



저작자표시-비영리-변경금지 2.0 대한민국

이용자는 아래의 조건을 따르는 경우에 한하여 자유롭게

- 이 저작물을 복제, 배포, 전송, 전시, 공연 및 방송할 수 있습니다.

다음과 같은 조건을 따라야 합니다:



저작자표시. 귀하는 원저작자를 표시하여야 합니다.



비영리. 귀하는 이 저작물을 영리 목적으로 이용할 수 없습니다.



변경금지. 귀하는 이 저작물을 개작, 변형 또는 가공할 수 없습니다.

- 귀하는, 이 저작물의 재이용이나 배포의 경우, 이 저작물에 적용된 이용허락조건을 명확하게 나타내어야 합니다.
- 저작권자로부터 별도의 허가를 받으면 이러한 조건들은 적용되지 않습니다.

저작권법에 따른 이용자의 권리는 위의 내용에 의하여 영향을 받지 않습니다.

이것은 [이용허락규약\(Legal Code\)](#)을 이해하기 쉽게 요약한 것입니다.

[Disclaimer](#)

Master's Thesis of Global Sport Management

**Sustainable Utilization of Human
Capital Legacy after PyeongChang
2018 Winter Olympic Games:
Focusing on the Viewpoint of Key Stakeholders**

2018 평창 동계올림픽 인적자본 유산의 지속적
활용: 주요이해관계자의 관점에서

2023 년 8 월

서울대학교 대학원

체육교육과 글로벌스포츠매니지먼트

박수빈



Ministry of Culture, Sports
and Tourism



Korea Sports Promotion Foundation

이 논문은 문화체육관광부와 국민체육진흥공단 지원을 받아 수행된 연구임
This work was supported by the Ministry of Culture, Sports, and Tourism and Sports Promotion Foundation

Sustainable Utilization of Human Capital Legacy after PyeongChang 2018 Winter Olympic Games:

Focusing on the Viewpoint of Key Stakeholders

Advisor: KANG Joon-ho

Submitting a master's thesis of Global Sport Management

August 2023

The Graduate School
Department of Physical Education
Seoul National University
Global Sport Management Major

Soobin Park

Confirming the master's thesis written by

Soobin Park

August 2023

Chair Lee, Yongho (Seal)

Vice Chair Kim, Yukyoum (Seal)

Examiner Kang, Joon-ho (Seal)

Abstract

Sustainable Utilization of Human Capital Legacy after PyeongChang 2018 Winter Olympic Games:

Focusing on the Viewpoint of Key Stakeholders

Soobin Park

Global Sport Management, Department of Physical Education

The Graduate School

Seoul National University

Many cities and countries are developing their national and social functions through the legacy by hosting mega sports events. In particular, the legacy of human capital provided by highly specialized management skills to the workforce is one of the essential legacies that host cities and countries should develop. However, compared to the importance of human capital legacy, the reality is that there are not many studies on the development of human capital legacy after mega sports events.

The purpose of this study is to examine the sustainable utilization of the human capital legacy by comparing the viewpoints on the human capital legacy of key stakeholders including the IOC, Central government, Local

government, and POCOG in the operation of the PyeongChang 2018 Winter Olympic Games.

To answer the research questions, a qualitative study was conducted through semi-structured interviews and in-depth strategies with key stakeholders on the perception of human capital legacy from the viewpoint of the stakeholders, what was done to utilize human capital legacy by each stakeholder, and how human capital legacy can be utilized sustainably. To suggest the practical way to sustainable utilization of human capital legacy, it was examined what effort each stakeholder made, what difficulties they faced, and what necessary elements were needed.

Based on this study it is expected to contribute to the successful future of managing mega sports events as a stepping stone for more advanced research on human capital legacy management in mega sports event organizations.

Keywords: Olympic Games, PyeongChang 2018, Legacy, Human capital legacy, Mega sports events, Organizing Committee for the Olympic Games

Student Number: 2020-21568

Acknowledgements

First and foremost, I would like to thank my committee members, Dr. Joon-ho Kang, Dr. Yongho Lee, and Dr. Yukyoum Kim for their guidance.

Next, thanks to KSPO and its DTM program, I could learn specialized knowledge and obtain wide insight into global sports management with my dear DTM 8th batch friends.

I would like to express to the whole workforce who participated in Pyeongchang 2018 Winter Olympic Games that we are a legacy. We need to be more specialized experts in the sports management field in order not to be forgotten so that we can make a better world, through sports.

Also, I would like to thank my eight interviewees who gave me their honest opinion and experience, which allowed me to draw meaningful conclusions. Thanks to them, it could be realized how human capital legacy is important in mega sports event management and needed to be studied more.

Lastly, this journey would not be over without my family's support. My dear Eunho, thank you for your infinite love. Love you all, and thank you for always being there.

