematurely. These qualitative findings demonstrate the influence of social distance on COVID-19 transmission¹¹.

In these epidemiological models, the phases between states of health are believed to be spontaneous with respect to economic results. This indicates that SIR models do not account for the projected drop in consuming activities or working hours due to COVID-19. This situation cannot be overlooked owing to the "lives versus livelihood" tradeoff that weighs strongly in any pandemic study that considers both public health and economic effects. The effectiveness of this tradeoff, i.e., how to lower the incidence of epidemics at the lowest feasible cost to economic well-being, is the focus of this study. Integrating a model of systemic general equilibrium with the traditional SIR model was used to solve this problem¹².

In addition to the random probability of getting the virus, the SIR-Macro model posits that the pervasiveness of infection is dependent upon the degree of contact between agents while eating and working. Consequently, vulnerable people might lessen their risk of infection by decreasing their consumption and work output (outside of their residences). Using their hypotheses and verification methodologies, eleven researchers conclude that, over a 32-week period, total consumption fell by 9.3 percent. Conversely, labor supply or hours worked followed a U-shaped pattern, with a peak decline of 8.25 percent in the 32nd week following the outbreak.

The infection externality issue has been emphasized¹³. It was observed that the competitive equilibrium is not Pareto-optimal because actors do not consider the infection and death rates of other agents. To effectively internalize the externality, the authors argue that the ideal

containment strategies are those that are proportionate to the progression of the infection's spread through time. The economic effect will be even more severe if a stringent containment approach is applied from the outset. The external nature of the illness was emphasized¹⁴. The Susceptible-Infected-Susceptible (SIS) and SIR models were created to quantify the infection externalities using a decentralized and then a social planners' method, respectively.

The risk heterogeneity among subpopulations was introduced¹⁵. Different subpopulations (young, middle-aged, and elderly) have varying infection, morbidity, and mortality rates, as well as varying degrees of social interaction. These conditions warrant specific quarantine measures. This is because a varied lockdown between various risk groups (active lockdown of older groups compared to younger ones) might minimize the number of lives lost and negative economic effects more than a uniform lockdown for all age groups. The authors show that if a uniform lockdown lasts 434 days, the overall number of deaths reaches 1.8% of the population, and the economic expenses equal to nearly 24.3% of the yearly GDP. A targeted lockdown policy lasting 230 days, on the other hand, reduces fatalities to 1% of the population and economic costs to 10% of annual GDP.

It has been seen in South Korea and the United Kingdom that the spread of the virus may be efficiently regulated via intensive testing and contact tracing, hence minimizing both economic and health expenses. An important topic is if varying containment/social distancing techniques across businesses and professions might minimize the severity of the economic slump and lower the number of lives lost. Focus on the consequences of the pandemic on the main input-producing sectors of the economy from a supply-side viewpoint. The authors build an integrated framework by integrating a typical SIR model with two groups of a diverse population and a macroeconomic model.

The multiplier effect between epidemiological and economic variables is the shift in labor supply, i.e. the incapacity of diseased persons to work, which is a direct cost of the sickness. The economic activities are separated into "core" and "non-core" sectors with limited output complementarity. The former create raw and intermediate inputs, whereas the latter produces final outputs. The indirect cost derives from the fact that the slowdown or closure of core businesses would have an impact on non-core industries via input-output connections — what the media refers to as "supply chains." Social distance measures contribute to the reduction of death and sickness, hence avoiding a fall in labor supply¹⁹⁹.

It was emphasized that the heterogeneity across sectors by introducing a multi-sector economy with varying degrees of consumption elasticity across goods^{16, 17}. In this case, industries differ in terms of the danger associated with using their services. According to their model, vulnerable households replace intake from the high-infection sector with intake from the low-infection sector in the case of an epidemic. This redistribution of expenditure helps preserve a reasonably constant intake route and minimizes the risk of contamination associated with involvement in high-infection activities, whether as a consumer or a provider. If all other conditions stay constant, this "redistribution" of economic activity may help lower the number of illnesses or flatten the curve, according to the scientists.

Other researchers attempt to model the endogenous response of economic agents and the temporally variable nature of infection risks. Theoretical propositions of behavioral responses to various changes in policies or infection levels are presented in Sections. The existing SIR models are modified for optimal social interaction decisions based on infection risks. Invariably, uncontrolled infection rates are considered in SIR models. However, after accounting for choice variability, it was discovered that value qualities like tolerance, benevolence, and reciprocity play key roles in minimizing the infection consequences. A

strategy that strikes a balance between strict social distancing restrictions and social preferences is anticipated to help mitigate the economic and public health costs.

As an illustration, it was concluded that public disclosure of COVID-19 cases in Seoul, South Korea decreased foot traffic in neighborhoods/areas with more cases¹⁸. These data were calibrated in a SIR model with a heterogeneous population to account for infection transmission and economic effects. The authors discovered that, compared to a scenario in which there was no public disclosure, public disclosure resulted in a drop of 400,000 infections and 13,000 fatalities over a two-year period. It is anticipated that the same policy will reduce economic costs by 50 percent. The endogenous behavioral response was extended by taking into account the time-varying infection rate or R_0 parameter in SIR models¹⁹. Using a Susceptible-Infectious-Recovered-Died (SIRD) model and varying values of R_0 across countries, they discover that death rate forecasts prior to the peak are 'noisy'. After the peak, these forecasts, however, converged well with the actual data. COVID-19 growth rates can be predicted by autoregressive fluctuations thus suggesting that the forecasts contain a great deal of uncertainty due to parameter uncertainties and future shock realization²⁰.

2.3 Economic Impacts

Numerous researchers have attempted to consider the economic impact of COVID-19 from a historical standpoint. Pandemics such as COVID-19 are analogous to large, multi-period exogenous shocks in a scenario devoid of non-linearities²⁵. Theoretically, a pandemic should induce a negative shock to the real natural interest rate, causing it to fall. This is because development prices fall as a result of an excess of capital per labor unit (i.e. a labor shortage), while savings flows rise for prophylactic or wealth-replacement objectives. It was found that the real natural rate remains depressed for forty years, falling to -1.5% within twenty years. However, historical data analysis may not be sufficient. According to²⁷, COVID-19 has caused a massive increase in uncertainty with no close historical precedent. Due to the

rapidity of evolution and the need for timely data, it was argued that it is necessary to employ advanced ambiguity measures to determine the economic impact of this phenomenon. Using a real business cycle (RBC) model, the authors find that a COVID-19 shock³¹ results in an 11 percent annual decline in GDP in the fourth quarter of 2020. More than half of the contraction, according to the authors, is due to COVID-19-induced uncertainty. Survey was utilized to evaluate the macroeconomic expectations of American households²⁸. It was discovered that lockdowns, not COVID-19 infections, are primarily responsible for decreases in consumption, employment, inflationary expectations, uncertainty, and mortgage payments. This shock is derived from the S&P 500 Volatility Index (VIX) and the news-based economic policy uncertainty index (EPU)²⁷.

Others have investigated the function of global supply chains²⁹. A large portion of the average decline in real GDP is attributed to disruptions in global supply chains, as determined by the authors. ³⁰Model the effect of COVID-19 as a decline in worker productivity and a decrease in labor supply, which will ultimately have a negative effect on firm revenue. A tidal wave of firm foreclosures caused by a drop in income and consequent inability to meet debt service obligations may bring down financial intermediaries. A study creates a minimal economic model in which COVID-19 also causes a decline in productivity³¹. The authors foresee a vicious cycle triggered by the loss of productivity, which reduces collateral values, which in turn reduces the amount of borrowing activity, which leads to a decline in employment, which in turn leads to a decline in productivity. The COVID-19 shock is thus amplified by a "doom loop of unemployment and asset price deflation.

The opportunity cost of shutdowns was evaluated to demonstrate the economical impact of COVID-19³². The welfare loss resulting from "non-working days," the decline in labor-capital ratio caused by the absence/layoff of workers, and the resultant idle capacity of the workplace was extrapolated. An annual welfare loss was estimated at approximately \$7

trillion from losses resulting from fiscal stimulus, the substitution of normal import and export flows with black market activities, and the effect on non-market activities (lost productivity, missed schooling for children and young adults). Medical advancements such as vaccine research, contact tracking, and workplace risk prevention may aid in balancing the estimated \$2 trillion in yearly welfare losses.

2.4 Socio-Economic Consequences

Now, we'll look at studies that document the socioeconomic effects of COVID-19 and lockdowns. These restrictive measures affect labor markets, mental health and well-being, racial inequality, and gender roles. Despite the likelihood that the environmental repercussions will be positive, they must also be thoroughly examined. Several studies also investigate the influence of income and occupation on COVID-19 transmission³³ and ³⁴. It was discovered, through an instrumental variable approach, that the spread of COVID-19 cases "between cities is significantly smaller in China than within cities"³⁵. Due to increased social interactions and economic activity, cities with a higher per capita gross domestic product (GDP) are more likely to have higher transmission rates.

2.5 Labor Market Outcomes

Numerous studies document the influence of COVID-19 on work hours and job loss. United States unemployment increases are influenced in part by lockdown/social distancing policies. Accounting for state-by-state differences in the timing of business closures and stay-at-home mandates in the United States, The employment rate in the United States decreases by approximately 1.7 percentage points for every additional ten days that a state experienced a stay-at-home mandate between March 12 and April 12.

It was found that unemployment/job loss in the United States is alarming based on the increase in unemployment insurance (UI) claims, which is predictable given the low coverage rate for UI regimes in the United States. It was also predicted that a chunk level of decline in labor force participation and an increase in "discouraged workers" in the long run

(unemployed workers who have actively stopped searching for work effectively withdrawing from the labour force) will arise. This may be owing to the multiplicative impact of COVID-19 on the older population. In South Korea, it was found that an increase in infections was associated with a decline in local employment³⁷. This number increased in countries such as the United States and the United Kingdom that mandated lockdowns.

The disparity in job/income losses based on job type and individual characteristics for the United States and the United Kingdom was examined³⁸. It was discovered that employees who cannot perform any of their duties from home are more likely to be laid off. Those prone more likely to experience income declines are the younger individuals and those without a college degree. It was observed that workers with lower levels of education, younger adults, and immigrants are disproportionately represented in jobs that are less likely to be performed from home³⁹. Relative to the epidemic shock in Norway, the viral shock in Norway has a significant socio-economic contour, since it has preferentially impacted financially disadvantaged communities, such as young parents.

The diverse effects across occupations and workers in the United States were discussed²¹. The study demonstrated that occupations with a greater proportion of remote workers were less affected by COVID-19. On the other hand, occupations with a greater proportion of employees working in close proximity to one another were more impacted. The study also discovered that occupations categorized as "more disease-prone" are less affected. This result may be attributable to the high proportion of essential workers in these occupations. On the basis of these findings, it is reasonable to anticipate that workers (or students) may change occupations in the short- to medium-term.

Companies in the United States have drastically reduced job openings since the second week of March 2020, according to. The authors find that the decline in job openings coincided with

the increase in unemployment claims²². Interestingly, the labor market reductions (proxied by the fall in job availability and the rise in UI claims) were consistent across states, with no significant variations between states that experienced the pandemic's faster spread or imposed stay-at-home orders sooner. With the exception of front-line roles, such as nursing and retail sales, the reduction in job vacancies was consistent across sectors and occupations, according to the report.

With the implementation of socially isolating policies, work from home has become more prevalent. The degree to which such social distancing measures impede economic activity is primarily contingent on firms' ability to manage commercial procedures from employees' residences^{23,24}. The increase in COVID-19 cases per 100k individuals is associated with a significant increase in the percentage of workers switching to remote work and a decrease in the percentage of workers commuting to work in the United States, according to researchers⁴⁵. Intriguingly, the authors find that people who work from home are more likely to file for unemployment insurance than those who commute to work and are likely employed in industries that provide essential services.

The viability of work-from-home opportunities was evaluated²⁵. It was found that 37 percent of jobs can be performed from home, which is proportional to the amount of face-to-face interaction the job requires. The job-characteristic factors of home-based work (HBW) and face-to-face (F2F) interaction vary along three principal dimensions: i) temporal (short run vs medium run); ii) the major channel of impacts (labor supply and demand); and iii) the important margins of adjustment (intensive vs. extensive). According to them, the labor supply in sectors with HBW capabilities and minimal F2F contacts (such as professional, scientific, and technological services) may be least affected.

However, vocations and sectors with HBW capabilities and significant F2F interactions are subject to productivity shocks. Using web-based software, instructors in high schools and colleges may provide online courses under lockdown limitations. This form of training is less participatory than classroom-based instruction. As lockdown limitations are relaxed, industries (such as manufacturing, transportation, and warehousing) with poor HBW capabilities and little F2F interactions may be able to recover quickly. By wearing personal protective equipment (PPE) and taking other appropriate precautions, the risk of contracting an illness via direct contact may be reduced. However, businesses with limited HBW capabilities and strong F2F interactions (such as lodging and food services, arts, entertainment, and leisure) are likely to face lengthier recoveries owing to customers' unwillingness to frequent them²⁵.

The firms surveyed were not optimistic about the effectiveness of the federal government's fiscal stimulus (CARES Act loan program). For sectors with concentrated labor markets (i.e., where hiring is confined within a small number of companies), non-tradable industries (e.g., construction, health services), and credit-constrained businesses, job losses have been particularly severe²⁶. A pattern of heterogeneity in firm resilience across industries in the United States and internationally have been identified²⁷. In the midst of the global disruption, earnings call reports provide evidence that some companies anticipate increased business opportunities (e.g., firms which make medical supplies or others whose competitors are facing negative impression after the outbreak of COVID-19). The reallocation of labor in response to the pandemic-induced demand response (e.g., increased hiring in delivery companies, delivery-oriented restaurant/fast food chains, and technology firms) was assessed²⁸.

Guidelines for Recreation/Sporting Centre's During Covid-19

- The presence of COVID-19 variants (including B.1.1.7) presents new challenges, and operators and organizations should be aware of the following:
- The risk of COVID-19 transmission is greatest when people are indoors, within two metres of one another, in a confined space with limited ventilation, sharing equipment or food, and/or taking deep breaths (e.g. while singing, shouting or exercising). Therefore, recreational and physical activities that take place indoors and/or in close proximity to others are deemed to be higher risk.
- Adults and children 5 years of age and older will be required to wear a non-medical mask that covers the nose and mouth beginning August 24, 2020. As often as possible, non-medical masks should be worn in indoor environments, including during low-intensity physical activities. However, individuals engaging in moderate to vigorous physical activity are permitted to remove their masks for the duration of the activity. Individuals should wear non-medical masks whenever possible when interacting with individuals from outside their household bubble, both indoors and outdoors. In the community, wearing a non-medical mask is not a substitute for maintaining physical distance and following hand hygiene protocols²⁰⁰.
- Regardless of whether fitness centres, dance studios, and yoga studios are municipally owned, volunteer-led, or privately owned, the facilities provide similar services; however, differences in facility design, schedule demands, human resources, and financial resources frequently result in varying levels of service. This instruction is intended to aid operators during the reopening phase. As owners/operators develop reopening plans, they must take each facility's unique circumstances into account.

- Group fitness, dance, and yoga activities are permitted in Alert Level 2. On Saturday, April 17, 2021, facilities may reopen with a capacity of 100 people per room, so long as physical separation is maintained (Note: Capacity limits may change within Alert Level 2 over time). Participants, staff, volunteers, and trainers are included.
- As of Saturday, April 17, 2021, the maximum number of spectators per space or room is 100, provided that a 2-meter distance is maintained between each spectator. This is in addition to the previously mentioned participants, staff, volunteers, and trainers. In the facility, spectators are required to wear a mask at all times, including when seated.
- Large venues with a normal capacity of at least 500 people who wish to host gatherings of more than 100 people may submit an operating plan for review and approval by a Digital Government and Service NL Environmental Health Officer.
- The subsequent precautions were in place:
- Personal training and group activities are permitted, and physical separation should be maintained at all times if possible. A minimum of two metres or six feet should be maintained at all times between all household bubbles, with the exception of dance instruction and performance, where brief contact is required. Whenever possible, greater separation distances should be encouraged for high-intensity physical activity. Place physical distance markers on floors near entrances and exits, as well as other suitable signage, to remind visitors to maintain physical distance. The owner of the property should determine who is responsible for monitoring physical distance²⁰¹.
- Facility provides access to hand washing stations or hand sanitizer stations (ideally vandalism-resistant), as needed (e.g. at entrances and exits, common areas,

registration desks and in washroom facilities). Hand sanitizer must be approved by Health Canada (contain at least 60 per cent alcohol).

- Ventilation systems in a facility should be both functional and suited to the activities taking place there. The owners of a facility may wish to seek assistance from a heating, ventilation, and air conditioning (HVAC) specialist.
- Trash containers should be provided for the disposal of trash, tissues, and any personal protective equipment (such as masks and gloves) that could otherwise pose a threat to public health. Frequent contact surfaces should be cleaned and disinfected twice daily (e.g. door handles, registration desk area, change rooms, etc.). Equipment such as dumbbells or other single-use equipment may be cleaned/disinfected prior to and following each workout. Refer to the public health fact sheet on cleaning and disinfecting public spaces for more information.
- Employees have access to cleaning and disinfecting supplies as well as personal protective equipment (as directed by the cleaning product manufacturer).
- Employees, volunteers, participants, and spectators who are ill or exhibiting symptoms must remain at home. Signage should remind participants to screen themselves for COVID-19 symptoms. When not engaged in moderate or vigorous physical activity and while moving throughout the facility, participants (at least 5 years old), spectators, employees, volunteers, etc. must wear a non-medical mask (e.g., common spaces, washrooms, hallways, etc.). This includes areas such as check-in counters, restrooms, locker rooms, and common areas²⁰².
- Organizers or operators of programs should, whenever possible, establish separate entrance-only and exit-only access points to the facility. Incorporate breaks between

sessions to allow for cleaning and disinfection and to prevent group interactions. Consider staggering group start and end times in larger facilities to reduce traffic flow in hallways and common areas.

