The Role of Exercise Physiology in

2020 Tokyo Olympic and Paralympic

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In September 2013, Tokyo 2020 Olympic and Paralympic Games (Tokyo Olympics) will be held. Before this, the Rio de Janeiro 2016 Olympic (Rio Olympics) will be held in Brazil in a little more than a year. There is no doubt that the Rio Olympics can be called a prelude of the Tokyo Olympics. We only have 5more years left until Tokyo Olympics, but I think there is some gap in the players' training programs in each sport's associations. Needless to say, there are a wide range of factors to consider for each event, such as host country privileges or advantage as a national sport. Therefore, depending on the policy sports associations, I think development policy and guidance policy by training and coaching staff are likely to differ.

50 years ago at the time of the 1964 Tokyo Olympic Games, I am reminded of when I was cheering the players hard as a junior high school student. These Games were without a doubt a brilliant performance in the history of Japan. The reason why is it led to success in Japan from before the Games as coaches and researchers of exercise physiology were introduced to scientific training.

So, I decided to lecture on "Philosophy and perspective of things about strengthening and training the players " on the basis of research and the experience that was gained. I observed the players characteristics (physique, physical fitness, morphisms type, etc.), and read national and international research papers on this area intently. However, I found there were big gaps between practice and theory and I tried to understand why. The advice of directors and coaches that specialize in archery was helpful at times.

South Korea is known as the top country for archery. I have an interest in Korean guidance and strengthening policy. One time I had a chance to meet the coach from South Korea at the game venue and he said "I instruct how to shoot using the bones". This technique was hard to me to understand. Then, I met Mr. Kim who graduated from the Korea National Sport University and Specializes in archery (currently a lecturer at Nagasaki International University and the director of their archery club), and got a chance to proceed with joint research.

While observing the basic processes of archery, such as physique and physical fitness of archer, we advanced in research with a focus on behavior analysis using the EMG. As a result, "Silent period" has been observed between the clicker signal and release while shooting. At this moment, the words of the Korean coach, "Shoot using the bones," came to mind. At that moment, I was able to resolved what I had been struggling with for so many years. Therefore, it is needless to say that it was an important tip on the strengthening of players.

Given the proper scientific training, it would be possible for even an inexperienced person such as myself to become staff members for player strengthening. I definitely believe they can become torch bearers on the way to success at Tokyo Olympics.

Ancient Olympic Games and the

Modern Olympic Games Creation of a new model

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Ecstatically, it has been decided that the 2020 Olympic and Paralympic Games will be held in Tokyo. I wonder if the concept of "Olympism" still exists today. Politics and athletics may be rarely associated. However, in comparison to other cultural elements, they are closely related. As the concept of peace and truce is achieved by political influences, the athletics are at risk.

In that sense, the ancient Olympic games had strong political influences as well as a strong religious importance. Without much of the "religion" aspects in the modern Olympics being held today, the elements of "Olympism" is rather subtle in my view.

On October 31 2014, the Olympic Movement, led by the International Olympic Committee (IOC), was unanimously accepted in the UN General Assembly. It is anticipated that this UN resolution holds a great magnitude of authority equivalent to the "religious" importance in the ancient Olympics. I hope that this is embraced all over the world.

Without such level of embracement, neither the Olympics nor the Paralympics would truly symbolize the "Olympism". In any case, the organizing committee of the Tokyo Olympic and Paralympic Games (TOCOG) and the related groups appear to be enthusiastic in the imminent affairs such as the issues around the Olympic venues or the amount of medals; however, what really needs to be addressed is to effectively exercise the "Olympism" in conjunction with the IOC. The committee cannot be a mere pen-pusher.

It is important to realize that the reason why the ancient Olympics lasted nearly 1200 years is not only it was a series of athletic competitions, but also because of its significant contribution in spreading the Hellenistic culture. It is also said that the political leaders of the city-states gathered in Olympia for political practices similar to the summits in the modern days.

A great amount of effort, innovation and Japanese government's devoted ness is required in order to promote the "Olympism". Having said that, the organizing committee must proactively work with the international organization such as the UN to gain their support. What I anticipate from the TOCOG is to act as a leading committee to execute the mission of promoting the "Olympism"

In addition to the Paralympics, the 2020 event should include mini-expo type exhibitions in order to provide cultural and economical influence. I fear the repetition of the same drive that was evident in the 1964 event.

The purpose of this lecture is to compare the ancient and the modern Olympics and to propose the new model of the 2020 Olympics. The lack of imagination; cultural inconsiderateness and the adherence to the commercial interests are baffling and must be alerted.

For whatever it takes, I want the 2020 Olympics to have a new model. I hope that this conference will serve as the starting point.