Table of Contents

Abstract	i
Acknowledgements	iii
Table of Contents	iv
List of Tables	vii
List of Acronyms	viii
Chapter 1. Introduction	1
1.1. Background.....	1
1.2. Research Purpose.....	7
1.3. Research Questions	8
Chapter 2. Literature Review	9
2.1. Understanding Legacy.....	9
2.1.1. Olympic Legacy	9
2.1.2. Knowledge, Skill-development, and Education Legacy	15
2.1.3. Use of the Olympic Legacy	17
2.2. Understanding Workforce, Human Resource, and Human Capital.....	19
2.2.1. Workforce.....	19
2.2.2. Human Resource	21
2.2.3. Human Capital	22
2.3. Understanding Organizing Committee for the Olympic Games (OCOG)	25
2.3.1. Overview of OCOG.....	25
2.3.2. Stakeholder theory in OCOG	29
2.3.3. Resource-based view in OCOG.....	30
2.3.4. Workforce in OCOG	30

2.3.5. PyeongChang Organizing Committee for the 2018 Olympic and Paralympic Winter Games (POCOG).....	33
Chapter 3. Method.....	37
3.1. Research strategy and Process overview	37
3.2. Criteria for selecting interviewees	39
3.3. In-depth individual interview process	42
3.4. Interview guide and Ethics	45
Chapter 4. Results	46
4.1. Overview	46
4.2. Perception from the perspective of stakeholders.....	49
4.3. Effort to utilize human capital legacy.....	55
4.3.1. Effort of IOC	56
4.3.2. Effort of Government	57
4.3.3. Effort of POCOG.....	60
4.4. Reason for the difficulty of sustainable use	63
4.4.1. Difficulty of IOC	63
4.4.2. Difficulty of Government	64
4.4.3. Difficulty of POCOG.....	69
4.5. Necessary elements for human capital legacy utilization.....	71
4.5.1. Governance and Budget.....	72
4.5.2. Recognition and Timing	74
4.5.3. Structural independence	76
4.5.4. Protection from political purpose	76
4.5.5. Practical human capital legacy utilization plan	77
4.5.6. Utilize existing structure.....	77
4.5.7. Utilize new system	79
4.6. Summary.....	81

Chapter 5. Discussion and Conclusion	90
5.1. Discussion.....	90
5.2. Limitations and Future research opportunities	98
5.3. Conclusion.....	101
Reference	104
Appendix	114
국문초록	116

List of Table

Table 1. List of participants.....	41
Table 2. Coding of themes and subthemes.....	46
Table 3. Participants' characteristics.....	47
Table 4. Frequency of participants' responses	48

List of Acronyms

BOCOG - Beijing Organizing Committee for the Olympic Games

FA - Field Area

IF - International Federations

IKL - Information, Knowledge, and Games Learning

IKM - Information & Knowledge Management

IOC - International Olympic Committee

KOC - Korean Sport & Olympic Committee

KSPO - Korea Sports Promotion Foundation

NOC - National Olympic Committee

OCOG - Organizing Committee for the Olympic Games

OGKM - Olympic Games Knowledge Management

PEM - People Management

POCOG - PyeongChang Organizing Committee for the 2018 Olympic and
Paralympic Winter Games

TOCOG - Tokyo Organizing Committee for the Olympic Games

Chapter 1. Introduction

1.1. Background

The mega sports event industry is one of the main cores of the sports industry, which generates value for other various types of industries. Indeed, recent research on mega sports events have explored a wide range of impacts on society in the host country (Kim, 2020).

Above all types of mega sports events, the Olympic Games are one of the largest and most popular mega sports events globally (Toohey & Veal, 2000). The Olympic Games are considered the peak of all sports events, as it conjoins a variety of sports disciplines, and also are regarded to bring strongly impactful and beneficial outcomes on community development in the host country as well as economic, infrastructural, social, cultural development (Kaplanidou & Karadakis, 2010; Gargalianos et al., 2015). These various benefits of hosting mega sports events could answer the question of why countries are eager to host mega sports events. In other words, because of these reasons, many countries want to host mega sports events as a vehicle to draw international attention and to create broad positive outcomes like economic and social development for their whole country (Getz, 1997).

However, Olympic host cities are not always able to gain positive outcomes. Depending on how the host city utilizes the outcomes created from the event after the event, it can be a positive legacy that can affect national development beyond city development itself or can be extremely burdensome to host cities. Over recent decades, the potential legacy that mega sports events can bring has been recognized. Besides, legacy itself has become an important task of the NOC and the host cities themselves (MacAloon, 2008).

Legacy has played a significant role in the expansion of the Olympic Games as they have increased in size, range, influence, and cost over the past decades. The IOC especially pinpoints the concept of legacy as seen in the IOC Charter, Rule 2, Article 14 of the Olympic Charter states that the role of the IOC is “To promote a positive legacy from the Olympic Games to the host cities and host countries” (IOC, 2007, p. 15; Agha et al., 2012). In the academic world, sport event legacy is defined as the “planned and unplanned, positive and negative, tangible and intangible structures created for and by a sports event that remain longer than the event itself” (Preuss, 2007, p. 211).

The interest in legacy from mega sports events has increased significantly since the early 2000s, and the commitment to accomplishing

sports legacies from hosting mega sports events has become one of the important tasks of host cities and bid committees (Preuss, 2007; Ritchie, 2000; Veal et al., 2012; Leopkey & Parent, 2017).

Many characteristics of the legacies of the Olympic Games can provide positive opportunities to develop host cities by utilizing those outcomes. These legacies connect with tangible and intangible outcomes that can bring positive impacts, on host cities, including social, economic, environmental, and sporting development (Preuss, 2007).

The legacy strategic approach document published by the IOC noted the importance of legacy below:

The Olympic Games are the most visible representation of Olympism and a role model for other sports events. Hence, this strategic approach mainly focuses on the legacy of the Olympic Games. However, by taking a more active stance on the legacy of the Olympic Games, the IOC aims to lead by example and influence other organizations which manage international sports events (IOC, 2017, p.2).

