The Sports Scientist Challenge

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Abstract. Sport as a social practice and as a field of science. Sport related to health, fitness and technology. The aspects of sports including education, training, and recreation side. Sports medicine to sports philosophy developed the possibility of scientific implementation to the latest and updated practice based on scientific norms that are linked as multidisciplinary. The methods used are hermeneutics (reviewing various literature to capture the essence) and heuristics (opening new avenues for new studies). The clarification and justification of various sports phenomena is continuously carried out by sports scientists. The COVID-19 is one of the extraordinary challenges of sports scientists to improve various sports activities. Locally, nationally, regionally and internationally scientists need to agree on a comprehensive and in-depth study of suggestions for organizing individual sports, community sports, and elite sporting events in an atmosphere of maintaining compliance with health protocols against the Covid-19 pandemic.

Keywords: Sports scientist, clarification, justification, COVID-19 pandemic.

1 Introduction

Sport is an activity that involves the body, and thus it is easy to identify the interests that come with it: health. At first, sports were more of a leisure time activity, then they developed and were also intended as activities that transform the patriotic spirit of nationality, positive activities to build superior character, and even as a method of psychological therapy. Not only physical health, sport has built a positive image among nations, represents mental health which also spurs various industries as well as an arena for creativity and innovation of many things. In short, sports fill substantive things in life.

Sports Science has a relatively shorter history compared to other disciplines such as philosophy, law, economics, and so on. The field of science under it is still relatively new. Therefore, it is very important for Sports Science to build theoretical foundations as a scientific discipline. Something that is very important and vital for Sports Science - as well as other sciences such as political science, medicine, literature and others - is that sports science provides a system of scientific research, teaching, training, and the constructive integration of other sciences in it.

The role of philosophers and the importance of philosophical views on the phenomenon of sports and sports science (representing other object areas, such as environmental issues, politics, etc.) can thus be summarized in two main processes: clarification and justification. In the context of sports, the question of clarification ("what do you mean?") Is relevant for examining issues of truth or the nature of objects /phenomena of interest to philosophers. Clear and logical conceptual argumentation is essential in order to arrive at a position where

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the philosophical thinking involved can be effectively agreed upon, or at least have an understanding of what is disagreed with.

Sports scientists also need to have the same tendency. Clarification of various phenomena that exist around sports science to be scientifically analyzed and to justify various key themes to enrich literacy about them. Although this paper has a small and simple contribution, the process of clarifying and justifying the atmosphere of the COVID-19 pandemic in relation to scientific theoretical developments in sport needs to be put forward along with the practice of organizing events.

2 Study Challenges

The methods used are hermeneutics (reviewing various literature to capture the essence) and heuristics (opening new avenues for new studies). Hermeneutic to capture *objective geist* (deepest meaning, the nature of values) contained in the object of research. Heuristics is next to the analysis results can open new avenues in reconstructing The characteristic of the object of study in Sports Science is the phenomenon of human motion. This phenomenon of movement in the context of sports becomes very complex because it contains biological, psychological, and anthropological content. Sport is a specific form of human movement behavior. The direction and purpose of people exercising, including the time and location of the activities carried out vary. This shows that sport is a phenomenon that is relevant to social life and cultural expression, including in this case the typical tendencies of ideology, profession, organization, education and science. Meanwhile, the nature of universality shows that sports diversity is influenced by socio-cultural diversity and specific geographical conditions [1]. In addition, sport can be used as a social laboratory for social science in general. But Carlson et al [2] emphasized that the combination of sports and science is still very problematic and requires a lot of study.

The involvement of updates on the status quo of sports science always brings challenges to this study. In the "Declaration of Sport", UNESCO defines sport as "any physical activity in the form of a game that contains a struggle against natural elements, other people, or oneself" [3]. What KDI-Keolahragaan [4] mentioned about various types of sports based on their functions and objectives, namely educational sports, health sports, rehabilitative sports, recreational sports, and competitive sports, reflects the breadth of the contents of the UNESCO definition of sport, which at the same time shows its limited breadth from the material object of sport science.

The keyword in the field of "sport" is human body movement. Mind-based sports - such as chess - must precondition physical activity. This is a standard, taking into account the level and focus of the physical activity (endurance, flexibility, strength, etc.). To date, there are five branches of "mind sports" recognized by the International Olympic Committee (IOC): go, draft, poker, bridge and chess, which are recognized as sports for the above reasons. The International Mind Sports Association is even specifically held to accommodate international competitions for four mind sports whose "playing field" is a board: go, draft, bridge, and chess (can be seen at www.imsaworld.com). The distinction between “mind sports” such as chess with, for example, basketball, is that the chess result is not a physical-intensive activity like basketball [3].