- Rearrangement of facility floor plans and management of public traffic flow may be required to maintain physical distance.
- Where possible, place arrows or markings to indicate one-way traffic.
- Place markers every two meters as visible cues to maintain physical distance wherever possible (e.g. line for the registration desk, restrooms/change rooms, equipment pick-up, etc.).
- Reduce elevator capacity to one person or multiple people occupying a single household bubble.
- Consider installing physical barriers to demarcate a two-meter distance between staff and the general public in registration and front desk areas.
- Public restrooms and change rooms in facilities may be open, but they must remain closed if they are not regularly monitored, cleaned, and supplied.
- Cleaning log sheets and an inventory of cleaning supplies, as well as hand sanitizers, gloves, and masks, must be maintained and accessible to the public²⁰³.
- The use of indoor water fountains is discouraged. Water bottle filling stations that are touchless may be utilized. Participants should bring their own water bottles and refrain from sharing with others.

- Signage regarding the risks of COVID-19, proper cough etiquette, and hand hygiene must be posted at all common entrances to the facility in order to raise awareness about these risks.
- Signage should be displayed to encourage the download of the COVID Alert App.
- It is the responsibility of the staff to ensure that equipment is cleaned and sanitized after each use. 24-hour access without on-site staff is not permitted unless the following additional measures are in place: Sharing of water bottles and food is prohibited.
- If equipment is provided to participants, it must be sanitized before and after use with products approved by Health Canada. Staff/volunteers and participants must be able to maintain physical distance, while retrieving and returning equipment. Program schedules should be staggered approximately 30 minutes apart, to reduce the number of people in the facility, including the number of people exiting and entering at once. There are preferences for cashless payment methods, but cash may be accepted when necessary²⁰³.
- Customers should wear a non-medical mask when not engaging in moderate or vigorous physical activity, as well as when entering, exiting, and navigating the facility (e.g., common spaces, hallways, etc). Masks that are not medically required should be worn during any low-intensity physical activity, including yoga and fitness. Face shields are optional. When physically interacting with students/clients, instructors/trainers should wear masks whenever possible and consider donning a face shield.

- Individuals should maintain physical distance when exiting the building after the conclusion of activities. Common area chairs and tables should be appropriately spaced, stacked, roped off, or removed to maintain physical distance. Chairs and tables may be used so long as they are properly spaced to maintain physical distance and regular cleaning and disinfection protocols are implemented.
- Prior to entering the facility, all individuals (participants, staff, and volunteers) must wash their hands or use hand sanitizer.
- Ensure that employees are trained on proper hand hygiene and sanitation to prevent the spread of infection. Food and beverage services may only be provided via curbside pick-up or a licensed food service provider, in accordance with the restaurant guidelines. The restaurants guidance document must be followed by businesses.
- Consider implementing a reservation system that would permit a limited number of customers to attend during a specific time slot. Establishing sufficient time between time slots would permit cleaning and disinfection of the equipment and facility.
- Visible signage must be posted at all entrances to inform patrons that they should not enter the facility if they are exhibiting any symptoms of COVID-19. Signage should be posted to remind patrons to wipe equipment before each use²⁰³.

First Aid Response:

- Providers of initial care for individuals with suspected COVID-19 should observe standard precautions. If possible, a sick person should wear a mask over their nose and mouth and maintain a distance of at least two metres from the infected person.

- Attempt to limit the number of people who come into contact with a sick person. Those who provide direct care to an individual who may have COVID-19 must wear a mask and gloves. After administering care, first responders must discard their masks and gloves according to standard procedure and adhere to hand hygiene protocols.
- Concerning life-saving measures, it should be noted that the Heart and Stroke guidelines state that hands-only CPR can be administered if there are COVID-19 concerns.

2.6 Theoretical Framework

Worldwide, regional, and nationwide evaluations and conversations are now the norm in regards to anything from healthcare readiness and social reaction to financial constraints, work-life harmony, and environmental problems. 'Experts' on the features of the virus, its actual (and imagined) socio-economic, cultural, and societal repercussions, and what it may imply for the foreseeable future have potentially filled our TVs, computers, radios, and webpages. Specialists, professionals, and others from varied disciplines like as psychology, economics, and politics continue to contribute such comments, and a genuinely tremendous amount of 'COVID-19'-related information has started to fill the pages of our existence and additionally, this sort of literature is starting to stress the impact of the virus on sport, exercise, and physical activity^{29,30}.

According to frequent government news briefings and updates, lawmakers, scientists, and others are seeking to organize a pandemic response. One of the most critical issues has been how to maintain a balance between linked health and economic hazards, which has led to an ongoing argument about how long the government shutdown can be sustained until economic collapse is unavoidable³¹. This argument has been particularly heated (even verging on civil disobedience or social upheaval) in countries where the neediest get limited welfare aid. As a

consequence of the epidemic, numerous industries have delayed, relocated their activities online, or even suspended operations for weeks or months. Moreover, the personal ramifications of this "lockdown" are only starting to manifest.

While some people continue to strive to juggle working from home with child care and other duties, others have lost their employment or had their income slashed. In contrast, many people in "important vocations," such as medical professionals and those laboring to maintain the food supply, continue to put their health at risk to reduce the pandemic's effect and sustain the wider population^{32,33}. The Academy has responded quickly, especially in the domains of economics and medicine. Multiple 'quick evaluations' of medical data have been undertaken as knowledge regarding the virus's impacts has surfaced in order to optimize treatment effectiveness and risk management, and governments continue to utilize scientific evidence to design a response in the future. Without a doubt, the generation of such evidence will continue to grow for an extended period of time.

Despite this, the upheaval has been erratic, uneven, and often unfair. There are startling claims that the rich may "skip the queue" to be tested for the virus, sometimes even ahead of at-risk and essential healthcare personnel³⁴. Similarly, although some celebrities apparently complain about being stuck in their villas, nursing home fatalities go undocumented and, in some instances, unacknowledged for days³⁵. Unquestionably, the epidemic has once again highlighted the economic and cultural gaps that beset our communities, leading in increased scrutiny³⁶.

Similarly, sport has also been impacted. While state reactions have varied considerably, the worldwide response has resulted in the near-total suspension of all competitive sport levels.

Due to the ongoing government shutdown, many megaevents, including the Olympic Games and the European Football Championship, as well as leagues and events in sports as varied as tennis, hockey, and formula 1 have been postponed. In addition, despite early hesitation from organizations like UEFA and the IOC³⁷, their later choices to postpone or reschedule similar

events have been well accepted by a number of stakeholders³⁸. Despite the fact that the epidemic has hindered the capacity of individuals, particularly athletes and the general public, to move about, exercise, and interact socially, contradicting research reveals that more people than ever are aware of the need of physical activity³⁹. Clearly, proof of the virus's long-term effects on sport is only starting to surface. We just do not know what sport will look like after the epidemic, particularly given early signs that the virus that caused the pandemic will likely become a normal part of life in the future.

2.6.1 Future Role of Sport, Exercise, and Physical Activity

The first item that has attracted our sociological attention over the last few months is the core aim of sport: who it is for, what counts as "sport" (including physical activity and exercise), and how this may change over the next few weeks, months, and years. New processes of re-sportification and de-sportification, as well as new laws on social separation and civilized (or risk-averse) behavior, might be focus areas.

How, for example, can the popularly held view that sport is a "business" be questioned, reformed, or reconceived now that the sport's precariousness has been revealed? The cancellation of a single event, competition, or even match seems to have put serious and urgent strain on wage-payments, prize-money, and the lives of individuals participating in professional sports. The implication is that these constraints have been felt at numerous levels, with clubs and organisations depending on memberships or fees suspending operations temporarily. Inconsistently, these economic constraints have been felt owing to variables such as lost income, interruption to sporting careers and salary, cash flow troubles, unemployment and loss of commissions for freelancers, loss of volunteer support, and alterations to company plans^{40,41}. This includes timeline, seasonality, and timetables, where clubs in the middle of their seasonal activities or organizations whose principal tournament or event was about to take place are more likely to have been impacted by the pandemic than those for whom it happened during the off-season. How will these concerns be addressed or

minimized, and who will be responsible for the majority of the associated costs? This remains unknown.

Budgets are determined by facility ownership, leasing or maintenance payment schedules, the quantity of available assistance, and consumption⁴². Some clubs may have been sponsored by local authorities and governments as a consequence of a local or national strategy, whilst others may not have been, resulting in some clubs receiving compensation for lost profits while others may not have. Indeed, it is unknown who will eventually be liable for any financial shortfall, since this may rely on local and national geopolitical conditions (i.e. the ability of a government to support infrastructure due to an advanced welfare system)⁴³. Clearly, sport sociologists may provide information and guidance to this field. Moreover, under such circumstances, more basic concerns are essential, such as what defines "sport," if sport is part of the welfare system (as many have argued in the past), whether sport is part of the state or private sector, and whether it is a "special case" or not⁴⁴. These investigations bring us to our second topic of research, which is the organization and funding of sport.

2.6.2. Sport's Organizational Structure in Response to the Pandemic

It has been claimed elsewhere that the worldwide suspension or delay of elite-level competitive sport is ruled out on the grounds that such huge meetings heighten the likelihood of the virus's transmission greatly owing to the enormous networks they depend on⁴⁵. Some sources discuss the end of globalization, citing the virus, nationalist and populist political movements, and environmental issues⁴⁶. Such observations call into question the future viability of global sport, requiring us to consider whether the continued globalisation of competitive sport can continue at a sustainable rate or whether new health-based restrictions must be imposed on the movement of athletes on regular "tours" or for international competitions. In addition, nothing is known regarding the larger, community-based or local effects of social distance or isolation on sport.

Regional, local, and grassroots clubs, organizations, and other local entities enable and support athletic communities across Europe^{47, 48, 49}; and Such organizations usually adhere to a centuries-old belief that the advantages of sport reside not just in its physical attributes, but also in its propensity to foster sociability via mutually-oriented societies⁵⁰. Despite our uncertainty over the efficacy of sport in promoting these benefits, the majority of us would say that socializing via sport has the potential to be very beneficial to physical, mental, and social health, and that the positives outweigh the downsides.

However, it may be important in the present to submit difficult questions questioning these assumptions. For instance, what happens when closeness to other community members becomes a threat? What if 'sport for all' cannot be sustained, at least in its most literal meaning, owing to increasing health hazards in specific populations (such as the elderly, the chronically sick, and pregnant women)? What does it imply for sports clubs and institutions if the populations they serve are dubbed "vectors" or "vehicles" for the transmission of health concerns such as COVID-19? How will these considerations alter the laws and regulations controlling cleanliness and contact in sports (for instance, the Dutch FA recently stated that spitting on the football pitch would henceforth result in a yellow card)? And to what degree will it be feasible to create sport around these current organizational blocs, which are based on the ideas of community, inclusiveness, and mutual support? Due to the method in which a virus spreads, certain sports may be influenced more than others (for example, in the Netherlands, team or indoor sports are more restricted than solo or outdoor adventure sports)⁵¹. Likewise, certain participant groups may have less sports options than others (e.g., "high-risk" groups may become more marginalized). These are, in reality, conventional sociological concerns, and we will now examine the influence of the pandemic on sports inequality⁵².

Some trends associated to inequality suggest that populations less able to isolate themselves owing to financial worries, such as those with unstable contracts or who lack funds, and who cannot simply "stop" their working lives due to a lack of welfare support, have higher

infection rates^{53,54}. Similar pressures also apply to people who are physically unable to maintain social distance, such as those who live in poverty (e.g. those who live in high-density housing). Similar to this, people who are considered to be "essential workers" frequently find it difficult to maintain their privacy due to their employment in fields like healthcare, education, delivery of goods, or retail food, for example. In many nations, healthcare workers also appear to be at a high risk of contracting infectious diseases. Furthermore, the broader debate on risk has largely ignored some of society's most vulnerable populations, like the homeless, refugees, and migrants stranded in camps as a result of recently closed borders⁵⁵. However, new trends show that such groups are more likely to suffer than those from greater income, which is pretty predictable. The COVID-19 epidemic has also been linked to an upsurge in racial discrimination, with some calling it the "Chinese Virus⁵⁶." Once more, evidence points to an upsurge in assaults and abuse towards people of East Asian ethnicities, maybe as a result. Contrarily, it has been noted in some circles that those who are financially stable, such as business owners and employees who can work remotely and still get paid, have either been less badly affected by the pandemic or have even profited from it. Indeed, there have been allegations of business owners in various countries seeking government subsidies even if they had sacked their staff^{57and58}. It was also revealed that some EPL clubs were taking advantage of the Furlough plan while continuing to pay players making over £100,000 per week in full. This is similar, but somewhat in the opposite direction⁵⁹.

Sports also display this social difference. For instance, elite footballers are now the focus of more scrutiny, often as a result of direct political pressure⁶⁰. For instance, the UK's Health Minister publicly asked professional footballers to accept pay reductions, leading to the players' acceptance of a proposal to contribute their salaries to UK healthcare services. In truth, the majority of professional players have experienced minor income reductions (usually between 10 and 30 percent) as a result of the suspension of their competitive football. This

argument ignores the fact that players in the Women's top divisions, players on youth contracts, players working for clubs in lower divisions or outside of the top European leagues, and players employed by lower division clubs are unlikely to be able to donate sizable sums of money to healthcare organizations. The implicit gender- and class-based norms and inequities that exist in this specific sport are highlighted by such presumptions about sport and athletes, and they surely demand further investigation⁶¹.

Owners of clubs, sponsors, and media outlets who pay the players' salaries rarely face pressure to make financial contributions. The severe financial discrepancies and inadequate support structures for non-playing personnel and grassroots clubs have been made clear by this catastrophe. In reality, many non-playing staff members have lost their jobs or, in certain cases, club owners have asked governments for financial aid to meet costs while players across Europe and beyond have taken minor pay cuts^{62,63}. In response to criticism of these owners' and clubs' acts, particularly in the United Kingdom, some English clubs (like Liverpool FC) swiftly reversed their intention to put non-playing employees on a "furlough" system that would have allowed the British government to cover 80% of staff salary. Elite sport's financial viability has been questioned, and at the time of writing, there are heated conversations over the creation of schedules for the restart of various leagues and competitions (discussions in which governments and politicians have played a large role)⁶⁴.

The issue of how to support the sports business without endangering the health of participants, spectators, and other personnel has definitely turned political. The political and sport-governance issues are also becoming more prominent on local and national agendas, proving that these observations are not exclusive to the elite or international levels of sport. For instance, it is vital to sustain local sport infrastructures like swimming pools, fitness facilities, golf clubs, event planners, and volunteer sport groups⁶⁵. The future of sports will depend on how governors and boards steer their organizations through these turbulent times and prepare for the future. Important areas of focus include how governments and politicians prioritize

payments to various sport providers and how these decisions affect how accessible sport is (financially, geographically, etc.) in diverse nations, regions, and communities⁶⁶.

These reflections prompt other, pertinent sociological queries. Will these apparent inequities, for example, be addressed, decreased, or perpetuated? How will socioeconomic inequality be viewed as culturally acceptable in sports and other contexts? Can the current capitalist system, which has for so long worsened these disparities, continue? In face of these demands and rules, how can the worldwide international sports system be preserved, which has for so long relied on large attendance, sponsorship, and the unrestricted movement of athletes and organizations? In actuality, this focus on athletics leads us to our fourth topic of investigation. As previously said, there is little doubt that the epidemic has affected, stopped, or even completely eliminated athletes' daily life and sporting activities. A major rearrangement of how coaches and instructors connect with and instruct athletes has become necessary as a result of this. Coaches will likely need to handle a number of significant difficulties owing to the distance between them and the athlete, including how to evaluate athletic performance, injuries, and other training-related input (sometimes only possible due to the presence of the limited view provided by a webcam and computer screen). This can lessen the effectiveness of many coaching techniques in sports where technique and physical prowess are crucial. A lack of proximity between coaches and athletes is also likely to require changes to coaching plans, such as the substitution of strength and conditioning workouts for technique-based instruction⁶⁶.

The capacity of instructors and coaches to promote unity and a sense of belonging within groups and teams is also likely to change. Coaches may use this time away from the fields, pools, and tracks to reflect on their work and engage in CPD or discussions with other coaches and practitioners from various sporting cultures and environments, which may result in modifications to their philosophies, behaviors, and practices. Additionally, these variables have led to declarations and suggestions that are in conflict. For instance, it has been decided

in California that physical education should be cut short to minimize contact while stressing the value of being active. If teaching and coaching procedures are to be modified, these aspects need to be looked into; however, it is unclear how, why, and what consequences these changes will have, and best practice may not be available for some time⁶⁷.