To this time, most of the studies on mega sports events legacies have been selective in their factors, with the majority of research focusing on the tangible legacies (Infrastructure impacts), monetary legacies (Economic impacts) tend to overlook the intangible legacies (Social impacts)

(Cornelissen et al., 2011). The reason why the tangible legacy has been studied a lot is because it is more easily measurable, and the effect is noticeable in a short period. While the outcomes from intangible legacy may not be immediately visible, its ability to improve quality of life, change our values, and make better life circumstances should not be understated.

More, recent studies have identified the importance of developing intangible legacies (Kaplanidou et al., 2016). One of these neglected intangible legacies is the knowledge, and skills development of the workforce involved in the delivery of mega sports events (Gratton & Preuss, 2008; Kaplanidou, 2012). Gratton and Preuss (2008) noted that host citizens of host cities acquire significant knowledge and skills from operating a mega sports event. While it is well identified that mega sports event organizing committee workforce (Paid staff) achieve skills and knowledge in their project management, and event operation, there is little study about this phenomenon.

For example, the Organizing Committee for Olympic Games (OCOG) needs a number of workforces who take part in a variety of functional areas to deliver the games and cooperate with other stakeholders, and sectors that are involved in event management (Kaplanidou et al., 2021).

The workforce who have cultivated knowledge and skills from Olympic management has not received any attention since the end of the Olympics. In other words, the study on human resources (paid employees of the Organizing Committee) in preparing and operating events is insufficient (Xing, 2009).

Workforce (regarded as human capital, and human resource) management is an important sector to deliver the Olympic Games, the skills development of the workforce has also been identified as an intangible legacy (Storey, 1995; Tripolitsioti, 2017; Kaplanidou et al., 2021).

According to Bontis's research (1996), it is recognized by several studies that human capital is regarded as the only sustainable competitive advantage that an organization has in the globalized world today. The terminology of human capital has been motivated by the increasing recognition that this term is considered as an intangible asset that has been the key contributor to organizational, and social development (Becker, 1993; Zidan, 2001).

Nonetheless, there has been little effort to describe human capital utilization as a legacy sector emanating from temporary sports organizations such as the Organizing Committee for Olympic Games (OCOG). According to recent studies, intangible legacy, including human capital legacy, is

understudied and there is little information in the current literature on it, including the legacy from the Olympic Games (Preuss & Hong, 2021).

In other words, unlike tangible assets such as Olympic venues, the human capital of the Olympics, an intangible asset, is not well-studied after the Olympic Games, and is not systematically managed despite its importance. Even at the academic level, there are few studies on the management issue of Human Capital Legacy involved in the operation of the Olympic Games, or on how to sustainably use it.

Management in OCOG is closely concerned with the coordination of various kinds of resources such as materials, finances, facilities, and people to produce profit and create positive outcomes. Above all, human resource is the most critical because it is the people who convert the other factors into “real” useful and positive resources. In other words, all the other kinds of resources can be valuable only if the people who work on tasks in the organization utilize them effectively (Chelladurai & Madella, 2006).

Thus, the OCOGs perform complicated tasks that are responsible for addressing various issues across diverse categories. Also, all tasks require cooperation with different internal-external and national-international stakeholders that have different needs and objectives that they want to realize through the Olympic Games. (e.g., the IOC, Olympic partners,

athletes, government, and spectators (Burbank et al., 2001; Yarbrough, 2000; Hwang & Jang, 2020).

Various stakeholders, such as the IOC, the Olympic Organizing Committee, and the government, exist in the operation of the Olympic Games. It can be presumed that the management and utilization of stakeholder groups may not be systematic because the expected outcomes from human capital are different.

This study starts from the question of why the human capital legacy is not maintained, managed, and utilized after the Olympic Games despite the fact that it plays a key role as an essential factor in the success of the Olympic Games.

1.2. Research Purpose

This study assumes that the IOC, the OCOG, and the government involved in the operation of the Olympic Games are the three main stakeholder groups. Based on this assumption, of the 2018 PyeongChang Olympic Games case, the purpose of this study is to compare the viewpoints on the human capital of the stakeholder groups and to study the sustainable utilization of the human capital legacy in the aftermath of the 2018 PyeongChang Olympic Games.

1.3. Research Questions

The following three research questions will be considered in this study:

RQ1. What is the perception of human capital legacy from the viewpoint of the stakeholder?

RQ2. What was done to utilize human capital legacy by each stakeholder?

RQ3. How can human capital legacy be utilized sustainably?

Chapter 2. Literature Review

In order to establish a preamble for the study at hand, a brief literature review will be done to understand this study. Firstly, conceptual research will be conducted about the notion of legacies and, the concept of workforce (called various terms, including human resource, and human capital). Secondly, phenomenon studies will research the characteristics of the Organizing Committee for the Olympic Games (OCOG), the PyeongChang Organizing Committee for the 2018 Olympic and Paralympic Winter Games (POCOG), and the workforce emanating from the POCOG. The current situation of legacy management of the 2018 PyeongChang Winter Olympic Games will also be researched.

2.1. Understanding Legacy

2.1.1. Olympic Legacy

Legacy plays a significant role in various aspects of all stages (Bidding, preparing for the event, delivering the ongoing event, and preparing a post-event plan) to manage the Olympic Games successfully (Hiller, 2006). The concept of legacy has been connected with the outcomes, and impact of the Olympic Games. It includes all diverse fields such as economic, social, cultural, environmental, physical, psychological, and

tourism (Fredline, 2005; May, 1995; Solberg & Preuss, 2007; Ritchie & Smith 1991; Waitt, 2003). Also, legacy is a multidimensional phenomenon in that each legacy concept can influence different concepts and is sometimes used interchangeably (Kaplanidou & Karadakis, 2010). Because of the characteristic of legacy, its definition and the impact of mega sports events have been studied from various perspectives with diverse terms.