Mind sports are not substantively differentiated from body sports, but can be seen as the other side of a perceptual unity (to borrow the concept of the phenomenology of the Merleau-

Ponty body) with the world at hand (eg chess and the board). Optimization of the body before, during and after playing chess also always requires constant optimization of the mind. The level of dominance at the conscious / reflective stage alone makes it defined as mental sports or not [3].

National sports are sports based on Pancasila and the 1945 Constitution of the Republic of Indonesia which are rooted in sporting values, Indonesian national culture, and responsive to the demands of sports development [5]. In the next article, the national sports system is all aspects of sports that are interrelated in a planned, systematic, integrated and sustainable manner as one unit which includes regulation, education, training, management, development and supervision to achieve national sports goals (article 3). In chapter 2, articles 3 and 4 of the same law, it is stated that national sports have the function of developing physical, spiritual and social abilities as well as forming a dignified national character and personality; as well as national sports aimed at maintaining and improving health and fitness, achievement, human quality, instilling moral values and noble morals, sportsmanship, discipline, strengthening and fostering national unity and integrity, strengthening national resilience, and uplifting the nation's dignity and honor. From some of these articles (and the entire contents of the law), it can be urged to identify the distinctive features of Indonesian sports which in this study must also be considered in congruence. Openness to theoretical findings or scientific applications as in other sciences, is of course a conventional requirement as well as an individual scientific attitude that continues to be implemented in the development of sports science [3].

When the middle of the 20th century sport was recognized globally as one of the world's scientific studies, various focus activities became increasingly escalative and intensive. Sports science side by side with various other scientific disciplines spur innovation and creation never stop filling life with various activity trinkets, goods, services, and various kinds of fruits of knowledge. Sport science and various related sciences work hand in hand to fill scientific challenges to spur the creative dimension of this science. The birth of sport as an independent science in the late 1990s in Indonesia gave rise to impetus (impetus) for scientists to increasingly contribute on all fronts in producing scientific-creative findings. Despite the attractiveness (and strength) of the sports metaphor, can sport, as a representation in science, overcome strong scientific standards. In this case, the test of whether sports science should be considered 'scientific', in terms of characteristics, relevance and position, can lead to a problematic diagnosis, as well as an optimistic cure. For example, the problems of instrumentalism, normativity and relativism seem to overshadow the potential for discipline. At the same time, the importance and impact of the subject can put sports science in an advantageous position, in relation to science. In this regard, Wing [6]wrote: 'games, competitions and sports are good categories to cut through and thus connect disciplines that are thrown on one side or the other of the gap between the humanities and the sciences. Malone et al [7] state that the future of applied sports science research must develop active research practitioners through academic collaboration and challenge the 'status quo' to achieve the highest standards of scientific rigor.

However, the scientific progress of the policy was on hold starting in 2020. The World Health Organization (WHO) on February 11, 2020 named what is called “severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)” this as “COVID-19”, and rightly so. a month later the WHO decided it was a global pandemic outbreak. WHO has released data dated April 9, 2020, that the number of medical workers who have contracted the corona virus (COVID-19) is more than 23,000 people worldwide. This number is the exact number that is reported. There are many more data that have not been reported because there is no specific data system on this matter. [8] Quantitative data at any time until 2021 is still worrying, so the

COVID-19 pandemic continues to be enforced. According to Kompas (28/03/2020) the impact of the COVID-19 virus occurred in various fields such as social, economic, tourism and education. Circular (SE) issued by the government on March 18, 2020, all indoor and outdoor activities in all sectors are temporarily postponed to reduce the spread of corona, especially in the education sector. On March 24, 2020, the Minister of Education and Culture of the Republic of Indonesia issued Circular Letter Number 4 of 2020 concerning Implementation of Education Policies in an Emergency for the Spread of COVID-19. One of the impacts to date has been in the field of sports.

The following section explores the substantial challenges of sports scientists, as scientists who have a strategic role to play in the application of their scholarship to the fields that employ them. Values such as adaptability, hard work and dedication, curiosity, collaboration, and resilience are essential to succeed when becoming a sports scientist in a new environment, or in an institution with no tradition in this field.

3 Substantial challenge

Before the pandemic, Le Meur and Torres-Ronda [10] mentioned 10 challenges for sports scientists, which involve the application of sports science in high-performance sports and professional sports:

(1) Understand the unique context and challenges yourself.
Sports scientists are expected to provide support to performance and medical staff, particularly through the implementation of monitoring strategies and readiness assessments. One of the first challenges of course is to understand the context and culture of the sport / club.