It's also possible that the athletic experience has changed. Sport is reportedly being practiced more and more solitary in secluded outdoor areas, at home alone or in family groups, with only camera or computer-based communication with others as a result of worldwide lockdown and social distancing regulations. Although there isn't enough proof to be certain, there are signs that e-sports, tracking technologies, and online education will all grow more common in the future⁶⁸. It will be interesting to see how far the digitalization of sport, which started before the COVID-19 pandemic, spreads and increases its proportion of athletic activities. The same is true for the growing trend of outdoor individual "sport" participation that poses a threat to team sport participation. Individual outdoor activities are indeed becoming more and more popular in Europe, but it will be fascinating to watch if the COVID-19 pandemic supports this upward trend despite frequently conflicting recommendations in various countries to stay indoors⁶⁹.

While it is generally accepted that exercising in a natural setting is beneficial in a number of ways⁷⁰, sociological research might also be used to examine the effects of diminished sociability in sport and exercise. Similar to this, it's likely that many people's experiences with and use of the senses in sport have changed. Some senses, like smell and touch, are likely to become limited, leading to a greater reliance on sight and kinaesthesia and changing the ability of athletes, teachers, and coaches to give feedback⁷¹. Athletes' wellbeing and sense of self could also be studied in relation to the good and negative consequences of structural changes in sport as well as delays, postponements, and cancellations of various sporting events.

For some athletes, the postponement of big competitions or leagues may pose a substantial obstacle to professional advancement, provide an opportunity for contract renegotiation, or even signal the beginning of involuntary retirement. The ability to postpone or extend a season, event, or competition may represent a second chance for some people, such as those who have just returned from a drugs or disciplinary ban, are healing from an injury, or are just starting out in their professions. Given the challenges many athletes have faced after such life-changing occurrences, including retirement, it is essential to understand how delays and cancellations affect athletes' sense of self, including their identity as athletes, mental health, and biographies⁷². The introduction of this idea of biographical disruption also brings us to our fifth and last area of investigation, which is the impact of fewer opportunities for the sick to participate in sport and other forms of health care.

The idea that the virus "does not discriminate" has received a lot of attention, but the majority of the general discussion about the virus has focused on the increased mortality risk among certain groups, such as older adults, pregnant women, and those with "underlying health problems" (some of which may not be recognized prior to infection). Some sources claim that in reaction to this, some governments would socioculturally frame their approach to combating the virus as a measure to safeguard these groups by restricting their contact with and socialization with other, less hazardous groups (the young and ostensibly healthy).

This calls into question the possibility of new or worsening kinds of inequality in the participation in sports. In different sport, exercise, and physical activity contexts, it has been found that the marginalization or segregation of particular groups, such as older adults or those managing chronic diseases, results from the "othering" of those groups^{73,74}. In particular, if outsider groups lack the social cohesion to challenge stigmatization processes and internalize established beliefs regarding their susceptibility to infection, growing distinctions between the healthy and less healthy, between 'clear' groups and unknown 'at risk' groups, etc., could result in new forms of established-outsider relations.

Furthermore, these dangers do not only affect specific, isolated, or "at-risk" groups. Will there be more exclusion or segregation if close proximity between young and elderly, healthy and unhealthy, or "high-risk" and "low-risk" groups is forbidden? If so, where will the line be set between those who are safe to participate with others and those who are not? This notion of risk might further stigmatize disabled communities by extending the medical model of impairment. Who will decide which costs are acceptable (i.e., which prices are acceptable to justify exclusion from the very activities that are designed to promote good health) and how will the costs and benefits of exclusion be evaluated against one another? What about "healthy" groups that were also encouraged to spend a lot of time alone, such as pregnant women? Who will decide which risks are tolerable and which underlying medical issues are sufficient to justify group exclusion? What effect would these justifications have on the human rights of particular communities in particular settings? Will they erode the distinction between "public" and "private," increase the surveillance made apparent by the medicalization of our "risk societies," or might awareness of the difficulties these groups experience offer opportunity for their views to be heard and considered in the discussion?

It won't be clear until much later how far the global epidemic expands this segregation and what effect it has on the marginalized and stigmatized communities as a result. Could the sociocultural or discursive construction of particular groups as "risky" have an effect on those groups' access to the venues, settings, and organizations that form the foundation of sport, for instance? We already notice these impacts⁷⁵. For example, the pandemic has caused the near-total cessation of face-to-face exercise-based cardiac rehabilitation in the United Kingdom, and there are suggestions that some high-risk groups (like those who have suffered spinal cord injuries) may be isolated for a lot longer than the general population. These findings imply that decision-makers may already be giving some risks a higher priority than others, such as the management of communicable diseases over (often just as deadly) non-communicable diseases and the management of physical health over mental health. Such

choices are definitely interesting to study, as are the ways in which they are influenced by sociocultural, political, and politico-economic systems⁷⁶.

2.7 Athletic Events during the Epidemic

All facets of professional, social, and personal life, including recreational sports, saw unprecedented transformation as a result of the COVID-19 virus and lockdown limitations that went into effect in March 2020. Even though some recreational sports were resumed after the COVID-19 precautions were increased and lockdown restrictions were loosened in the summer of 2020 (with socially separated training in place), additional national lockdowns in November 2020 and January 2021 led to the termination of all recreational provisions.

Recreational sport is a term used to describe physical exercise that is done for fun rather than for money or other external rewards⁷⁷. Recreational activities usually include a competitive component (such as fun leagues), but this element is not typically seen as the primary motivator, as it is in elite and professional sport. Sport and physical activity are widely acknowledged to have positive effects on physical, psychological, and social health at all levels, including the prevention of osteoporosis, osteoarthritis, and cardiovascular disease. They also present opportunities for social interaction, companionship, and a sense of belonging, while also enhancing self-esteem and self-control. There has been little, if any, research on the psychosocial effects of eliminating all recreational opportunities, despite the fact that the advantages and motives of recreational sport participation have been extensively examined⁷⁸.

Despite the fact that (some) exercise was permitted during lockdown limitations, people in the United Kingdom were only allowed to go outside for exercise once every day. Recent data suggests that COVID-19 limits caused declines in vigorous physical activity in France and Switzerland, as well as in Spain and Italy⁷⁹. Furthermore, it was established that lockdown limits increased daily sitting time from 5 to 8 hours and had a detrimental effect on levels of physical activity. The lowest levels of physical activity were reported by people

between the ages of 18 and 29, which can be explained by the absence of the sporting facilities they usually use.

Younger people under 35 had the highest prevalence of mental health issues during the influenza pandemic of 1995. (depression, anxiety, and stress). Younger adults also showed increased levels of felt stress and rage during lockdown⁸⁰. In light of prior findings, this study examines changes in exercise participation and the psychological effects of lockdown. A clear gap in the literature exists because no papers have yet examined leisure athletes, alternate forms of exercise, or attitudes toward returning to sport.

The resilience and coping skills of a person will probably determine how COVID-19 may affect physical activity and mental health. A person's cognitive and behavioral attempts to manage particular external and/or internal pressures that are thought to surpass his or her resources are referred to as coping. Research shows that accepting the virus's presence, using self-distraction, and exercising reduce the virus's potential negative impacts during a COVID-19 pandemic. The idea of resilience, which affects how an event is interpreted and effects several stages of the stress reaction, is commonly linked to adaptation and effective handling of setbacks (e.g., the selection of coping strategies). This is different from coping, which describes the methods used after assessing a stressful circumstance⁸¹. Resilience is therefore "the function of mental processes and behavior in boosting personal assets and safeguarding a person from the potentially negative impacts of stressors," according to the definition given above. Because resilience is favorably connected with a greater quality of life, directly influences psychological and physical sickness, and indirectly influences the perception of stressors, it is vital to research it with responses to COVID-19 stressors^{82,83}. Additionally, by preserving an athlete's drive and managing stress throughout injury rehabilitation (relative time away from sport), resilience contributes to better management of injury and possibly lockdown.

In conclusion, the COVID-19 epidemic has substantially harmed people's capacity to exercise for fun, but amateur athletes' experiences are now being disregarded. This study set out to look into (a) the psychosocial effects of COVID-19 restrictions on recreational sport participants, (b) different forms of exercise, and (c) attitudes toward getting back into sports. These new insights may help clarify how sports and/or health organizations (such as local clubs and national governing bodies) can support athletes before, during, and after a lockdown. This is important because creating home exercise equipment will be essential for staying active during current and upcoming local/national lockdowns. The following inquiries are put forth for research: (1) How do COVID-19 limits affect recreational athletes, and does this effect differ based on (a) age and (b) resilience? (2) What alternatives to exercise have been sought after, and (a) does this differ depending on the age group? (3) How do recreational athletes feel about getting back into sports, and (a) does this differ depending on the age group?

In sporting facilities, research highlights the value of cleanliness, social isolation, and required health checks. Additionally, it is noted that in times when the majority of people lack experience with the epidemic, it is crucial for people from all walks of life to engage in regular physical exercise in order to maintain their health. 150 to 300 minutes of moderate-intensity exercise and two sessions of muscle-strengthening activities each week are advised by experts in physical activity. According to study, regular physical activity has been demonstrated to offer particular advantages for indices of mental, physical, and physiological health as well as beneficial health consequences^{84,85}.

The majority of people may exercise at home during the epidemic without any specialized equipment or additional space. An individual can stay physically active at home all day long in a variety of ways. Exercise can be done through simple stretches, housework, stair climbing, dancing, and other activities. Additionally, those who have access to the Internet should look for methods to stay active during this time by taking advantage of the wealth of

free online resources. Online resources give users access to games with physical activity content that are suited to their needs and portable. This suggests that technology, which is necessary for daily life and facilitates it, can be applied more successfully in sports. Technological developments are starting to have an impact on people's entertainment tastes, behaviors, requirements, and values in the sports sector⁸⁶.

The epidemic has accelerated sports technology adoption and the digitalization of the sports industry⁸⁷. Physical activities, training regimens, nutrition plans, and motivational programs customized to the individual have started to help with his daily organization as a result of the integration of sports and technology, mobile phones that identify and recognize the individual, and applications that collect personal data. Thanks to technology advancements, trainers may now arrange for their clients to participate in sports in front of cameras, regardless of the time or location. As a result, people may follow their coach from home thanks to technology. Despite these encouraging advancements, epidemic issues still exist. The prevalence of ball-based activities among kids and teenagers is another problem the epidemic is influencing in the sports business. Young athletes should be made aware of the reasons why playing in ball games should be prohibited during this time. Children and teenagers should be encouraged to temporarily give up ball sports in favor of pleasurable physical activities that boost health during the epidemic. For kids and teenagers, this adjustment could be difficult.

Children and teenagers need to be physically active to develop their social skills⁸⁸. The friendships of children and adolescents during this time may be threatened by a lack of social connection⁸⁹. According to preliminary research, the epidemic makes teens more prone to time abuse, despair, and anxiety. Young athletes should receive online social-psychological support during this time from sports and exercise psychologists, physical education instructors, and coaches. Young athletes who receive support at this period are more likely to stay motivated. Parents and friends can help with this process as well, but they shouldn't be put under too much pressure to maintain their social distance^{90,91}. During this stage, young

athletes must keep their sense of teamwork. Due to limitations, online group gatherings can be arranged when they're needed to foster camaraderie and peer support⁹².

As a result, it is possible to interact while maintaining both social distances. Sports psychologists can identify athletes who have been adversely affected by the epidemic or social isolation, assist athletes in learning coping mechanisms for anxiety, and recommend individuals with mental health difficulties to mental health experts. The epidemic's problem might be exploited as a chance to develop family ties and promote communication between athletes and their families. According to recent developments, COVID-19 has significant negative consequences on sports and sports enthusiasts. Even while the epidemic's impacts cannot be completely eliminated, there are several strategies that can be used to lessen their current impact as things return to normal⁹³.

2.8 The Effects of COVID-19 on Social Development Worldwide

The majority of major international, regional, and national sporting events, including marathons, football tournaments, athletics championships, basketball games, handball, ice hockey, rugby, cricket, sailing, skiing, weightlifting, and more, have been canceled or postponed to protect the health of athletes and other participants. For the first time in the modern games' history, the Olympics and Paralympics have been moved to 2021. It is estimated that the sports sector is worth \$756 billion annually on a global scale⁹⁴.

Tens of millions of jobs across the globe are in danger due to COVID-19, including those of sports professionals as well as those working in retail and sporting services related to leagues and events, like travel, tourism, infrastructure, transportation, catering, and media broadcasting. They run the danger of losing business partners who may not continue to assist them as originally planned⁹⁵.

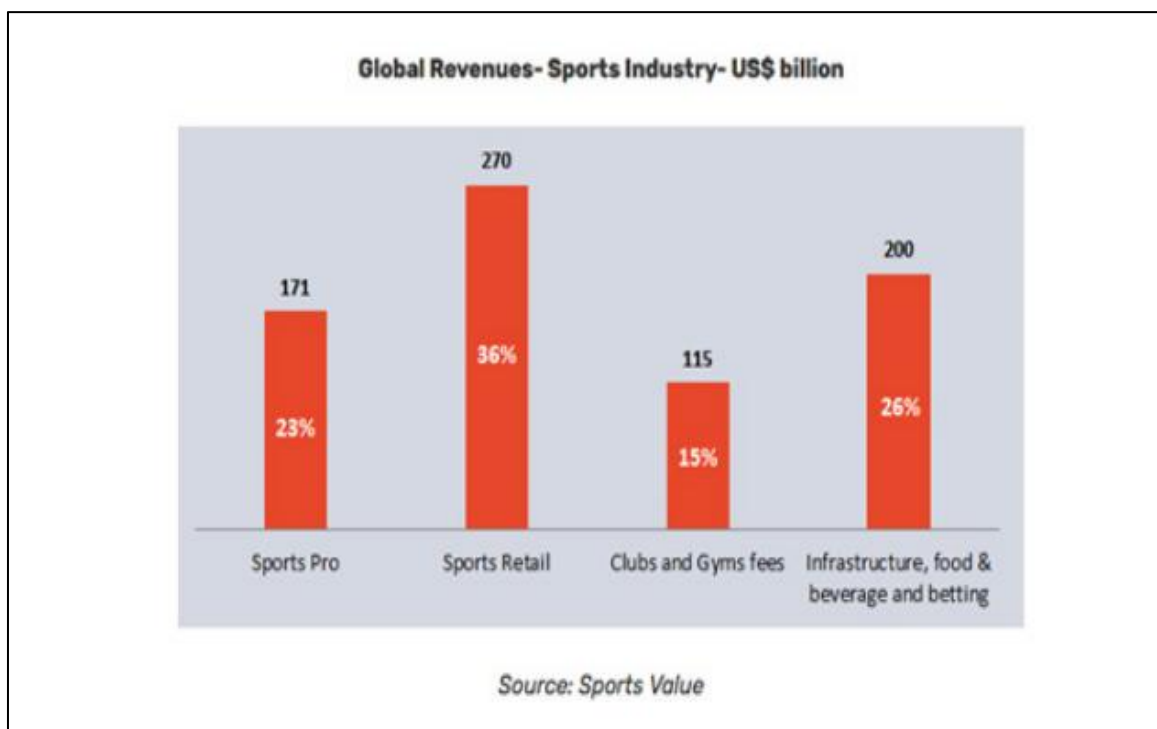


Figure 2.1

The social benefits of international and regional sporting events, which can strengthen social cohesion, contribute to the social and emotional excitement of fans, and increase people's physical activity through their identification with athletes, are significantly impacted by game cancellations in addition to their economic effects. Sport has long been recognized as an effective means of promoting communication and uniting diverse communities and generations. Sport enables many social groups to take a more prominent position in social development and transformation, especially in divisive society. In this setting, sport is employed to develop educational possibilities and open doors for underserved or vulnerable people.

Major sports leagues have shown their support for initiatives to slow the spread of the virus. For instance, FIFA and the World Health Organization (WHO) collaborated to launch the "Pass the message to kick out coronavirus" campaign in 13 different languages. The campaign encourages people to take five essential precautions to stop the disease from spreading, including hand washing, proper coughing technique, avoiding touching one's face,

physical distance, and staying at home if they are feeling under the weather⁹⁶. Other international sport for development and peace organizations have come together during this time to stand in solidarity with one another, for example through recurrent online community discussions to share difficulties and dilemmas. Participants in these online discussions have also attempted to come up with creative solutions to more general social problems, such as figuring out how sporting organizations can assist vulnerable people who would typically take part in sporting events in low-income communities but are now unable to do so because of mobility restrictions⁹⁷.

A wide range of stakeholders, including national ministries and local authorities, public and private education institutions, sports organizations and athletes, NGOs and the business community, teachers, scholars and coaches, parents, and most importantly the - predominantly young - learners, have been impacted by the closure of educational institutions around the world as a result of COVID-19. Although the current crisis has had a significant negative impact on this group, it can also play a critical part in helping to control and resolve it as well as in promoting rights and values during times of social isolation.

The global community has quickly adapted by producing online material catered to various populations, such as free social media tutorials and kid- and family-friendly yoga, dancing, and stretching programs. Higher education institutions offer online learning materials that students can utilize at home. Many fitness centers provide reduced app memberships as well as daily-changing online video and audio lessons that can last anywhere from one to several hours. Through social media sites, you can access a lot of live fitness demonstrations. Many of these programs don't need specialized equipment, and in some, weights can be replaced with everyday objects from the home.