Today, the most well-known definition of legacy is “All planned and unplanned, positive and negative, tangible and intangible structures created for and by sports events that remain longer than the event itself”, conceptualized by Preuss (2007). Another related definition is identified by Chappelet and Junod (2006), “The material and non-material effects produced directly or indirectly by the sports event, whether planned or not, that durably transform the host region in an objectively and subjectively positive or negative way”. Chappelet (2012) defined the legacy of a mega sporting event as all that remains and may be considered as consequences of the event in its environment.

Also, Kang (2017) presented in the Olympic Games PyeongChang 2018 legacy symposium, that Legacy can be defined in the 10 dimensions outlined below:

(1) Infrastructural/urban legacy, (2) Institutional/legal legacy (3) Economic/industrial legacy (4) Knowledge/information legacy (5) Human resource/network legacy, (6) Symbolic legacy, (7) Socio-cultural legacy, (8) Environmental legacy, (9) Financial legacy, (10) International relations legacy

As stated above, the legacy-related terms are commonly found in the bid process for the following Olympic Games, but also is often referred to in the sports management research field. However, until the late 20th century, the studies about the term legacy and its influence in host cities were not sufficient to fully understand the substance and leverage of legacy, unlike today. In other words, this concept of legacy and its practical phenomena tended to be somewhat overlooked among the host cities, organizations, and scholars (Leopkey & Parent, 2012).

Leopkey (2009) noted that the concept of legacy was first referred to in the bid process for the 1956 Melbourne Olympic Games by Lord Mayor James S. Disney. He announced that “Melbourne will establish, as a legacy of the XVI Olympiad, an Athletic Centre” that would showcase sports development ideals.

Initial references to legacy were superficially considered as a concept of profit, benefits of post-games, or as motivation to host the games

to gain. In addition, they tended to highlight the successful delivery of the Games through the supply of venues with plans of post-Games utilization (Gold & Gold, 2016).

In and around this period, moreover, according to McIntosh (2003), before the word legacy was explicitly used in the bid process cases of deliberately making positive outcomes in the host city through hosting the games could be explained as:

. . . Instead, the early potential candidate city hopefuls largely wrote of how suitable and capable they were, of what an “honor” it would be to serve the Olympic Movement in this capacity, or of what their promises would include in order to ensure that the celebration of the Games would be a success.

As the Games increased in scale over time, in the beginning of the 2000s, the concept of legacy began to receive attention by organizing committees, especially following the Centennial Games. In 2003 the IOC amended the Olympic Charter by including a positive legacy mission statement for host cities and as such legacy established itself as a follow up measure of a conference on legacy (Chappelet, 2008). Bidders had to answer specific questions of impact and the legacy of hosting the games in

2003, the year of the bids for the 2010 Winter Olympic Games (Leopkey & Parent, 2012).

The IOC's specific focus on the concept of legacy is noted in the IOC Charter. Rule 2, Article 14 of the Olympic Charter states that the role of the IOC is "To promote a positive legacy from the Olympic Games to the host cities and host countries" (IOC, 2007, p. 15).

After the amendment of the Olympic Charter, all bidders for the following games (from the 2012 Summer Olympic Games) have been officially required to deliver the concept of legacy in their bid documents in the first section under the theme Olympic Games concept/motivation and legacy (Leopkey & Parent, 2012).

Since then, legacy planning has been integrated as a necessary part of the IOC; all host cities that are interested in hosting the Olympic Games are required to submit candidature files containing contents of legacy plans (IOC, 2021). This has also stimulated many scholars to study the sector of legacy. One of the significant criteria for the decision to win the hosting of the Olympic Games is the component of the legacy for the host city and its detailed plan to produce positive influence on various aspects of the host country (Olympic Studies Centre, 2003).

As mentioned in the beginning of this chapter, the legacy of the early simple concept has been analyzed in various aspects today, classified as tangible legacy and intangible legacy, with these sectors being further described in detail as economic legacy, infrastructure legacy, sporting legacy, and social legacy, etc.

The explanation of typical types of legacy arranged by many scholars is as follows:

(1) Economic legacy: It includes an increase in employment levels, job creation, tourism, sources of funding, marketing, and investment (Chappelet & Junod, 2006; Cornelissen et al., 2011; Horne, 2007; Karadakis et al., 2010; Leopkey & Parent, 2012; Owen, 2005; Whitson & Horne, 2006).

(2) Infrastructure legacy: It refers to the various networks, venues for sports competition (sports venues) and non-sports competition (transportation, housing, hotels, facilities, parks, and recreation, media centers, tourist attractions) that were renovated or constructed for mega sports events that continue to be utilized after the event is complete. New access by road or rail, water, air, network, and telecom is part of this legacy (Chappelet, & Junod, 2006; Chappelet, 2008; Cornelissen et al., 2011; Hiller, 2006; Solberg & Preuss, 2007).

(3) Sporting legacy: Sports-related legacies can be related to sports development, sports facility, local sports culture, increased participation in sports, participation in new sports events, and health improvement (Chappelet & Junod, 2006; Cornelissen et al., 2011; Leopkey & Parent, 2012).