(2) Build trust.
Starting from simple things, sports scientists must master communication with different teams by strengthening confidence in understanding the ins and outs of each team involved.

(3) Maximize athletes' support.
Athletes are the most important part. The existing facilities, technology, and various resources need active involvement of athletes with constructive, adaptive and flexible communication.

(4) Make good use of technology.
Sports scientists now have the potential to provide a lot of feedback to coaches as technology evolves today. An understanding of how to master technology to the responsibility of each role must be strengthened.

(5) Handling tsunami data.
Data handling becomes very challenging, especially when the volume of data and / or the number of players being monitored is large. The higher the data volume, the greater the capacity requirement for filtering, cleaning, organizing, analyzing, and presenting robust database-based information.

(6) Keeping things simple.
The more data that is collected, the more difficult it is to keep the information to the point and easy to digest. Concentrate on the information the audience needs.

(7) Does not "put the chariot before the horse".

Protocols of scientific studies are often a simplification of reality. The complexity of the problem which is attempted to understand in sports science should always encourage deciphering the uniqueness of the situation file at hand before formulating any recommendations.

(8) Contribute to the vision of the organization.
Humility, honesty, hard work, quality in work, and patience are paramount. Applying exercise science in elite sport is about how scientists can contribute to strengthening institutions by maximizing performance and helping people optimize their decision-making on a daily basis.

(9) Manage your pace.
Take the time to examine priorities, principles and how scientists will manage them at their speed. Have a great desire to prove to people that they made the right choice choosing you, to meet their expectations and try to provide solutions and understandable answers to their questions.

(10) Maintain proper balance.
Managing a balance between fun work and personal life is important, as high-performance sports work is often unstable, unpredictable and emotionally challenging. Balance productivity with personal problems such as exercise, family and other things can recharge energy.

All health protocols for sports activities during the Corona COVID-19 pandemic, compiled by the International Olympic Committee (IOC) and the authorities of each country, must refer to the regulations set by the World Health Organization (WHO). The health protocol used by each sport must also be in accordance with the respective International Federation (IF). There are several things that must be considered in the WHO guidelines for sports protocols, namely the risk of transmission, location of activities, number of spectators, and venue management. It has been decided that the Tokyo Olympics will be held in July-August 2021 or postponed from the original schedule which was supposed to be July 2020. The Tokyo Olympics schedule was postponed because the corona virus pandemic has not subsided (https://tirto.id/fGkm). The World Health Organization (WHO) recently provided guidelines for people who want to exercise in the midst of the Covid-19 pandemic. WHO says that the recommended exercise is for 150 minutes or 2.5 hours each week. Previously, the WHO recommended that adults aged 18-64 get at least 150 minutes of moderate exercise or a minimum of 75 minutes of vigorous exercise each week, and previous recommendations were made for healthy adults. The new recommendations now cover people living with chronic conditions or disabilities.

The Indonesian government through the Ministry of Youth and Sports issued a circular with Number 6.11.1 of 2020 concerning the Health Protocol for the Prevention of COVID-19 Transmission in Youth and Sports activities. In this circular, several sports activities in public places can be carried out again, of course, with various conditions. The same thing is also applied by professional athletes such as in the field of football to continue to maintain stamina and hone skills (https://kominfo.go.id/). The easiest reason to digest for shifting events has more to do with their economic potential. This can be seen, for example, from the contribution of the tourism sector to the nation's economy, including in terms of the number of foreign tourists visiting Indonesia, which has increased significantly from 10.41 million (2015), up to 12.01 million (2016), 14.04 million. (2017), and 15.81 million (2018).

If what Howe [14] says is true, that "all sports are games, and all games are contests", then the most risky challenge for sports scientists is at the time of the current pandemic. The postponement of the Tokyo Olympics (as well as the PON in Papua) from 2020 to 2021 are

just a few examples that sport is following the current contest mood. At the end of his article Howe concludes that maintaining 'sport' as an exclusive search for the fastest, strongest, and so on may help keep sport as an elite activity, but is counterproductive to the goal of increasing sports participation and structured physical movement activity, whether we call it 'sport' or not. . Given the increasing immobility of the individual in modern society, the better choice seems to be to encourage any movement and to allocate our social resources to do so. This seems to be an applicative form of "sportification" of all things as mentioned by Bo Carlson [15] which will contribute to social science in general and to the analysis of social change and human social conditions. So taking the concept of sportsmanship seriously, as well as a way to understand society and popular culture would be a useful approach to 'handing the baton' over to scientific embrace.

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