Significant challenges will need to be resolved in order to ensure the safety of sporting events at all levels and the health of sporting organizations as the world starts to recover from COVID-19. Events will soon be modified to safeguard the safety of competitors, spectators,

and merchants, among others. In the longer term, it might be necessary to support participation in sporting groups, especially young sports, in light of a predicted global recession.

2.9 How Covid-19 Affects Physical Activity and Overall Well-Being

Gyms, stadiums, pools, dancing and fitness studios, physiotherapy centers, parks, and playgrounds have all been shuttered as a result of the worldwide COVID-19 outbreak. Since they are unable to leave their homes, many people are unable to participate in their regular individual or group physical or sporting activities. In these situations, many people engage in lower levels of physical activity, spend more time in front of screens, experience inconsistent sleep patterns, and eat worse diets, which leads to weight gain and a reduction in physical fitness. Low-income families are especially vulnerable to the negative consequences of stay-at-home policies because they are more likely to live in subpar conditions and small areas, which make it more difficult to engage in physical activity.

75 minutes per week of vigorous level physical exercise or 150 minutes per week of moderate intensity physical activity are advised by the World Health Organization. Such intermittent exercise has shown to be quite helpful, especially during times of stress, anxiety, and fear⁹⁸. Therefore, there are worries that, in the event of a pandemic, a lack of access to regular sporting or exercise opportunities may pose problems for the immune system and physical health, including the beginning or worsening of conditions associated with sedentary lifestyles. Lack of access to exercise and physical activity can also have detrimental impacts on mental health, which can make those who are socially isolated feel more stressed or anxious. The potential of losing relatives or friends to the illness, as well as the virus' effects on one's financial well-being and availability to food, would all intensify these consequences. Despite having little space and no equipment, many people may still workout at home. Stretching, doing chores around the house, climbing stairs, or dancing to music are some ways sedentary people might enhance their daily activity levels. For those with access to the

Internet, there are also a ton of free materials on how to stay active during the pandemic. For instance, games that promote physical health can be played in tiny settings and appeal to people of all ages. Strength training, which doesn't require a lot of space but maintains muscle strength, is another crucial component of being physically healthy. This is especially true for elderly people who have physical limitations⁹⁹.

These online choices can make it easier to access professors and courses that would not otherwise be available. As not everyone has access to digital technologies, not everyone has access to these resources. Residents of disadvantaged regions and many developing nations frequently struggle with or cannot access high-speed Internet. The digital gap has an impact on prospects for virtual sports as well as remote banking, education, and communication. The provision of written materials that promote physical exercise, as well as radio and television programs that promote it, are essential for closing the digital divide for many low-income households. Given that sport is frequently used to promote polite competition, teach conflict management, and encourage collaboration and sportsmanship, youth are disproportionately influenced by social and physical distance. Many young people lose the social network that sports involvement provides when they stop playing. Some groups and institutions have started using virtual training to allow young athletes, coaches, and leagues to practice while staying at home.

2.10 COVID-19 and Sports Events

The coronavirus epidemic has affected people's physical activity all across the world. Sports and recreation facilities (such as swimming pools, gyms, fitness clubs, and playgrounds) as well as organized physical activities were suspended in several countries during the first wave. Additionally, there weren't many chances to engage in outdoor recreation and sports. For example, the first lockdown in Poland prohibited usage of golf courses, hiking routes, and woodland regions for recreational and tourist purposes, further limiting options for exercise. Regulations were relaxed during the second wave of the epidemic, but many

limitations were still in place. Prior to the coronavirus pandemic, 65% of Poles claimed to engage in physical activity at least once per month, with 39% of these people following World Health Organization guidelines¹⁰⁰.

The percentage of people who were physically active fell by 4% during the first shutdown while rising by 2% during the second. (up to 63 percent) ¹⁰¹. Similar to this, data from all across the world shows that people's patterns of physical activity changed over this time, and a lot of current study shows that while most individuals decreased their physical activity, other people increased it^{102,103}. Researchers will certainly spend many years studying the predicament of millions of people being confined to their houses, which is unprecedented in the contemporary world, and its effects on health. However, many are already highlighting the value of exercise in preserving one's physical and emotional well-being while under lockdown as well as in slowing the spread and effects of COVID-19¹⁰⁴. In keeping with its guidelines for exercise, the World Health Organization has also promoted physical activity during lockdown/quarantine.

The lifestyles of university students were impacted by the coronavirus pandemic as well. Lockdowns caused schools to close, e-learning to be introduced, and dorms to close, causing many students to go back to their parents' houses. Students were forbidden access to sports and recreation facilities, much like other people, although they could still exercise at home and, in many places, outside. Therefore, it was important to know whether and how much this group of young adults took use of the few opportunities for physical activity from a research perspective. It is assumed that students studying tourism and recreation are more physically active than those studying other subjects. We concentrated our investigation on this group as a result. This assumption is made based on the fact that they have selected a course of study where physical recreation is a key element of the curriculum. These students are prepared to become experts in active forms of recreation and promoters of physical activity through a variety of (theoretical and practical) university courses. It will be interesting to see if they

affirm the special value of physical activity for overall health physical, mental, and social by doing so.

1. Organizations and Federations in Sports.

Governments and intergovernmental organizations may offer advice on safety, health, labor, and other international norms and procedures that apply to future athletic events and secure working conditions to sports federations, clubs, and organizations around the world. This would make it possible for all interested parties to work together to fix the current issues and facilitate future sporting events that are both safe and pleasant for everyone.

2. The Ecosystem of Professional Sport.

To lessen the negative consequences of COVID19 on the world of sport, the sport ecosystem which includes, among others, producers, broadcasters, fans, corporations, owners, and players must come up with new and creative solutions. This includes retaining the current personnel, creating new operating models, and designing venue strategies. It also includes ways to interact with spectators to assure the security of upcoming athletic events.

3. Encourage Physical Exercise

Governments should work with health and care providers, educational institutions, and civil society organizations that represent a variety of social groups to promote physical exercise at home. Maintaining social distance should prioritize improving access to online tools that support sporting activity. For individuals without access to the Internet, however, low-tech and non-tech options must also be looked for.

4. Policy Advice and Research.

The UN system should assist Governments and other stakeholders in ensuring the successful recovery and reorientation of the sports sector while also enhancing the use of sports to achieve sustainable development and peace through its sports policy instruments and mechanisms, such as the Intergovernmental Committee for Physical Education and Sport, as well as its research and policy guidance. Higher education and scientific research will also be

crucial pillars for influencing and directing future policies¹⁰⁵.

5. Capacity Building and Technical Cooperation.

Governments, UN agencies, and other important parties should see to it that capacity building and technical assistance services are available to support the creation and application of national policies and strategies for the best use of sport to promote health and well-being, especially in the COVID-19 age group.

2.11 The Impact of Covid-19 on Physical Activity

A respiratory illness called COVID-19, sometimes referred to as SARS-CoV-2, overtook the world in the first few months of 2020¹⁰⁶. According to the World Health Organization, the newly identified coronavirus is what causes the infectious disease COVID-19. They add that it is a sickness that spreads through droplets and has the potential to become lethal for the elderly and people with underlying medical disorders¹⁰⁷. Many individuals around the world are still subject to lockdowns, restrictions, and mask-wearing because of the severity of this disease and how easily it may spread through human droplets. The amount of physical exercise most people get on a regular basis has been significantly impacted by these lockdowns, which have changed how and when we move around in our everyday lives.

Residents of some countries were expected to stay in their houses during the height of lockdowns in the spring of 2020, and were only allowed to leave for very necessary trips, such going grocery shopping or to the pharmacy. The average number of steps taken declined by 5.5 percent after ten days and by 27.3 percent after thirty following the announcement of a pandemic. According to the analysis, steps decreased by a maximum of 48.7% in Italy, which had one of the tightest lockdowns in the world. In contrast, Sweden, which favored social segregation and restrictions on meetings rather than implementing a statewide lockdown, experienced a maximum reduction in steps of 6.9 percent¹⁰⁸.

Expected and unanticipated tendencies have started to emerge as research on the consequences of ongoing lockdowns and mitigation attempts expands¹⁰⁹. The results of a

study looking at the impacts of physical activity during the pandemic in France and Switzerland showed that more leisure time was spent in sedentary behavior and less time in intensive physical activity.

Unexpectedly, they saw a rise in leisure-time walking and light exercise. According to results of another study, people who were considered to be extremely or moderately active before the COVID-19 pandemic showed a sharp decline in their level of physical activity during the pandemic. Additionally, they found that participants who would have been considered to be inactive before the COVID-19 epidemic engaged in much higher levels of physical activity during that time. This rise may have been brought on by the necessity of staying at home and doing more housekeeping. In a research done in the UK, which does not have particularly stringent lockdowns, it was discovered that 75% of subjects got enough exercise when they were socially isolating themselves. The average amount of time spent engaging in moderate-to-vigorous physical activity increased across all adult age categories, according to this study, and 75 percent of adults in the United Kingdom reached the recommended levels of physical activity, up from 58 to 68 percent earlier.

2.12 Impacts and Challenges of Sport and COVID-19

On December 13, 2020, a lengthy piece headlined "2020: The Year in Sports When Everyone Lost" 132 was published in The New York Times. The article lamented the financial toll that the COVID-19 pandemic had on international sports organizations, citing losses of US\$13 billion in US sports leagues, US\$28.6 billion in wages and earnings, and nearly 1.5 million jobs in the US alone. Revenue losses at some of Europe's biggest football clubs exceeded 1 billion euros, the article stated. All sub-sectors of the sport industry had devastating outcomes as a result of the cancellation, postponement, and shortening of important sporting events and contests, such as Wimbledon and the Olympic Games, which polarized the people of Tokyo¹¹⁰. Participatory sports ceased to exist or became intermittent, and indoor and outdoor leisure activities as well as physical activity were the only options.

A large spike in sales of home fitness equipment, online exercise studios, esports, and repackaged athletic content was brought on by the proliferation of alternative sporting content and activities at the same time that problems engulfed established sport. While conventional sports and their supply chains died, new ones thrived, and the two merged in the middle as imaginative and well-funded parties developed hybrid fan-facing projects as a result of mobile and streaming technology and the large businesses that made them available. Those who were lucky enough to continue working in the sports industry did so mostly from their homes. The "Age of WFA" - Work from Anywhere - is here, according to an e-book created by technology giant Cisco in partnership with wired magazine¹¹¹. Forget the "Fourth Industrial Revolution" or even the "Age of Information." This led to the emergence of yet another "new" working paradigm, this one built on a hybrid response to the unexpected growth of the distant economy.

The epidemic has highlighted how closely conventional sport is tied to participation and fan attendance, as the articles in this special issue show. Hyperbole seems, for once, to fall short of adequately capturing the enormous impact that the sporting world, its stakeholders, and its fans have undergone and are still fighting. No other exogenous event has ever produced a shockwave as damaging as COVID, if the response to the request for articles for this special issue is any indication of the sport management academic community's assessment of COVID's relevance to the industry. In fact, in response to this call for papers, the journal received the most submissions for a special issue. The magazine has committed to publishing two volumes in order to publish as many of the excellent articles as possible.

The most social and participatory sport was discontinued as a result of the COVID-mandated closure of neighborhood venues and facilities¹¹², which was accompanied by severe social estrangement. This event serves as the beginning point for a lot of the studies given in this first volume. On the other extreme, professional sports and their competitive leagues went broke due to a lack of fan-related earnings like gate receipts, concession sales, product sales,

and sponsorships. The most serious losses, nevertheless, were those brought on by decreased transmission. Few sports organizations had the financial reserves or government backing to make up for the losses, despite US behemoth leagues like the National Football League (NFL) and its teams being able to bridge the financial gap left by the pandemic's estimated yet ongoing US\$6 billion damage. In the form of a 300 million pound emergency government bailout for a small number of professional sports, such as rugby and horse racing, but omitting the wealthiest, such as football and cricket, the United Kingdom offered one of the most generous government rescue packages.

Only a few facets of the sports industry escaped the epidemic untouched, while others saw unheard-of expansion. The impact has been immediate and severe for the vast majority of recreational players, venues and facilities, sponsors and broadcasters, as well as athletic organizations and leagues. Events "pivoted" to compensate for the necessity of excluding live fans. Some, like the X-Games Aspen, invested a lot of money in a broadcast-only plan to make up for the loss of 50,000 live spectators. For a sport whose core was a culture of live experience, their January 2021 event posed a huge risk.

The event ended up being a huge success as record numbers of spectators turned to social media and digital channels. The triple-digit growth of social and digital media platforms, with 105 million video views across TikTok, Instagram, YouTube, Facebook, Twitter, and Snapchat (+483 percent year-over-year), outpaced even double-digit increases in television viewership. E-sports organizations, like Electronic Arts, who switched to a wholly online, digital event model, also came out on top.

The media and broadcasters that rely on sporting content have faced significant challenges from the pandemic, just like event organizers. This is especially true given their sizeable, long-term, and largely fixed rights deals with major leagues, as well as the fact that they have recently turned to sport as a major investment platform¹¹³. As ties to sport suddenly eroded,

traditional and new media sought to replace the material with alternative programming. Digital sporting communities grew at the same time¹¹⁴.

Particularly those sponsors who depend on event visibility, player endorsements, and retail sales have suffered¹¹⁵. For example, Adidas closed its retail locations throughout the world, and its sponsorship agreements fell through as a result of the cancellation of several events and contests, not the least of which were the hopes placed in the 2020 Olympics and Euro 2020. 70% of the company's outlets were shuttered during the deadliest stretch of the pandemic to yet. Adidas, on the other hand, stepped up its digital marketing initiatives, distributing its goods to a record 160 global markets using a personalization-at-scale methodology that raised e-commerce sales by more than 90%.

The athletic organizations that responded in the most inventive ways were driven by need. Sport assets responded to unique engagement methods, frequently stressing new kinds of content monetization and commercial exploitation of sport brands, in a desperate attempt to find new revenue options to make up for the losses associated with the absence of pay-per-view programming. For instance, when it came to signing a deal with a cryptocurrency company, English Premier League club Southampton followed a pattern set by several other European football teams, including AC Milan, Swansea City, FC Barcelona, Real Madrid, and Paris Saint-Germain. By including matchday rights arrangements to connect supporters with cryptocurrency prospects and Bitcoin value for VIP fans, these partnerships go beyond the conventional framework of sponsorship. It's likely that without taking fan opinion into account, a group of prestigious European football teams announced the development of a European Super League because to the pandemic's potential financial impact. The proposal was abandoned shortly after it was announced in April 2021, but it is nevertheless clear that even the most powerful corporations have incurred significant losses and are scrambling to find new, safe business models¹¹⁶.

To enhance fan experiences, the American National Hockey League (NHL) and Amazon Web Services struck a contract. The National Hockey League (NHL) used the analytical skills of a technology company to probe deeper into epidemic data, much like the National Basketball Association (Microsoft), National Football League (Cisco), and Major League Baseball (Google). The epidemic era has made buzzwords like player tracking, tailored insights, super-connectivity, mobile augmentation, platform interaction, social media, at-home experiences, immersive technology, and artificial intelligence and learning algorithms popular. Even in the face of this unparalleled change, sport organizations were inspired to find novel approaches to engage their audience. As sports and athletes used social media to construct brands out of tweets and postings, it is clear that the platform was a perfect fit for the task. The most popular brands prompted personal reactions, media co-creation, daily following, impacted engagement, and content monetization¹¹⁷.

While required to stay at home, golfer Bryson DeChambeau posted social media updates on his cutting-edge technology applications, triumphing over the disclosed endorsements and sponsorships. According to reports, DeChambeau's HD golf simulator from Flightscope gave him all the swing information he could possibly need. In addition, between workouts, he used his Fortnite thumbs to donate \$25,000 for charity. However, due to the virus¹¹⁸, the majority of athletes were unable to use this kind of technology, leading some observers to fear that sport may be losing a generation. The consequences have also been uneven, disproportionately affecting people who are struggling economically as well as athletes at the lower end of the performance spectrum who were already disadvantaged in terms of access to facilities and equipment. There are reports that the lack of access to other training facilities and possibilities, as well as the disability sport's comparatively weak funding basis, which is unable to survive a period of little to no income flow, have had a significant negative impact on the sport¹¹⁹.

Although it may appear counterintuitive, exercise has become even more crucial during the shutdown periods despite the increasing difficulty of its accomplishment. As a result, home-based fitness technologies, tools, and virtual experiences have proliferated, including the increasingly popular streaming biking technology Peloton¹²⁰. Unsurprisingly, as millions of bored, housebound people sat on their couches and played video games and engaged in e-sports, the gaming business exploded¹²¹. Various "rebooting sport" principles, frameworks, and guidelines have been released by a variety of public health organizations in an effort to encourage people to restart physical activity in a safe manner.

The post-pandemic consequences for sport were examined and three legacy challenges were observed¹²². First, they made the case that the epidemic should prompt governments to reconsider their sports funding policies, especially the conflict between elite and participation resourcing, the latter of which is always the loser to the former's attractiveness. Second, the usage of remote and online labor and business, especially in the sports industry, will significantly rise as a result of the crisis. Grix and colleagues expected that e-sports' extraordinary rise during the epidemic would continue, as would established sports like Formula 1 and FIFA using it to enhance their existing offerings. These and many other features of the forecasts are covered in the two volumes of the special issue.