(4) Social legacy: This social legacy can be explained as local residents' memories of mega sports events. It also includes opportunities for engagement in all relevant event activities and providing national pride, social cohesion, positive emotion, branding their community image, and interaction (Bull & Lovell, 2007; Chappelet & Junod, 2006; Cornelissen et al., 2011; Solberg & Preuss, 2007; Waite, 2003). In addition, there are various other legacy scopes, but the importance of this is identified in various ways depending on the country's viewpoint and situation.

Such diverse concepts of legacies have attracted attention and have been studied by scholars, but a relatively neglected sector is 'Knowledge, Skill-development and Education legacy' which is identified as important by Gratton and Press (2008). Legacy in this field has been recognized for its importance, but relatively little research has been done compared to other legacies.

2.1.2. Knowledge, Skill-development, and Education Legacy

Gratton and Preuss (2008) identify 'Knowledge, Skill-development and Education legacy' in their research. Moreover, it is described that the host country's people gain knowledge and skills from hosting a mega sports event, and especially OCOG's workforces achieve professional skills and knowledge in fields such as event operation, human resource management, and project management by delivering Olympic Games.

In another study, it is noted that knowledge development is one of the intangible legacy aspects especially among employees of organizations. Also, these outcomes can create sustainable development from the organizations involved because it is able to fuel projects related to legacy after the Olympic Games (Kaplanidou & Karadakis, 2010). Kaplanidou (2012) points out this phenomenon that even though the sector of knowledge development of the workforce who deliver the Olympic Games is regarded as one of the intangible legacies, this sector has barely been studied in the sports management field.

Another linked concept called 'Human skills, networks, and innovation' is identified in the document and this concept is defined as accruing soft skills (leadership, client-focused mindset), technical skills (sports management, event management), and new networks by staff involved in the operation of the Olympic Games (IOC, 2017).

As described above, recently scholars, including the IOC, have identified the legacy of knowledge and skill development. The next chapter will focus on the aspects of this legacy being created by staff of the organizing committee, and how this legacy can be considered as ‘Human capital legacy.’

2.1.3. Use of the Olympic Legacy

For the London Assembly (2007, p4) the term legacy momentum was coined to describe the ability of a host country and city to continue positive influence in the post-games period through the regeneration (e.g., converting building of infrastructure, utilizing developed skills- knowledge sectors) created before and during the Games (Agha et al., 2012).

Even though the legacy plan is a vital and required part of an Olympic bid process, there is little incentive or follow-up method for the OCOG to focus on generating legacy. Especially in the middle of the Games or finalizing the Games (e.g., Games time and Bump-out time). In other words, legacy management is required as a significant part of the preliminary process, but it tends to be neglected as time passes, and this important task is prone to fizzle out.

This task, legacy management, is a key factor that gains or losses from an Olympic legacy to the host country beyond the local community not

only the Organization. Especially as the OCOG disbands within two years of the completion of the event, there is little time or energy to focus on this task around the end of the Games. So, this is why legacy management should be proactively planned from the initial stage (Agha et al., 2012).

In 2000, the IOC initiated a project called the 'Olympic Games Global Impact' (OGGI) that is responsible for evaluating the overall impacts of the Olympic Games on the host country, the host city, its environment, and its citizens. There is a new OGGI created for every OCOG, and this program runs over 11 years from the bidding process, but the program dissolves two years after the Games concluded. The problem is that it takes more than 15-20 years to measure the lasting legacies of the host city, not a short period of two years (Gratton & Preuss, 2008).

In the case of PyeongChang, for example, officially the PyeongChang Olympics brought 61.9 billion KRW in revenue. With this direct impact of the PyeongChang Olympics, PyeongChang 2018 Legacy Foundation is established in 2019. The importance of establishing this foundation has been proven through the success of the Korea Sports Promotion Foundation (KSPO), which was established in 1989 with surplus money from the Seoul Olympics and with staff from the Seoul Organizing Committee for the 1988 Olympic Games. However, one big difference was

that the PyeongChang 2018 Legacy Foundation does not have the purpose or any projects related to staffing or outplacement of former OCOG staff, unlike KSPO.

The main role of the PyeongChang 2018 Legacy Foundation is to promote the development of winter sports, not only in South Korea but also in other developing countries, through the management of the PyeongChang Olympics legacy. The main project of the foundation is to support the hosting of winter sports events and run various sports participation programs for youth both domestically and abroad to spread the Olympic spirit, PyeongChang Olympics legacy (Kim, 2020).

2.2. Understanding Workforce, Human Resource, and Human Capital

2.2.1. Workforce

Various terms relating to the workforce have been coined, including workforce, human resource, and human capital. It has been transformed little by little depending on the point of view (Huselid et al., 2005). Among the intangible legacies, informational-educational legacy includes opportunities for gaining experience, knowledge, personal development, research, and governance capacity, processes that can be obtained from mega sports events (Leopkey & Parent, 2012). In this regard, the knowledge development of the workforce involved in the delivery of the mega sports

events is in line with intangible legacies derived from the Games (Kaplanidou, 2012).

To address the aforementioned assertion more conceptually, this study will identify many associated terms that are able to be referred to as the word of the workforce in the next sub-chapter. Therefore, by examining relevant terms of the workforce, this chapter will achieve an understanding of the concept of 'Knowledge, Skill-development, and Education Legacy'. Based on these relevant expressions, each terminological review will be described.

First, the word workforce is defined as the workers engaged in a specific activity or enterprise in the dictionary (Merriam-Webster Dictionary, 2020). The terms strongly linked to this word of the workforce are human resources and human capital. These are often used interchangeably in this paper but need to be accurately explained. Moreover, the workforce can be defined as individual and group members who has/have potential capability and power to become the most powerful benefit to the organization once they start working (Baum et al., 2016). Huselid et al. (2005) point, it is believed that the workforce is clearly a key element of effective business strategy execution, and the nature of workforce can have a crucial effect on

business outcomes, including productivity, profitability, and shareholder value.

The breadth of the workforce domain, from workers to the organization and from small to broader labor forces, can be acknowledged by the term workforce, rather than employment, labor, human resources, human capital, or other nomenclature. In other words, the term workforce is readily applied and identified in real-life, and literature, so this term can be equated to all those people within organizations, any type of company, and any scale (Baum et al., 2016).

In this sense, using this word may seem obvious in this study as mentioned earlier because the term of workforce contains the whole process and types of related employees in the organization. Nevertheless, this term still has limitations to describe the aspect of intangible informational-educational capacity.

2.2.2. Human Resource

Human resources (HR) is defined as the division of a business that is charged with selecting, screening, recruiting, and training programs, as well as administering employee-benefit programs (Kenton, 2020a). A resource in the organizational framework is regarded as a possibility that can be considered as an organization's important asset. In other words, since the

human resource is regarded as an organizational asset that is required to be developed to achieve an organizational goal, the term of human resource has been extensively researched. Also, this attribute of human resource must be converted into human capital by cultivating itself through a series of effective processes such as training, engagement, motivation to be utilized as a creative protentional innovative way for longtime organizational value creation under organizational guidelines and objectives (Wernerfelt, 1984; Tripolitsioti, 2017).

Another important term is Human resource management (HRM), a mechanism derived from the concept of human resources to take advantage through a highly committed and competent workforce (Khasawneh, 2011; Weerakoon, 2016).

2.2.3. Human Capital

‘Human capital’ is defined as the skills, knowledge, and experience possessed by an individual or population, viewed in terms of their value or cost to an organization or country (Oxford Dictionaries, 2020). In his assertion, Becker (1993), the founder of human capital theory, defined “human capital as the investment of organizations in training to increase employees’ knowledge, expertise, and skills, which ultimately may maximize organizational productivity and outputs.” He emphasized that

through human capital, the quality of efficiency improves and employment prospects increase; especially employees achieve the goal in the form of high-developed individual capability, and organizations can acquire further valuable benefits beyond their whole industry area (Sweetland, 1996; Kaplan & Norton, 2004; Nafukho et al., 2004; Khasawneh, 2011). According to recent findings (Luthans et al., 2004), human capital and knowledge development are strongly connected terms. Human capital is also regarded as the development of knowledge, experiences, and skills (Kaplanidou et al., 2021). Furthermore, this capacity of human capital can be developed by employees themselves as a sustainable development factor by learning new skills and perfecting old ones while on the job (Becker, 1993).

Human capital is an intangible asset or quality, and it can be regarded as the value of a worker's experience and capacity. This includes assets like education, intelligence, skills, health, operating experience, and other things organizations value such as loyalty. While not all employees can be considered to have the same human capital, employees can improve and develop the quality of their capital by managing their work and gaining experience (Kenton, 2020b). Moreover, it can represent personal competencies and knowledge that increase the workforce's capability for

their job, produce economic value, and promote organizations' value by sustaining their ability in the marketplace. Also, this term is connected to all types of output of the workforce in organizations

To summarize, it may be that other research areas view the workforce associated with it in slightly different ways and terms. However, it is described by the correlation of similar words, so this paper seeks to accommodate a breadth that other available terms do not afford by adopting the meaning of workforce to cover all related terminologies by applying the workforce definition (Baum et al., 2016).

An organization's employees are regarded as a significant component of its total value and an equally significant component of its capital. This is strategic human capital management (HCM), often referred to as workforce analytics (Cokins, 2009).

This study takes the word of Human capital and its definition (the skills, knowledge, and experience possessed by the workforce, viewed in terms of their value to a country or organization). Also, based on related research, this study adopts the concept that human capital is regarded as the development of knowledge, experiences, and skills (Kaplanidou et al., 2021) and human capital and knowledge development are strongly connected terms (Luthans et al., 2004).

2.3. Understanding Organizing Committee for the Olympic Games (OCOG)

Sports businesses, especially large organizations like OCOGs, must manage their time, energy loss, budget, and human resources to reach the goals of their organizations (Unlu et al., 2012). In particular, organizations must devote to managing their workforce for the effective and efficient organization of their operations (Khasawneh, 2011). Unlike permanent organizations, OCOGs are formed to prepare and deliver an event rapidly and are disbanded upon completion of the event (Theodoraki, 2007). To deliver successful Olympic Games, it is crucial for OCOGs to manage their organizations well, specifically employees who are committed to the goals of the event. Developing strategies for managing expert staff are important not only to the success of the OCOGs and the IOC but also to the successful operation of other sports governing bodies that host international sports events (Hwang & Jang, 2020).

2.3.1. Overview of OCOG

If a candidate city wins the bidding process for hosting Olympic Games, and the hosting discussion is well completed, within 6 months the host city establishes the Organizing Committee for the Olympic Games (OCOG) with the approval of the IOC. OCOGs have several characteristics.

Typically, OCOGs are temporary organizations that are responsible for the planning and delivery of the Olympic Games by growing rapidly, and after completing their mission, those organizations are disbanded (Odio et al., 2013). Because OCOGs have limited time and a finite future, they bring people with the necessary skills and plenty of experience to deliver the Olympic Games and then they ask people to work hard to complete the overall project (Xing & Chalip, 2009).