The presence of the virus has made it easier to investigate infected populations and, in the case of sports, to see natural experiments involving fan behavior in the absence of spectatorship, as we will see in this volume. For example, researchers have acted quickly to take advantage of the data that is currently available with regard to a variety of questions, such as how an airborne virus spreads among crowds, how social distance can be used to control contagion, and, of course, a suite of economic and behavioral modeling regarding purchasing and market behavior during times when sporting services and content have been interrupted^{123,124}. It has been noted that crises put resilience to the test and put strong pressure on sociopolitical and economic dynamics. The COVID-19 pandemic has sparked the first

significant interdisciplinary study of crisis, disaster, and emergency management in sport¹²⁵ as well as a rekindled discussion about the previously uncontested idea that the sport product is what happens on the field of play and is consumed live, as the contributions to this special edition foreshadow.

When faced with a number of decisions that seemed impossible to make about their responses to the pandemic, sport organizations often found themselves torn between competing tensions between risk and opportunity as well as between cautious passivity and competitive proactivity. These difficulties have been exacerbated by a number of ethical considerations, such as the safety and security of the surrounding environment and the health and welfare of competitors, support personnel, spectators, and employees. Similar to this, sporting organizations have balanced their self-control with an eye toward the future in an effort to lessen the harsh consequences for stakeholders in the case of substantially reduced revenues and commercial chances. In the first article of this special issue, it was discussed how the COVID crisis presented decision-making issues, notably with regard to risk management and the ethical sensitivity triggered by the paramountcy of personal safety.

Based on a content study of NBA news stories during the first half of 2020, it was discovered that the league's decision-making exhibited a type of constrained rationality. According to the eponymous theory, the data is consistent with the idea that rational assessments of decision-makers are constrained, leading to adequate rather than ideal decisions. In light of this, it was believed that the NBA's decision-making process fluctuated between prudence and risk based on the situational priorities, such as health and safety, economics, or the potential for gaining a competitive advantage. Depending on which compulsion was the strongest at the time, both prudence and danger were actively pursued at the same time. Decisions were morally constrained in addition to being rationally constrained. This meant that the NBA prioritized economic and financial constraints after the acute health dangers subsided while still acting to preserve health and safety when there was an urgent need to do so. Naturally, the epidemic

has taught sport's leaders a much, with ethical and consistent decision-making in the balancing act between caution and danger being a key lesson²⁰⁴.

It was also investigated if professionally diversified football clubs were less susceptible to the crisis than undiversified clubs, at least from the standpoint of investors, by looking at the risk implications for sport from COVID. The daily stock returns for the 2019–2020 season were used as proxies by the researchers to operationalize the robustness of diversified clubs. Over 5000 daily returns for 21 publicly traded European football teams were examined. Investors preferred club stocks with greater product diversification during the COVID crisis over those with greater regional diversification. Clubs were more resilient to stock swings and market crashes thanks to their strong local positioning and variety of products. A club's vulnerability to the "match result trap," in which a club's stock value drops concurrently with subpar on-field performance, appears to be reduced by product diversity. The fact that Fühner found that club size did not give any discernible benefits shows that product variety might be helpful for any sport organization looking to preserve its worth in a fluctuating market.

The future of sport may be affected by COVID-19, especially during what could be a protracted period of tension between unrestricted freedom and total shutdown, during which sporting events and competitions must navigate shifting regulations and uneasy spectators. This issue sheds light on this potential legacy. For instance, the third article by Vegara-Ferri, Pallarés, and Angosto examined how local inhabitants' impressions of a professional cycling race were influenced by their fears and their health. Their research focuses on the first major international cycling competition that took place following the suspension of all contests (and before the vaccination period), in this example in Burgos, Spain. It is without a doubt a groundbreaking investigation into locals' perspectives. Three categories of residents Safe, Unsafe, and Neutral were identified via a cluster analysis based on a Facebook survey that was done after an event²⁰⁵

Strangely, the data showed a roughly equal distribution of perceptions: one-third of the tested residents had no fear (Safe), one-third had fear (Unsafe), and one-third had no fear (Indifferent) (Neutral). It may not have come as a surprise that attendees showed less dread than those who stayed at home. Vegara-study Ferri's was limited in scope, but its application is clear given the amount of significant sporting events that have been postponed with little information regarding when they would resume. In reality, the dangers and risks of COVID may polarize consumers when they are determining whether to risk exposure, similar to the study of Tokyo residents, in which half supported and half opposed the 2020 postponement.

There are also two other important consequences of this study. The first is that Burgos people' plans to watch live sports in the future were overwhelmingly favorable, showing that even those who felt frightened had not completely lost interest in sports. Second, because it offered entertainment at a period when other social activities were scarce, the event was highly regarded by its courageous supporters. Sport groups that provided tournaments and activities carried on during the early phases of the pandemic, before social shutdowns, despite the virus's new origin and its unidentified risk profile. The fourth paper by Reade and Singleton investigated stadium attendances in the top football leagues of England, Italy, France, Spain, and Germany to ascertain how supporters responded during this initial phase. Reade and Singleton quantified the impact of COVID-19 sentiment on fan attendance behavior by examining the variation in daily attendance in each league using panel data methodologies²⁰⁶.

The results of the analyses showed a detrimental impact on the Italian, English, and German audiences, who responded carefully to the just verified case and death figures from the previous day and thereafter shunned the event. There was no such hesitation among the fans from Spain and France. If there is a steady and non-trivial level of case and death numbers in a hosting place, even if pent-up demand rises, it appears plausible to believe that Reade and Singleton's research predicts persistent challenges for live event attendance during re-opening.

The authors offered wise counsel that probably holds true for all sporting organizations. Competition managers should use more flexible and dynamic pricing methods and try to understand how the perceptions and expectations of their fan bases have changed in light of risk and its implications on the desire of fans to watch live venue-based sports.

The durability of sports fans' choices is demonstrated in the sixth article. Nosal and Lopez-Gonzales jumped at the chance to test the idea that sport gambling is a unique subset of hobbies and that those who engage in it have an innate connection to it out of a sense of identity, ownership, and belonging. Little is known about how sports bettors would respond to a suspension of the gaming market as a result of the COVID sport shutdown. Nosal and Lopez-Gonzales conducted a survey of "frequent" (at least once a month prior to the outbreak) Polish sports bettors during the suspension of sport betting to ascertain how the suspension influenced their gambling behaviors.

It became widely accepted that sports bettors can have unique goals and allegiances. The majority of bettors chose to stop or substantially reduce their wagering activities in the absence of sport betting and did not choose to engage in other types of wagering in its place. The majority of responders said they didn't miss betting, and many people claimed they didn't even show any signs of addiction or a desire to go back. A small percentage of people kept gambling in other places. The habitual gamblers did, however, save time and money. The results indicate that attempts by the gaming industry to reduce gaming losses by providing alternatives activities like virtual events, esports, and casino-style games may have failed, which may be good news for the bank accounts of Polish sport gamblers who took part in this study. The study by Nosal and Lopez-Gonzales also emphasizes the need for more research into how easily fans' and customers' favourite sports products may be substituted, whether in wagering or other types of consumption behavior.

Even in affluent times, nothing is known about the relationship between contests and cannibalization, which is especially true in favor of huge leagues over their smaller

counterparts. In their sixth piece, Weimar, Holthoff, and Biscaia took advantage of the rare opportunity provided by the COVID shutdown of the main professional football leagues to further explore the problem. The Belarus league carried on despite the top league's suspension. As a proxy for fan interest in the league, the effects of COVID were evaluated using social media follower numbers of Belarus clubs and those taking part in the 48 first divisions that were shut down. Fans' attention went to Belarus clubs during the absence of the top divisions, which saw an increase in social media followers. However, as they resumed, the Belarus clubs' popularity on social media dropped to pre-pandemic levels. It is acceptable to wonder whether better cooperation or even remuneration should be taken into consideration given the fact that major leagues have the ability to draw fan attention away from more regional and smaller contests.

The results suggest that some leagues may feel pressured to stay open longer than their rivals do during health and other crises, possibly at the expense of public safety. This is maybe even more concerning. Live games undoubtedly energize followers, which motivates them to use social media. Fans rushed to the only game in town in this situation, proving that live sports events, even those of poorer quality, are incomparable. The reactions of fans seen in the study by Weimar et al. confirm the importance of sustaining content that can inspire supporters to connect, identify, and stay connected with their clubs—a lesson that penetrates the rest of the COVID sport research in this issue. Additionally, it should be clear that social media is a powerful tool for boosting fan involvement and can be used by smaller leagues and teams because it requires significantly less funding than traditional marketing. Clubs and leagues may need to improve their social media content since supporters will look for quick social connections throughout the offseason.

Bowes, Lomax, and Piasecki asked elite female athletes in the UK to think about the prospects for women's sports after the epidemic. They were worried that the closure would not only halt the growing trend in participation, media attention, investment, and support, but

also that the start-up would give up hard-won ground in order to get men's sport back on track. The top future worries of a select group of female athletes were determined by Bowes et al. using a thematic analysis of online questionnaire responses. The majority of the athletes had noticed a good change in the trajectory of women's sport, but they restrained their optimism because historically, men's sport has gotten greater support and funding. They worried that the post-COVID athletic world would revert to its more established ways, further relegating women's sport to a secondary position while men's sport seized the scant resources of finance, sponsorship, and media attention.

Bowes et al. additionally proposed that the pandemic would offer a helpful break for individual growth, the possibility of a post-pandemic increase in involvement, and perhaps even the opportunity for sport to resume in a reorganized and more egalitarian form. Bowes et al. issued a warning that the "progress narratives" that are frequently observed in discussions about the future of women's sport mask ongoing structural and symbolic disparities that are a reflection of a more pervasive and persistent societal gender difference. Sports for women were getting better, but there was still a long way to go before the pandemic. What remains to be seen is whether women's sport will advance in the post-pandemic atmosphere or revert to an earlier, more unbalanced one. The pandemic's experience and viewing limitations have already caused some trends in sport consumption to accelerate noticeably. The COVID-19 is expected to have a bigger impact on women's sport than on men's sport, according to elite athletes. It's not hard to understand how, but things could still turn out well²⁰⁷.

The most severe and widespread challenge that sport has ever faced served as the inspiration for this inaugural volume of the COVID special edition. The sport's dependence on its live-action, media-resourced, sponsorship-dependent, broadcasting-rich, and fan-reliant consumption experience has been made clear. The inner workings of sport have been made vulnerable by their own interconnectedness on a worldwide scale via COVID-19. Due to this

widespread tragedy, several sectors of the sports industry have discovered methods to adapt and thrive, with some giving up the formerly sacred notion that sports require live spectators. An explosion of creative activity has resulted²⁰⁸. In order to engage fans, promote user-generated engagement, integrate digital material, grow social media, and repackage content, sport organizations, media, and broadcasters have learned new techniques¹²⁶. Many of the academics who contributed to this special issue and some commentators agree that these advances have expedited and increased the importance of the technical and media axis in sport. Although there may have been a significant change in how sport is delivered, it is still unclear whether this change will last.

Sport across the globe shut down, including the postponing of several major international events and competitions as well as the closure of municipal facilities and recreational places. At first, governing sport organisations and leagues reacted rather differently¹²⁷. Some athletic associations made the decision to increase their involvement in the community and CSR¹²⁸. While some organizations, like the NBA, created brand-new engagement platforms, others, like the MLB, integrated their COVID response into their already-existing initiatives. According to a recent study, an elevated sense of social responsibility would be the pandemic's most desired impact on sport. The topic, as well as its consequences for ethical behavior and decision-making, was addressed in a number of the research included in this issue¹²⁹.

Despite COVID-19's disastrous effects on international sport, there has never been a time when it is more respected than today¹³⁰. The manager of Liverpool, Jürgen Klopp, once said that football was "the most important of the least important things" during the pandemic. It is debatable if Klopp's assertion was prescient or foolish¹³¹. The pandemic is still going strong, and its impacts could linger in sports for decades^{132,133}. Readers of this special edition might, however, come to the same realization as the editors of the issue: for many people, football, or sport in general, may be the least significant of the significant things^{134,135}.

2.13 Adaptation and Change in Behaviour

Adults may need to transition to different forms of physical activity during the COVID-19 pandemic in order to keep the advantages of their usual routines¹³⁶. Physical activity schedules are known to be impacted by marriage, pregnancy, and retirement. However, these changes are frequently intentional¹³⁷. Few research have looked at how people have changed their behavior during the COVID-19 epidemic, including the facilitators and/or barriers to physical activity and sedentary behavior¹³⁸. However, they were not created in the setting of pandemic conditions. Several hypotheses exist to forecast changes in health behavior¹³⁹. According to various theories of behavior change, including the Health Belief Model, the Transtheoretical Model of Change, and the Theory of Planned Behaviour, beliefs, attitudes, expectations, self-efficacy, and intentions play a significant role in the processes of changing one's behavior in favor of better health¹⁴⁰. Contrarily, socioecological models contend that a variety of reciprocal elements (such as cultural, policy, legislative, environmental, interpersonal, and intrapersonal factors) have an impact on health-related behaviors like physical activity¹⁴¹. Effective intervention tactics should be developed with the individual's environment in mind¹⁴², especially in times of crisis^{143,144}. The epidemic has produced a once-in-a-lifetime chance to investigate how people modify their health and physical activity routines in response to unforeseen situations where they experience difficult movement restrictions¹⁴⁵.

2.14 COVID-19's Effects on Sedentary Behavior and Physical Activity

Public health measures taken in reaction to infectious disease pandemics like COVID-19 could have an impact on millions of people's levels of daily physical activity^{146, 147}. Sedentary behavior includes sitting, lying down, watching television, playing video games, and using a computer¹⁴⁸, and is linked to negative health outcomes¹⁴⁹. Extended durations of inactivity and increased sedentary behavior, in particular, may have a deleterious impact on outcomes related to the cardiometabolic and mental health^{150,151}. Reduced physical activity and an

increase in sedentary habits can raise the chance of developing chronic illnesses like depression, type 2 diabetes, obesity, and cardiovascular disease. On the other hand, regular, moderate exercise strengthens the immune system and guards against respiratory infections^{152,153}. The World Health Organization advises adults to limit their sedentary behavior and engage in at least 150–300 minutes of moderate or 75–150 minutes of intense physical activity per week in order to reap the health advantages¹⁵⁴.

Recent quantitative research from China, Canada, Europe and the US have found changes in sedentary behavior and physical activity that can be attributed to COVID-19¹⁵⁵. Although 58 percent of individuals in Canada still met the required levels of physical activity per week, according to a cross-sectional research, adults felt that their weekly moderate-to-vigorous activity had decreased from pre-COVID-19 levels^{156,157}. Lockdowns have been connected to an increase in walking, moderate-intensity physical activity, and leisure-based sedentary behavior in France and Switzerland. Adults in the US have reported being more sedentary and engaging in less physical activity. The pandemic's consequences on physical activity are unclear, despite recurrent indications of elevated sedentary behavior¹⁵⁸.

2.15 Physical Activity and Social Position

There have been two unique impacts of the novel coronavirus on scenarios requiring physical activity. On the one hand, it's harder to play a variety of sports now than it used to be¹⁵⁹. For instance, workouts or activities carried out in small locations clearly come under this group¹⁶⁰. However, people who are open to participating in physical activity have also been impacted by the economic downturn brought on by the spread of COVID-19, which may have an impact on their capacity and desire to play sports¹⁶¹. Then, when discussing sports, Bourdieu claimed that they needed to be set apart from "playing games" and various forms of physical activity or gymnastics¹⁶². In this case, the truly important criteria for sports include sophisticated rule sets, the development of which was significantly influenced by young nobility and rich middle class students attending English high educational institutions¹⁶³.

Sports, which originated from folk rituals and games associated with important traditional agricultural celebrations, are thus a development within the framework of varied forms of activity according to rigid regulations¹⁶⁴. Similar processes that resulted in the development of traditional dances with rigid step combinations, choreographies, and etiquette can be compared to this process. In addition, Bourdieu underlined that the idea of "fair play" in athletics acts as a training ground for future elite leaders because it emphasizes fair competition above what he refers to as a plebeian principle: the importance of winning at all costs¹⁶⁵. We widen the scope of our research to include other types of physical activities while keeping to Bourdieu's concept by considering all forms of physical activity to be important for the current analysis. However, Bourdieu thought it was crucial to look at the many sports as parts of a greater system of mixed sports rather than as separate entities. Each element in the intricate structure of sports has a certain function and importance¹⁶⁶.

As a result, we want to continue our investigation by looking at sports and physical activity as a feasible and useful technique for maintaining health. It is essential to create clear definitions of social strata in order to investigate and analyze the connections between participation in sports and physical activity and the various social strata. Such specific definitions, however, are not available. The availability of specific privileges and access to specific resources typically serve as indicators of social standing. We label people as "individuals living in poverty" as a result when they find it difficult to meet even the most basic demands. It has been shown that intake of nutrient-poor foods tends to rise under circumstances where social conditions are unfavorable¹⁶⁷. In addition to poverty, the impoverished also tend to be excluded from society. The normal low level of physical activity engagement among the poor and impoverished is largely attributable to the fact that a sizable fraction of leisure activities cannot be engaged in for free.