So, from the perspective of an organization, it is essential to make an effort into solving the issue related to human resources to overcome an uncertain environment and challenging situation (Weerakoon, 2016). OCOGs deal with complex tasks that cannot be solved without employees and their capacity to cooperate with various sectors and working units during a fixed short time period (Hwang & Jang, 2020).

The OCOGs are essentially established with the goal to deliver Olympic Games successfully. Once this goal is achieved, the organization ceases to exist. From the event organizer aspect, it is more significant that its employees are devoted to the goal and can concentrate on their work with their knowledge and skills, rather than on the organization itself (Heere & Xing, 2012).

The OCOGs are in charge of overall event management and running operations in various fields beyond simply sports presentations (IOC, 2013). Thus, the OCOGs perform complicated tasks that are responsible for addressing various issues across diverse categories. Also, all tasks require cooperation with different internal-external and national-international - stakeholders, and many types of service clients (e.g., the Olympic partners, athletes, media, and spectators) (Yarbrough, 2000; Burbank et al., 2001; Hwang & Jang, 2020).

Organizations start with a small number of employees gradually and supplement the employees rapidly before peak time approaches. (e.g., in the case of the POCOG, the initial 1st headcount of employees was 118 and the final 5th headcount was 1,205). Unlike the staff involved in these organizations, the organization focuses only on the current situation and hardly thinks about the situation after the event. In this sense, it can be regarded that if the workforce utilization is planned actively and correctly, the host country can utilize such workforce to gain a competitive advantage in other sectors (Kaplanidou et al., 2021).

According to Lepak & Snell (1999), it can be observed that even though employees own their human capital, organizations, and governments should utilize their expertise to achieve positive outcomes. Moreover, it

noted that according to human capital theory, an organization's productivity lies in the knowledge, skills, and abilities of its employees (Becker, 1993). Formal education and job experience develop an organization's human capital level, as they enable employees to acquire abilities, intelligence, and skills (Smith et al., 2005).

As Holton et al. (2001) research, because by utilizing human capital, the organization can achieve its purpose and is able to create new value, human capital is the most crucial asset of the organization and it is indisputable that this asset should be leveraged to provide optimal value for the organization.

As described by Chelladurai and Kim (2022), People are regarded as the most important element in the management of organizations because it affects the other two elements. "That is, people who make money and materials meaningful as resources and turn them into wealth. For Instance, a stadium becomes a resource only when athletes perform in the stadium and spectators flock to it to see a contest. Even the most modern electronic scoreboard becomes a resource only when knowledgeable technicians are available to operate it and people are present to watch it. These two examples show that a material resource is a resource only when people with

the know-how (e.g., athletes, technicians) use it to serve the needs of other people (spectators).”

So, based on this research, it is clear that human capital has the capability to turn other factors into valuable assets (e.g. by human capital, unused Olympic venues can be tourist sites, youth engagement sports programs and policies can be established, awareness of winter sports can be improved).

2.3.2. Stakeholder theory in OCOG

Work collaboration with various internal-external, and national-international stakeholders is necessary for all Olympic management duties (Burbank et al., 2001; Hwang & Jang, 2020; Yarbrough, 2000). From the standpoint of strategic management, creating a positive Olympic legacy through stakeholder cooperation is important (Black et al., 2019; Leopkey & Parent, 2017).

According to this theory, McGahan (2021) states that "Stakeholders will only remain connected to organizations if they anticipate and ultimately receive sufficient returns on their investments." In order to improve cooperative advantage, the significance of comprehending stakeholder participation in connection to resource management cannot be understated.

2.3.3. Resource-based view in OCOG

Resources are viewed by the Resource-based view (RBV) as the fundamental analytical unit, providing a conceptual foundation for understanding how an organization might develop strategies (Grant, 1991). This is especially crucial in uncertain environmental circumstances (Capron & Hulland, 1999). By framing this study from the RBV perspective, we can get insights into how stakeholders can maintain legacies through strategic resource management, given that the post-Games phase is a period of significant environmental volatility. Given that stakeholder engagement is essential for a lasting Olympic legacy, this research examines how stakeholders manage their internal resources and share external resources (Bell & Gallimore, 2015; Byun & Leopkey, 2020).

2.3.4. Workforce in OCOG

Based on Heere and Xing's research (2012), the employees of OCOGs feel a high responsibility to be involved in operating the Olympic Games and uphold the legacy of the Olympics. Although employees face several challenges in some situations, usually they regard the Games as highly important to their country, and they feel strongly about themselves being a part of the Olympic legacy. Accordingly, because employees contribute to organizational growth and success and they are the main asset

to achieving the organization's objectives, it can be said that employees are the most important assets or resources of an organization (Amin et al., 2014). The Olympic Games offer a unique opportunity to develop highly skilled workforce that sustains the acquired skillset for a lifetime, contributing to human capital development while delivering the Olympic Games. However, it is a fact that Olympic Games are one-time events, the organizations will be disbanded, and employees have to leave their places after completing Olympic Games. From about seven years before, employees with various working experience start to be recruited by OCOGs and are required to deliver on a short-term project with a predetermined and inflexible deadline (Kaplanidou et al., 2021). Staff hired before a few years ago for the Olympic Games become unemployed right after the Games and it remains uncertain how staff deal with the situation of unemployment during a peak period with high workload (Odio et al., 2013).