Because of this, people with low earnings are usually unable to set aside money for sports-related expenses and instead spend the majority of their money on items needed for

subsistence or survival¹⁶⁸. Accurate studies of the problems of groups that are falling behind and engaging in less physical activities are required in order to better their circumstances, and these analyses should be utilized to create plans for the expansion of physical activity. This is necessary in order for an increasing number of people to benefit from exercise and physical activity's positive effects on health¹⁶⁹. Additionally, it is crucial that the chance to engage in sports be planned taking into account the needs or preferences of specific groups, and that the various programs and facilities be accessible to those affected. There are many developing countries where residents have very little access to sports opportunities or physical activity, according to a global analysis of the association between poverty and sports or physical activities. Additionally, it can be seen that, as a result of development in formerly underdeveloped nations, the consumption patterns or traditions that are most frequently copied from developed cultures have a propensity to have a detrimental effect on the health of the populace. Additionally, it is typical of developing countries that the majority of the populace cannot afford to pay expenses above those necessary for basic subsistence, with the exception of a very small elite¹⁷⁰.

A study listed the most prevalent causes of measurable disparities in the field of physical activities, including differences in financial bracket and social standing, in addition to qualification, gender, and age¹⁷¹. Therefore, it is possible to measure the highest levels of physical activity among young men who come from better social classes, have relative higher incomes, and have completed more formal schooling. When applicable, characteristics that reduce the likelihood of engaging in physical activity include having a less favorable financial condition, being a member of a lower social class, having less education, being older, and being female. Sports participation is inversely correlated with social status, with people in higher social positions participating in more sports than those in lower social positions. Additionally, there are other variables that greatly influence whether or not a given person has access to sports or physical exercise opportunities over the course of their

lifetime¹⁷². These circumstances may involve, in addition to geographic disadvantages, a number of variables, such as racism, religious or cultural constraints, or even linguistic hurdles. These situations include low income, lengthy work hours, and access challenges¹⁷³.

However, it seems sense to contrast the aforementioned with the cultural and unifying role of sports. It's normal practice to watch sporting events on television, read and/or talk sports news with family and/or friends, and engage in what is frequently referred to as "passive consumption" of sports. It is reasonable to infer that the public's interest in sports is fairly widespread¹⁹⁶ when considering the impressive proportion of sports-related goods from various sources, including printed and electronic media. The function of sports in promoting social integration was examined¹⁷⁴. The study maintained that sports engagement, whether active or passive, can erase social disparities. This is because everyone is treated equally when participating in sports, regardless of their specific circumstances. In other words, individuals engage in a variety of physical activities while competing against one another to accomplish the same objective¹⁷⁵.

Similar to active sport consumption, passive sport consumption, such watching a football game on television, fosters a sense of belonging and the desire to establish community. These real-life scenarios are perfect for networking and building relationships since they have a common interest¹⁷⁶. As time goes on, they may also turn into big events that have an impact on social standing. These kinds of beneficial benefits can be proven even in situations when members of stigmatized groups, such as refugees or immigrants, who otherwise encounter various problems during their integration^{177,178}. Volunteering in sporting events can be equally successful for building social capital, which can be done by bridging social gaps or status discrepancies. However, as people from lower socioeconomic strata are routinely denied the chance to volunteer, this potential is frequently simply hypothetical¹⁷⁹.

Parents' attitudes, their involvement in sports, and their socioeconomic situation all frequently have an impact on children's drive to engage in physical activity. Children are more likely to

take up sports seriously in homes with more sports equipment, such as bicycles and balls, than in homes without such things¹⁸⁰. Furthermore examined and described was the connection between kids' physical activity levels and family finances¹⁸¹. It was found that the value of friends in retaining dedication to the practice of activities and the role of the family in continuing to practice sports or quitting is more commonly relevant only at a younger age for children¹⁸². It must be underlined, too, that as final examinations draw closer and students' study loads rise, so does the percentage of students who put academics before athletics.

It was asserted that the media material people experience across multiple platforms has a substantial impact on how likely they are to engage in sports and other activities (as they relate to their bodies) as well as how they maintain their own bodies. Young people access and favor a wide variety of media content¹⁸³. In a perfect world, we could also locate those that promote sustainability and health¹⁸⁴. However, there is a growing trend among young people who were born after 1995 to reject traditional media information that has been created and compiled by the editorial staff of traditional media sources. For them, the ability to choose and choose from within their own circle of content that they are inquisitive about or find intriguing, and to be able to consume these at the ideal time, becomes increasingly important¹⁸⁵.

This also means that young audiences learn about public concerns from a number of new media sources, including different sports and physical activities¹⁸⁶. The quality of life for aging and older people is garnering more attention as the world's life expectancy rises and, as a result, the aging of societies in some, mainly wealthy, countries become a pressing concern. The topic of older persons' health-related obligations is also covered in a significant suggestion. An increasing amount of focus is being placed on older persons who, because of their effort and forethought, can actively take care of their health and age and maintain a higher quality of life even as they get older¹⁸⁷. If older individuals had the chance to live a healthy lifestyle at a younger age, for instance, disease prevention would have a considerable

impact on the quality of life in old age. The aging population won't put a pressure on the public health system as long as health protection and disease prevention continue to be effective throughout time¹⁸⁸.

It has been observed that as people get older, they get less interested in physical activity and are happy to not play sports¹⁸⁹. They frequently participate in other activities despite the fact that physical activity has several health benefits. In their summary, researchers compiled the findings from datasets related to seniors' participation in sports and physical exercise. It was stated that the databank had considerable variations not only between nations but also between individual surveys¹⁹⁰. In general, it seemed that as people aged, their level of physical activity reduced and their choice of sports increased. Because they are more reasonable and predictable than games like ball games, gymnastics, hiking, and cycling are growing in popularity.

Getting elderly folks to exercise also affects their motivation. While a sizeable percentage of younger people see working out as a hobby or source of enjoyment, this seems to be far less common among elderly people. Similar to this, social interactions appear to be a driving force or a chance that affects how open older persons who live alone are to physical activity. The level of physical activity and willingness to participate are also influenced by the elderly's social position and general health. In their situation, the wealthy had a higher average level of physical activity than the less fortunate. However, it is vital to specify what is included in this category in order to calculate or measure the level of physical activity. The geriatric activity rate dramatically rises if we classify some household chores, gardening, and modes of transportation, such walking and cycling, as physical activity.

Elderly people who live in rural locations with little access to sports may also engage in gardening if it includes backyard farming or other subsistence tasks, for example. As a result, they not only exercise but also create food that is healthy for themselves^{191,192}. But the social physical activity that older people who live alone miss and yearn for can be extremely

dangerous, especially now that COVID-19 is a global threat. Elderly people have a greater mortality rate when they contract an infection, in part because they are more likely to have underlying illnesses or disorders¹⁹³. Governments generally enact austerity measures during economic downturns, which may result in a decrease in public investment on sports. Members of diverse social strata are often impacted differently by this.

However, it can be said that generally speaking, these austerity measures have a negative impact on lower socioeconomic status groups' possibilities and opportunities to participate in sports. These populations may also be negatively impacted indirectly, for example, by a reduction in the financing for social organizations that would typically help them¹⁹⁴. However, it was found that even during recessions, more affluent people, such those in the middle class, were able to counteract the effects of this drop in public spending on sports by increasing their individualized expenditures¹⁹⁵. Economic crises affect sports organizations directly, and not merely because of reductions in state or federal financing¹⁹⁶. Even previously effective fundraising techniques can only be partially used during times of distress. This is due to the fact that, on the one hand, the funding available to organizations that support athletic activities is declining, and, on the other hand, there is less room for private persons to contribute financially.

Despite this, or perhaps even because of it, the expectations placed upon these organizations typically fail to account for the constrained opportunities brought about by the shifting economic landscape. National sport federations and grassroots sport groups alike are subsequently forced to reevaluate and modify their approaches. It should be mentioned that national sports federations, for instance in Greece, reported declining financing resources and, as a result, worsening circumstances as a result of the severe economic crisis that began in 2008 and the severe budgetary constraints that began in 2010¹⁹⁷. According to them, they were forced to set operational goals and carry them out, collect money for services that were previously supplied free of charge to competing athletes, and generally reorganize their

operations as a result of falling governmental funding. Greece's success rate in a variety of sports disciplines decreased as a result of these adjustments.

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Chapter Three

Methodology

3.1 Research Design

In this study, a descriptive survey research design was used. A descriptive survey design focuses on individuals' beliefs, opinions, perceptions, and behaviors. It allows one to discover the opinions of others regarding a particular topic.

3.2 Population of the Study

The study comprised all the visitors to recreation/sporting centres in the study area which is in Minna. Minna is located at 9°03'N latitude and 6°33'E longitude on the geological base of an undifferentiated basement complex composed primarily of gneiss and magmatite. Paidia Hill, located in the city's north-eastern region, is a more or less continuous step of granite that limits urban development. The city serves as the administrative capital and seat of government for both Niger State and the Chanchaga Local Government. From April to September, the city receives an average of 1334 millimeters (53 inches) of precipitation. September is the wettest month (300 mm/1.7 in).

The highest average monthly temperature occurs in March (39°C) and the lowest occurs in August (30°C). The dry season runs from October to April and is characterized by wind from the north-east that is cool, dry, and dusty. The land area of the city with an estimated population of 889,997 is greater than 1,000 ha. These are depicted in figures 1.1 and 1.2. The majority of the population of Minna consists of migrants; men and those of working age make up a larger proportion of the population¹. Even though it is a Gwari town, other tribes from the country are also present, making it a diverse city.

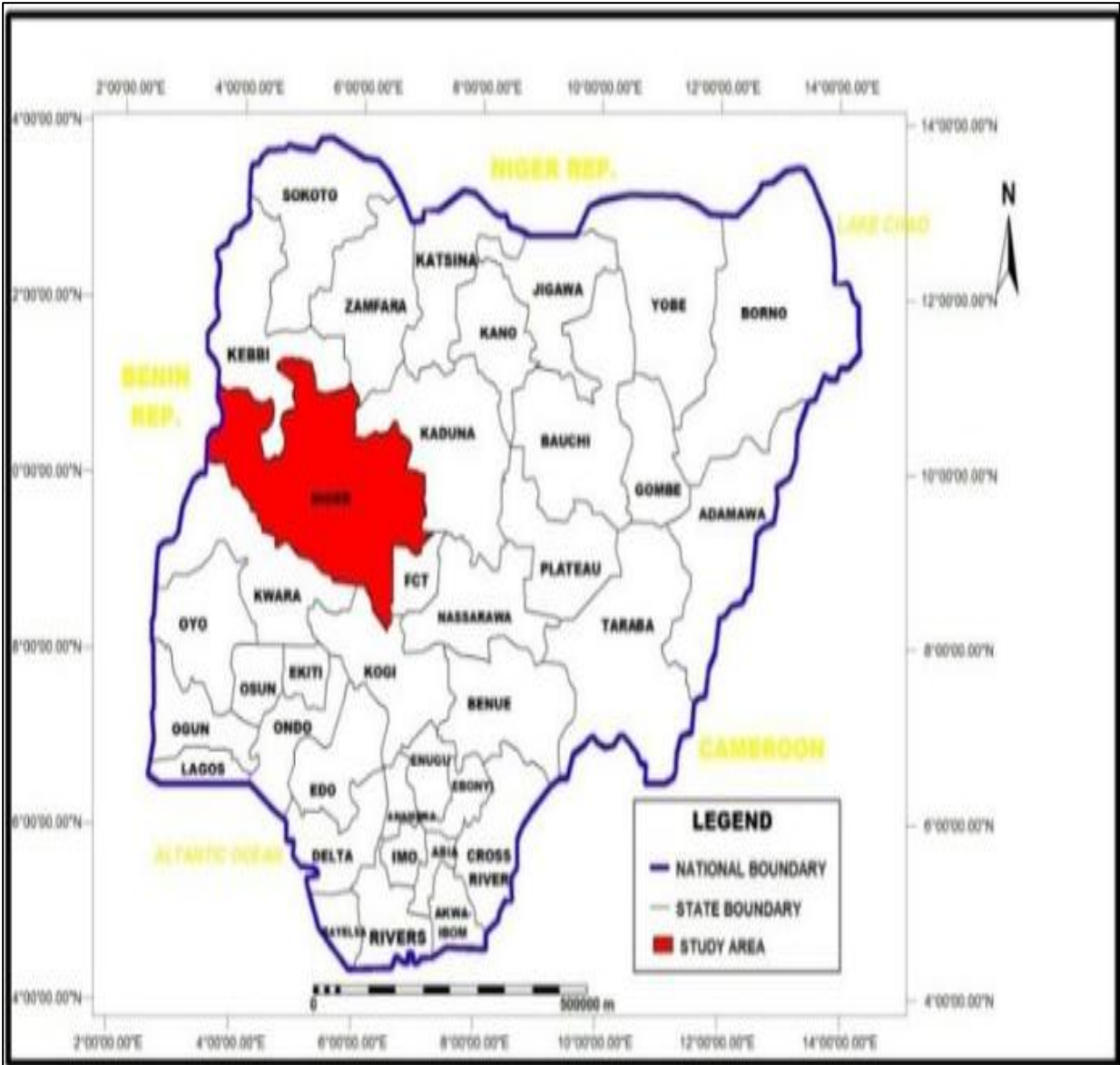


Figure 3.1 Map of Nigeria showing Niger State

Source: Ancient.eu 2015

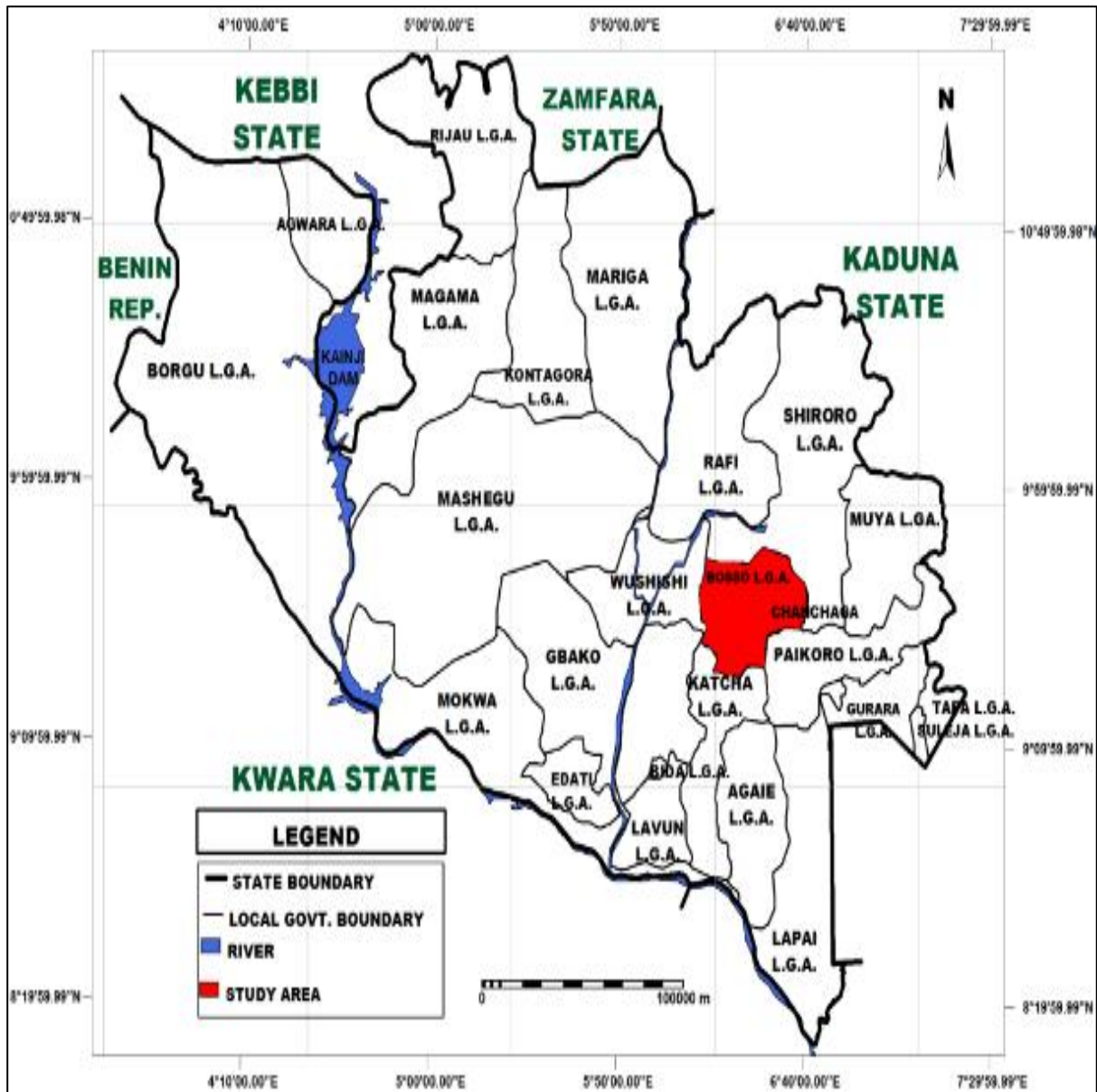


Figure 3.2. Map of Niger State Showing the Study Area (Minna)

Source: Ogunjimi 2017

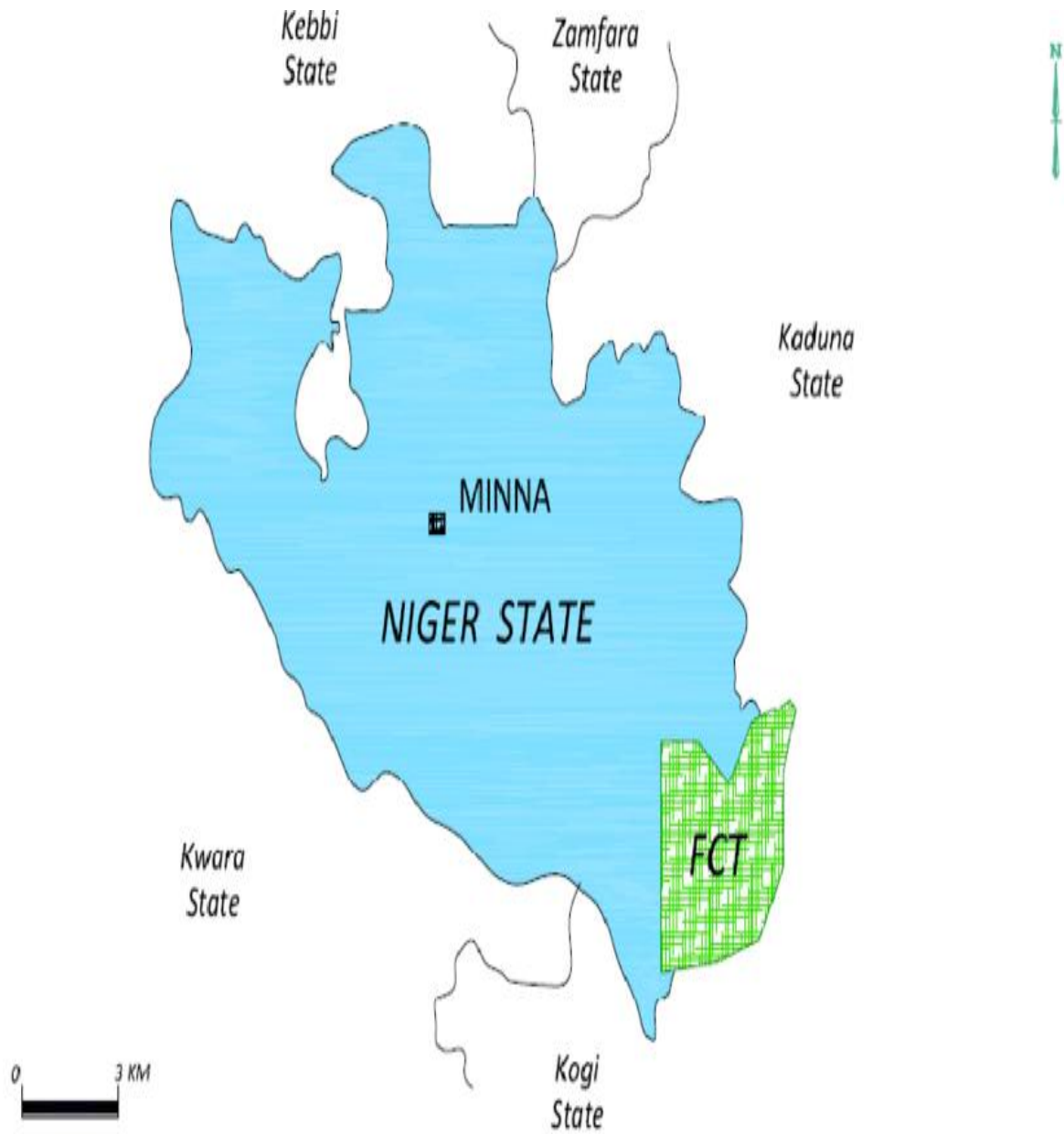


Figure 3.3: Map of Minna, Niger State

Source: Ogunjimi 2017

3.3 Sample and Sampling Techniques

Multistage sampling method was utilized to select the study sample. Multistage sampling is a phased procedure that typically employs multiple sampling techniques. For this study, a sample of 341 respondents will be taken.

Table 3.1: Population Distribution of the Sample used for the Study by Senatorial Zone and Recreational Centres

Study Area	Recreational Centres	Population(Tourist 2021)	Sample (50%)
Niger	Gurara Water Falls	49	25
	Zuma Rock	33	17
	The Moving Rock	52	26
	Soje (Hut) At Fogbe	66	33
	Bina Footprints	46	23
	Baro Empire Hill	57	29
	Baro Port	41	21
	Lord Lugard Colonial Ruins At Zungeru	29	15
	Nagwamatse Well (Near Kontagora)	38	19
	First railway locomotive engine (wushishi tramway engine no. 1)	61	31
	Gani Cultural Festival Kutigi,	47	24
	Kainji Lake National Parks	52	26
	Dutse Mai Nono	39	20
	Minna National stadium	63	32
Total			341

Source: Field survey, 2021

Table 3.2 Recreation Center in Niger State by Senatorial Zones

Study Area Niger State	Recreation Center	Total Population	Percentage %
Senatorial Zones A			
	Soje (Hut)		
	Baro Empire Hill	3	29%
	Baro Port		
Senatorial Zones B			
	Gurara Water Falls		
	Zuma Rock		
	Moving Rock		
	Minna Stadium	6	42%
	Railway		
	Dutse Mai Nono		
Senatorial Zones C			
	Lord Lugard		
	Nagwamatse Well		
	Locomotive Engine at	4	29%
	Wushishi		
Total			100%

Source: Field survey, 2021

3.4 Description of Research Instrument

This study's data collection instrument was a questionnaire developed by the researcher. The questionnaire contains five sections labeled A, B, C, D, and E. Section "A" contained information on the demographic characteristics of the respondents (Gender, age range, and highest level of education), whereas Section "B" identified recreation centres in the study area. The questionnaire will be constructed using a two-point Likert scale, with the following rating scale: True (2) and False (1).

Section "C" contained information on the level of recreation center patronage in the study area during the pandemic. The questionnaire was constructed using a four-point Likert scale, and the following rating will be assigned: Never (N): 1 point, Always (A): 4 points, Frequently (F): 3 points, and Seldom (S): 2 points. Section "D" contained information regarding the impact of covid 19 measures on recreation center attendance. The questionnaire was constructed on a two-point Likert scale, and the rating scores will be as follows: Yes (2) and No (1), whereas section "E" contained information on measures that could formalize the recreation center. This was an open inquiry.

3.5 Validity of Research of Instrument

In order to establish the content validity of the questionnaire, the questionnaire was subjected to vetting by the experts in the Department. Their observations and corrections was incorporated in the final draft of the questionnaire to the satisfaction of the supervisor before administration for a pilot study.

3.6 Reliability of Research Instrument

To ascertain the reliability of the instrument, a pilot study was conducted using twenty (20) staff of Gurara Water Falls, Niger State. A split-half reliability test was used to determine the reliability of the research instrument. The administered and filled questionnaire was pooled

and split out into odd and even number items. The scores obtained from odd and even number items collected was subjected to a statistical test using Spearman-Brown Prophecy method, with reliability index of 0.86 considered as reliable for questionnaire administration.

3.7 Administration of Research Instrument and method of Data Collection

An introductory letter was obtained from the Head of Department which was taken to the authorities of the sampled recreational centers in Niger State, to seek permission to conduct the study. After permission is granted, the researchers employed the services of six (6) research assistants who helped in administering and retrieving the questionnaire within a week.

3.8 Methods of Data Analysis

Simple frequency count and percentage was used to organize and describe the demographic information of the respondents while Students' T-test and Pearson Correlation Moment coefficient (PMC) statistic tools was used to test the formulated hypotheses at 0.05 level of significance

3.9 Ethical Approval

The researcher sought a written letter of recommendation from the department for the purpose of introduction to the organizations at which the study will be carried out. Permission from the respondent was also sought and the respondent was assured of utmost confidentiality of information provided. Respondents not willing to partake in the research were accorded their right of refusal.

Endnote

National Population Censor 2006

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Chapter Four

Results and Discussion of Finding

Introduction

The analysis, interpretation and discussion of findings in the line with the study objectives are hereby provided in this chapter. A total of 341 respondents were sampled via structured questionnaires and used for analyses.

4.1 Demographic Data Analysis

Table 4.1: Socio-demographic Characteristics of the Respondents

Socio-economic characteristics	Frequency	Percentage
Age		
18-25 years	13	3.8
26-35 years	328	96.2
Gender		
Female	93	27.3
Male	248	72.7
Marital status		
Single	267	78.3
Married	74	21.7
Educational qualification		
ND/N.C.E	310	90.9
M.Sc/M.B,A	31	9.1
Nationality		
Nigerian	341	100.0
Household size		
1-3	46	13.5
4-6	149	43.7

7-9	103	30.2
10-12	35	10.3
Above 12	8	2.3
Major occupation		
Trading	108	31.7
Civil servants	79	23.2
Artisan	99	29.0
Contractor	55	16.1
Working experience		
Below 5 years	247	72.4
6-10 years	88	25.8
11-15 years	6	1.8
Religion		
Christianity	101	29.6
Islam	240	70.4
Member of social organization		
Yes	287	84.2
No	54	15.8
Total	341	100.0

Source: Field survey, 2021

This study examined the relationship between the socioeconomic characteristics of each respondent and their patronage of recreation centres and sporting activities in order to draw conclusions about the patronage of recreation centres and sporting activities in the study area during the Covid-19 pandemic. However, socioeconomic status has frequently distinguished individuals based on their social and economic position in society¹ and may influence decision-making², such as the patronage of recreation centres and sporting activities during

the Covid-19 pandemic. Age as a factor refers to the length of time that respondents have lived, which may directly or indirectly affect productivity³ and which may be relative to respondents' income potentials, as some age boundaries are more likely to belong to the nation's workforce (income-earning) than others.

For the respondents, age may have influenced their use of recreation centres and participation in sporting activities during the Covid-19 pandemic, which is the basis for determining their age. The conclusions drawn from the study's parameters are presented in Table 1. The analysis revealed that the majority of respondents, 96.2%, were between the ages of 26 and 35, with a mean age of 26.5 years. This suggests that young people are the predominant patrons of recreation centers and sporting activities in the study area. This distribution indicates that respondents in the study area are still young and energetic enough to perform their duties effectively. A test of significance revealed that this age threshold had a significant relationship with respondents' recreation center usage and sporting activities. The gender of the respondents was required because it was clear that the majority of respondents were males (72.7 percent).

It was anticipated that respondents' marital status would influence their level of responsibilities, which could have a positive or negative impact on their recreation centre attendance and sporting activities. Consequently, the decision to analyze the marital status of the respondents for this study revealed that the majority of respondents (78.3 percent) were unmarried.

On the basis of the relationship between education and recreation centre patronage and sporting activities, the respondents' educational level was evaluated. The study revealed that while the majority of respondents (90.9 percent) held NCE/OND degrees, a sizeable proportion of respondents (9.1 percent) held M.Sc./MBA degrees. The findings suggest that

level of formal education may be associated with recreation centre patronage and sporting activities of respondents in the study area, consistent with the a priori expectation that respondents with formal education may be more inclined to frequent recreation centre patronage and sporting activities than those with no formal education.

The size of the respondents' households is an important factor to consider because it may influence the pressure on household heads to use the lump sum received from their primary occupation for household consumption expenditures, which may have a negative effect on their use of recreation centers and participation in sporting activities. The relationship between respondent household size and their participation in recreation center and sporting activities served as the basis for analyzing respondent household size.

According to Table 4.1, 43.7% of respondents, on average, had between four and six people living in their household. The respondents' primary occupation has a significant impact on the regularity of their income, and those with a regular income source (e.g. a salary) may be more likely to frequent recreation centers and participate in sports than farmers whose income fluctuates seasonally. Table 1's analysis of the respondents' primary occupation reveals that respondents engaged in a wide variety of occupations; however, a substantial proportion of respondents (31.7%) engaged in trading as their primary occupation. This indicated that the respondents' primary occupation may influence their propensity to visit recreation centers and participate in sports in the study area.

Typically, a higher level of experience denotes greater expertise, which may have an effect on productivity and income. The decision to analyze the respondents' experience in their primary occupation was influenced by the correlation between their experience in their primary occupation and their level of recreation center and sporting activity use. Table 1 reveals that the majority of respondents (72,4 percent) have less than five years of experience

in their primary occupation. This indicates that respondents must have acquired skills that will improve their job performance.

Religion is said to be the opium of society, particularly in Nigeria and the area under study. Frequently, religion dictates what people eat, wear, and perhaps engage in social and economic activities. The relationship between religion and patronage of recreation centre and sporting activities was the primary reason for analyzing the religion of the respondents, and Table 4.1 reveals that there are two major religions in the study area (Islam and Christianity) that are substantially represented in the study, with the proportion of Islamic practicing respondents (70.4%) being significantly higher than the proportion of Christian practicing respondents.

As a component of social and economic benefits, membership in a social group is a crucial parameter that may influence a person's propensity to patronize a recreation center and participate in sporting activities. This was the basis for analyzing the respondents' patronage patterns in relation to membership in social groups. The assessment of respondents' social group membership revealed that the majority (80.8%) of respondents was members of social group(s), suggesting that participation in recreation center and sporting activities may be contingent on social group membership. The t-test results (see Table 4.5) confirmed, however, that recreation center and sporting activity use by respondents in the study area is unrelated to social group membership. The implication of this finding is that social group membership did not influence respondents' attendance at recreation centers and sporting events in the study area.

4.2 Identification of Recreation Centers in the Study Area

The results of the analysis are displayed in Table 4.2 and reveal the level of awareness of recreation centers in the study area among respondents. The respondents' patronage of these

recreation centers will invariably be affected by their level of awareness. The following recreation centers enjoyed a high level of awareness among respondents, according to the findings. They are Gurara Water Falls (84.2 percent), Zuma rock (80.4 percent), the moving rock (93.8 percent), Bina footprints (79.8 percent), Baro Empire Hill (96.5 percent), the first railway locomotive engine (97.9 percent), Gani Cultural Festival Kutigi (87.4 percent), Kainji Lake National Parks (71.0 percent), Dutse Mai Nono (57.2%), and Minna National Stadium (57.2 percent) (97.9 percent) and this is in agreement with⁴.

Table 4.2: Awareness Level of Recreation Centers in the Study Area

Recreation Centres	Awareness				Rank
	Yes		No		
	Freq	%	Freq	%	
Gurara Water Falls	287	84.2	54	15.8	5 th
Zuma Rock	274	80.4	67	19.6	6 th
The Moving Rock	320	93.8	21	6.2	3 th
Soje (Hut) At Fogbe	148	43.4	193	56.6	10 th
Bina Footprints	272	79.8	69	20.2	6 th
Baro Empire Hill	329	96.5	12	3.5	2 rd
Baro Port	180	52.8	161	47.2	9 th
Lord Lugard Colonial Ruins At Zungeru	137	40.2	204	59.8	11 th
Nagwamatse Well (Near Kontagora)	44	12.9	297	87.1	12 th
First railway locomotive engine	334	97.9	7	2.1	1 st
Gani Cultural Festival Kutigi	298	87.4	43	12.6	4 th
Kainji Lake National Parks	242	71.0	99	29.0	7 th
Dutse Mai Nono	195	57.2	146	42.8	8 th
Minna National stadium	334	97.9	7	2.1	1 st

Source: Field survey, 2021

4.3 Level of Patronage of Recreation Centre during Pandemic in the Study Area

Table 4.3 demonstrates the level of patronage at the recreation centres chosen for the study. The majority of recreation centers were frequented frequently, according to the study. The centers consist of Sultan Guara water falls (mean = 2.09), Zuma rock (mean = 2.13), The moving rock (mean = 2.09), Bina footprints (mean = 1.99) and Baro empire hill (mean = 2.58), the result is in conformable with that of ^{5&6}.

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Table 4.3: Level of Patronage of Recreation Centre during Pandemic in the Study Area

Centre	Frequency of Patronage								Mean	Rank
	Always		Frequently		Seldomly		Never			
	Frq	%	Frq	%	Frq	%	Frq	%		
Gurara Water Falls	124	36.4	127	37.2	90	26.4	-	-	2.09	3rd
Zuma Rock	108	31.7	154	45.2	79	23.2	-	-	2.13	2nd
The Moving Rock	81	23.8	223	65.4	37	10.9	-	-	2.09	3rd
Soje (Hut) At Fogbe	-	-	79	23.2	217	63.6	45	13.2	1.05	10th
Bina Footprints	68	19.9	-	-	202	59.2	71	20.8	1.99	4th
Baro Empire Hill			205	60.1	129	37.8	7	2.1	2.58	1st
Baro Port	57	16.7	128	37.5	105	30.8	51	15.0	1.56	8th
Lord Lugard Colonial Ruins At Zungeru	67	19.6	173	50.7	50	14.7	51	15.0	1.75	5th
Nagwamatse Well (Near Kontagora)	51	15.0	203	59.5	36	10.6	51	15.0	1.74	6th
First railway locomotive engine	51	15.0	205	60.1	34	10.0	51	15.0	1.75	5th
Gani Cultural Festival Kutigi,	51	15.0	176	51.6	63	18.5	51	15.0	1.67	7th
Kainji Lake National Parks	27	7.9	189	55.4	74	21.7	51	15.0	1.56	8th
Dutse Mai Nono	51	15.0	176	51.6	63	18.5	51	15.0	1.67	7th
Minna National stadium			108	31.7	233	68.3			1.31	9th
Grand mean									1.85	

Source: Field survey, 2021

4.4 Effect of Covid-19 Measures on Patronage of Recreation Centre/Sporting Activities

The effects of Covid-19 Measures on Recreation Centre/Sporting Activity Attendance in the Study Area During the Pandemic Period are presented in Table 4.4 Low patronage of recreation centres/sporting activities (99.4%), low income to the owners of recreation centres (97.9%), infrastructure deterioration due to low or no patronage (90.3%), and unemployment are the results (87.4 percent).

Table 4.4: Effect of Covid-19 Measures on Patronage of Recreation Centre/Sporting Activities

Effects	YES		NO		Rank
	Freq	%	Freq	%	
Low patronage	339	99.4	2	0.6	1 st
Low income	334	97.9	7	2.1	2 nd
Infrastructure decay due to low or no patronage	308	90.3	33	9.7	3 rd
Loss of job	69	20.2	272	79.8	6 th
Unemployment	298	87.4	43	12.6	4 th
Low/none maintenance of infrastructure	99	29.0	242	71.0	5 th

4.5 Presentation of Test of Hypotheses

H₀₁: There is no significant difference in the frequency of recreation and sporting activities before and during period of Covid-19. Table 4.5 displays the results of the hypothesis test of the relationship between the frequency of recreation center use and participation in sporting activities before and during the Covid-19 period in the study area. Before and during the Covid-19 period, there was a statistically significant difference (p 0.05) in the frequency of recreation center and sporting activity use. The finding is congruent with those of recent recreational studies ^{7&8}.

Table 4.5: Analysis of Pearson Moment Correlation Relationship between Patronage of Recreation Centers and Sporting Activities before and during period of Covid -19

S/N	Variables	Df	r-value (0.05)	Significance (P < 0.05)	Decision
1	Patronage before Covid-19vs patronage after Covid-19	5	0.002	0.000	Significant

Source: Field survey, 2021

4.6

H₀₂: There is no significant difference between the socio-economic characteristics of the respondents and the patronage of recreation and sporting activities before and during period of Covid-19.

The results of the hypothesis test of the relationship between selected socioeconomic characteristics of respondents and participation in recreational and sporting activities prior to and during the Covid-19 period are presented in Table 4.6. Prior to and during the period of covid-19, there was a significant relationship ($p < 0.05$) between the socioeconomic characteristics of the respondents and their participation in recreation and sporting activities. This indicates that age, gender, marital status, education, major occupation work experience, household size, and membership in a social organization are related to the respondents' participation in recreational and sporting activities prior to and during the covid-19 period in the study area and this is in agreement with the study of⁹ which evidence suggest an overall negative impact of COVID-19 on physical activity at differential effects across different sub-population .

Table 4.6: Students' T-test Relationship between selected Socio-demographic Characteristics of the Respondents and the Patronage of Recreation and Sporting Activities before and during period of Covid-19

Variables	Df	t-value	Significance (P < 0.05)	Mean Difference	Decision
Age	340	188.911	.000	1.96188	Significant
Gender	340	71.513	.000	1.72727	Significant
Marital status	340	54.440	.000	1.21701	Significant
Educational qualification	340	134.112	.000	2.09091	Significant
Household size	340	48.499	.000	2.44282	Significant
Major occupation	340	39.236	.000	2.29619	Significant
Working experience	340	48.430	.000	1.29326	Significant
Member of social organization	300	49.138	.000	1.36877	Significant

Source: Field survey, 2021

Endnotes

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⁶ <http://www.mayoclinic>. Org 2019

⁷ <https://www.nigerianstat.gov.ng> 2019

⁸ <https://www.researchgate.net> Jan 2022

⁹ J. James Reade & Carl Singleton "Demand for Public Events in the COVID-19 Pandemic: A Case Study of European Football," Economics Discussion Papers em-dp2020-09, Department of Economics, University of Reading.

Chapter Five

Conclusion

5.1 Summary of Findings

The analysis revealed that the majority of respondents, 96.2%, were between the ages of 26 and 35, with a mean age of 26.5 years. Clearly, the majority of respondents were male (72.7 percent). This study revealed that the vast majority of respondents (78.3 percent) were unmarried. The study revealed that while the majority of respondents (90.9 percent) held NCE/OND degrees, a sizeable proportion of respondents (9.1 percent) held M.Sc./MBA degrees. The results revealed that majority of respondents, on average, had between four and six members of their household, but a substantial proportion of respondents (31.7 percent) engaged in trading as their primary occupation. 72.4 percent of respondents had less than five years of experience in their primary occupation. There are two major religions in the study area (Islam and Christianity) that were well-represented in the sample, with a significantly higher proportion of practicing Muslims (70.4%). Eighty-eight percent of respondents belonged to a social group (s).

The following recreation centers enjoyed a high level of awareness among respondents, according to the findings. They are Gurara Water Falls (84.2 percent), Zuma rock (80.4 percent), the moving rock (93.8 percent), Bina footprints (79.8 percent), Baro Empire Hill (96.5 percent), the first railway locomotive engine (97.9 percent), Gani Cultural Festival Kutigi (87.4 percent), Kainji Lake National Parks (71.0 percent), Dutse Mai Nono (57.2%), and Minna National Stadium (57.2 percent) (97.9 percent).

The majority of recreation centers were frequented frequently, according to the study. The centers consist of Sultan Guara water falls (mean = 2.09), Zuma rock (mean = 2.13), the moving rock (mean = 2.0), Bina footprints (mean = 1.99) and Baro empire hill. Low

patronage of the recreation centres/sporting activities (99.4 percent), low income to the owners of the recreation centres (97.9 percent), and Infrastructure decay due to low or no patronage (90.3%), and unemployment (87.4%) were the most significant effects of covid 19 on the patronage of recreation centre and sporting activities in the study area. Before and during period covid 19, there was a significant difference ($p < 0.05$) in the frequency of recreation center use and participation in sporting activities. Results revealed a significant relationship ($p < 0.05$) between socio-demographic characteristics of respondents and participation in recreation and sporting activities prior to and during the Covid-19 periods.

5.2 Conclusions

During the pandemic, the patronage of recreation centres and sporting activities in the study area were severely impacted, according to the research findings. Prior to the period of Covid-19 in the study area, the majority of recreation centres in the study area were utilized on a regular basis.

5.3 Recommendations

On the basis of this review's findings, the following suggestions are made: Without a doubt, this pandemic has had a significant negative impact on the recreation center/sporting activities industry.

- i. Maintaining the safety and security of employees and visitors should be accorded the utmost importance.
- ii. Promoting flexible rates and allowing guests to move a booking to a new date is an additional key strategy for promoting recreation and sporting business as a form of compensation for emergency cancellations.
- iii. Additionally, it is recommended to promote flexi-services (i.e the need for flexibility when planning recreational activities) rather than value-added services (this is a premiums

features and add-ons to basic core function) People are extremely concerned for their health and safety in light of the pandemic situation. Therefore, it is essential to devote additional time to cleaning the entirety of recreation and sports facilities. These strategies will have a positive effect on ensuring a safe and hygienically clean environment for guest stays.

iv. During the outbreak, recreation/sporting centre service providers must maintain constant contact with their core clientele (check their safety maintaining a strong linkage)

5.4 Contributions to knowledge

- (i) The study detailed the effects of the covid-19 virus on recreation and sporting activities centers and how this unfortunate circumstance affected their patronage.
- (ii) The project contributed to the body of knowledge by demonstrating measures to protect the health of athletes and other participants.
- (iii) It suggested strategies for the study area to adopt in order to become important cultural hubs that contribute to the quality and richness of their communities and the state as a whole.
- (iv) It provides specific information about recreational facilities in and around Minna, Niger State.
- (v) The study reveals the degree of awareness of the recreation centers in the study, which affects the respondents' patronage of the centers.
- (vi) The study contributes to knowledge by demonstrating the effects of Covid 19 Measures on Recreation Centre and Sporting Activity Attendance in the study area during the pandemic.

- (vii) This study suggests that age, gender, marital status, education, major occupation, years of work experience, household size, and membership in a social organization are related to respondents' participation in recreational and sporting activities prior to and during the period of covid 19 in the study area.
- (viii) According to the study, checking on guests' safety via phone/Internet during a lockdown maintains a strong correlation..

5.5 Areas of Further Research

Outdoor enthusiasts represent a sizable portion of the end user and comprise of those who "enjoy being outdoor" via a range of leisure activities. As was suggested, the effects of the COVID-19 pandemic on leisure activities need urgent intervention. Furthermore, based on the spread of COVID-19 throughout urban and rural areas, it is essential to understand which kinds of populations are most impacted by the epidemic in regard to the outdoor leisure practices. Due to:

- i. Kidnapping and insecurity within the state
- ii. The dynamic nature of the recreational business
- iii Government policies

Findings cannot be generalized to other environments. Consequently, additional research may be conducted on the subject.

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Appendices

Lead City University, Ibadan

Research Topic: Covid-19 Pandemic Impact on Recreation and Sporting Activities in Minna, Niger State, Nigeria.

Dear Respondent,

I am a master's student of Lead City University undertaking a research work on "Covid-19 Pandemic Impact on Local Recreation and Sporting Activities in Minna Niger State".

I therefore request you to please supply the information being sought for as stated in the attached questionnaire so as to assist the researcher to arrive at rational conclusion.

Your identity will not be revealed in any form so feel free to complete the questionnaire with objective and independent judgment.

Thanks for your cooperation.

TSADO, Beullah Teni

The Researcher

Section A: Socio-Economic Characteristics

1. Respondents age: _____
2. Sex: Male [] Female []
3. Marital status: Single [] Married [] Divorced [] Separated []
Widowed []
4. Level of Education: No formal education [] Primary education [] Secondary education [] Tertiary education []
5. Nationality: Nigerian [] Non-Nigerian []
6. Total number of household members:
7. Major occupation: Farming [] Trading [] Civil servant [] Artisan []
Contractor [] Student [] others (specify).....
8. Years of working experience (in years):
9. Religion: Christianity [] Islam [] Traditionalist []
10. Do you belong to any social group? Yes [] No []
11. If yes, specify: Cooperative and thrift society [] Peer group [] Social Club []
Trade Association [] others (specify).....

Section B: Identification of Recreation Centres in the Study Area

12. Please kindly indicate which of the following RECREATION centres you are aware of in Bida.

Recreation Centres	Awareness	
	Yes	No
Gurara Water Falls		
Zuma Rock		
The Moving Rock		
Soje (Hut) At Fogbe		
Bina Footprints		
Baro Empire Hill		
Baro Port		
Lord Lugard Colonial Ruins At Zungeru		
Nagwamatse Well (Near Kontagora)		
First railway locomotive engine (wushishi tramway engine no. 1)		
Gani Cultural Festival Kutigi,		
Kainji Lake National Parks		
Dutse Mai Nono		
Minna National stadium		

Section C: Level of Patronage of Recreation Centre during Pandemic in the Study Area

13. Please kindly indicate the frequency of your patronage to the following recreation centre

Centre	Frequency of Patronage			
	Always	Frequently	Seldomly	Never
Gurara Water Falls				
Zuma Rock				
The Moving Rock				
Soje (Hut) At Fogbe				
Bina Footprints				

Baro Empire Hill				
Baro Port				
Lord Lugard Colonial Ruins At Zungeru				
Nagwamatse Well (Near Kontagora)				
First railway locomotive engine (wushishi tramway engine no. 1)				
Gani Cultural Festival Kutigi,				
Kainji Lake National Parks				
Dutse Mai Nono				
Minna National stadium				

Section D: Effect of Covid 19 Measures on Patronage of Recreation Centre

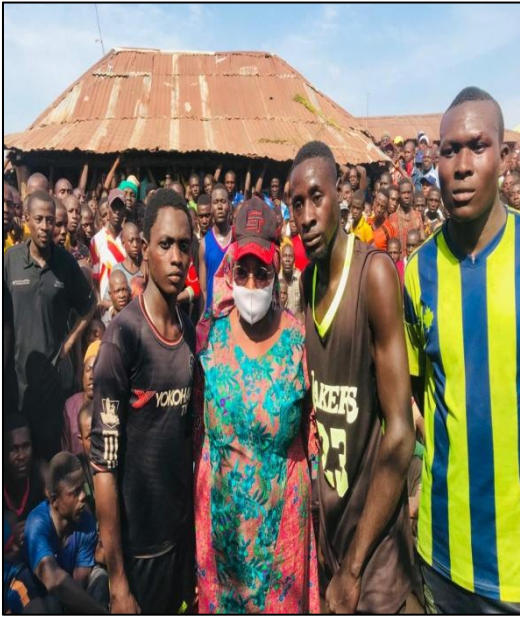
14. Please kindly indicate the Effect Of Covid 19 Measures on Patronage Of Recreation Centre

Effects	YES	NO
Low patronage		
Low income		
Infrastructure decay due to low or no patronage		
Loss of job		
Unemployment		
Low/none maintenance of infrastructure		
Other (specify)		

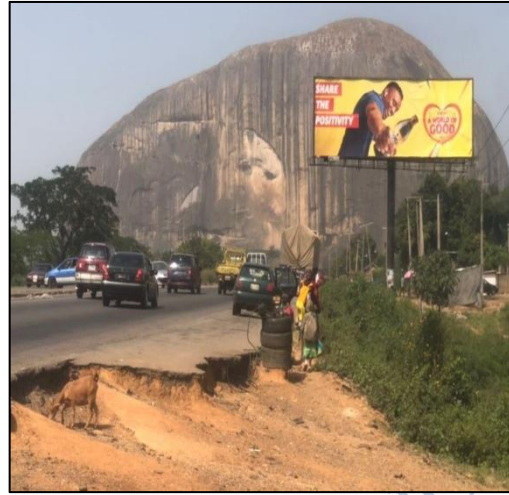
Section E: Measures that could Bring Recreational Centre to its Formal Shape

What do you think can be done to bring recreational centre back to its formal shape?

Field Work Pictures







DO NOT COPY. LEAD CITY UNIVERSITY, NIGERIA

Bio-data

Lead City University, Ibadan, Oyo State

Researcher's Bio Data

Beullah Teni Tsado

bttsado@gmail.com 08036214012

68, Lowcost Housing, Estate, Illorin Garage Bida, Niger State.

7th February, 1964/ Lavun, Niger

Nigerian

Mr. Michael Tsado, No.68 Lowcost Housing Estate, Ilorin Garage Bida, Niger State.

B. Educational Institution Attended/Qualification with Date

Lead City University Ibadan, Oyo State. **Master of Science** 2020-2022

Tourism and Hospitality Management

Guros Consulting. **Diploma** 2013

Quality Management System in Tertiary Institutions

National Institute for Hospitality and Tourism. **Post Graduate Diploma** 2010-2011

Hospitality Management

North West Campus Bagauda Lake, Kaduna Polytechnic.

Higher National Diploma 1992-1994

Catering and Hotel Management

The Federal Polytechnic Bida, Niger State. **National Diploma** 1984-1986

Catering and Hotel Management

Government Girls Sec. School, Tunga Magajiya. **SSCE** 1976-1981

Kpaki primary school. **First School Leaving Certificate.** 1970-1976

C. Working Experience with Date

Office of the Deputy Governor Niger State 1981-1982

Clerical assistant

Industrial Experience 1985

Shiroro Hotel Minna

Voluntary Teaching Scheme Niger State 1987-1988

Ministry of Education

Peoples Bank of Nigeria Bida 1990-1992

Field Officer and Center Leader

Niger State Polytechnic Zungeru 1996-till date

Chief Instructor

House 7 Hotels, Bida, Niger State 2020-till date

General Manager

D. Membership of Academic Professional

Member, Hospitality and Tourism Management Association of Nigeria (HATMAN)

Member, Women in Technical Education Development (WITED)

E. Publications

Utilization of water melon seed flour as composite flour in bread production 2015

Seminar Papers

Catering and The polytechnic Education in Nigeria 2003

Adolescent Nutritional Problems in Tertiary Institutions 2008

Factors Hindering Effective Purchasing of Perishable Food Commodities

in Shiroro Hotel Minna, Niger State 2011

The Importance of Skill Acquisition Programmes as Empowerment

Tools for Youth in Doko Lavun LG, Niger State 2013

Polytechnic Education in Nigeria and the Challenges of Insecurity in Nigeria	2014
Evaluation of Student's Private Hostel Accommodation	2018
Living a Good, Healthy Lifestyle	2019
Challenges Faced By Women in Leadership Positions in the Education Sector (Lower Cadre)	2020
Challenges Faced By Women in Leadership Positions in the Education Sector (Higher Cadre)	2020

On Going Research

Covid-19 Pandemic Impact on Local Recreation and Sport Activities in Minna, Niger State, Nigeria.

F. Special Assignment/ Community Service and Award With Date

Centre for Continuing Education and Training (CCET). House Capacity Building Training

Certificate of participation January, 2013

Global Center for Resource and Policy Development in Conjunction with Niger State

Polytechnic Zungeru

Workshop certificate of participation February, 2013

Date and Signature: _____

University Compliance Certification

This is to certify that this thesis is written by **Beullah Teni, TSADO** with Matric No. **LCU/PG/001560** in the Department of Tourism and Hospitality Management, Faculty of Environmental Design and Management, Lead City University Ibadan is in full compliance with the approved university format and style.

Signature

Date

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