By delivering the Olympic Games, employees can carry out their tasks efficiently through their knowledge, skill, and work experience. They can also acquire further new and developed factors that emanated from its process. Especially Parent (2008) mentions that for this reason, the work of OCOGs is regarded as special to the staff. In that sense, the Olympic Games offer a unique opportunity to develop highly skilled and qualified

employees that retain the acquired skillset for a lifetime contributing to human capital development.

So, these acquired factors can be identified as one of the intangible legacies that need to be utilized after the Olympic Games (Heere & Xing, 2012; Kaplanidou, 2012; Kaplanidou et al., 2021).

A problem identified by Byun and Leopkey (2020) is that human resources developed through hosting the Olympics have been underutilized. They point out that many people who worked at OCOGs could gain special experience, knowledge, and skill-set in the management of global major sports events. However, despite the importance of this problem, this intangible resource was not managed well after the Olympic Games by gained little attention (Preuss & Hong, 2021).

Through literature review, this paper can confirm three factors. 1. Human resources are one of the organization's most important assets. 2. By delivering the Olympic Games, employees could acquire or develop the human capital of Knowledge, Skill-development, and Education 3. One of the intangible legacies is Knowledge, Skill-development, and Education legacy, this can be regarded as acquired or developed human capital through working in OCOGs.

However, because of the characteristics of OCOGs (disbanded immediately after the end of the games), the matter of responsibility is unclear to find out the way to utilize human capital to develop the host city or country as a long-term plan.

2.3.5. PyeongChang Organizing Committee for the 2018 Olympic and Paralympic Winter Games (POCOG)

The event ended with the closing of the PyeongChang Winter Paralympic Games on March 18, 2018. Major foreign media such as US NBC Sports, BBC, and USA Today reported that the PyeongChang Winter Olympics was a “beautiful and successful Olympics.” According to an article (Kim, 2018), the PyeongChang Olympics received positive reviews in their operating aspect from both national and international press. Especially, "The problem with PyeongChang is...there is no problem", as can be seen from the foreign press, and Thomas Bach, president of the IOC, also stated in an interview, "The impressive memories in PyeongChang are not enough to speak all day long."

The 2018 Winter Olympics was held in the rural city of PyeongChang in South Korea. These games received favorable reviews from national and international media and experts. Peace, harmony, connection, and communication were regarded as the keywords of the

PyeongChang Olympics. The Olympic Games put PyeongChang on the map as a city of development possibility, framing it as a global center for winter sports, tourism, and the birthplace of peace.

The POCOG seized that momentum by maintaining well-managed characteristics that PyeongChang cherishes as a prospective city from a global perspective. North Korea participated in the Olympics by agreeing with South Korea's suggestion under Olympic values. Through a peaceful atmosphere, the two countries marched together in the opening ceremony as one joint team, the united women hockey team played their best with teamwork.

After these events, the 2018 PyeongChang Olympics became the catalyst for South Korea and North Korea to engage in peaceful discourse. Thus, the Olympics were the cornerstone of the two countries' peace discourse. It was recognized by global media beyond Korea that the PyeongChang Olympics was not just an international sports event, but a platform that allowed us to avoid conflict on the Korean Peninsula and create a peaceful flow (Kang & Kim, 2019).

In most cases, OCOGs are composed of several groups of employees with different work experiences, origins, and backgrounds. the POCOG consisted of three types of full-time paid staff across the organization: (a)

professionals directly hired by the POCOG until the end of the Games, (b) seconded employees dispatched from affiliated organizations, including national and local-domestic governments, public service organizations (e.g. National Intelligence Service, police, and fire stations), and affiliated sports organizations such as the Korean Sport & Olympic Committee (KOC) and International Federations (Ifs), and (c) seconded employees dispatched from sponsor institutions and partner companies (e.g. Korean Air Lines, PAGODA, etc.) (Kim, 2013; Hwang & Jang, 2020).

A few months before the Olympic Games, to find ways to outplace professionals directly hired by the POCOG, POCOG contracted a business agreement with Kelly Services, which runs the business recruiting, and discussed POCOG employees' transfer with the next Organizing Committee - Tokyo Organizing Committee for the Olympic Games (TOCOG) and the Beijing Organizing Committee for the Olympic Games (BOCOG).

However, in the case of Kelly Services, it was not practically helpful to professional contract workers because it only provided the basic and general level of employment information, and there were only few people who could be employed at the next organizing committee.

In the case of the Seoul Organizing Committee for the 1988 Olympic Games, after the event was over, KSPO was newly established to outplace

the staff of the Seoul Organizing Committee. However, in the case of the PyeongChang Organizing Committee, similar ways were discussed, but the competition ended without a new way materialized.

It is obvious that the human capital created by taking part in the Olympics is one of the sustainable legacies of the PyeongChang Olympics. The Olympic experience of the workforce can also contribute to the development of sports in South Korea beyond a one-time event. In this paper, “Above all, every part of managing the Olympics is run by staff so the people at the PyeongChang Olympics will be important human capital for Korea and can be fully utilized for other future sports events in Korea. So, it could be a great opportunity for Korea to develop winter sports, the Olympic movement through the human capital of the PyeongChang Olympics” (Kim, 2020).

Chapter 3. Method

After gathering secondary data, and conceptualizing phenomena in the literature review part, the method part was developed to present produced primary data through a qualitative research study. Secondary data helped establish the way of this study by finding the answer to this research's questions, also it helped realize this research's objective. In this chapter, the method way was described to make understand.

3.1. Research strategy and Process overview

This research used the qualitative method of analysis. Data was gathered from a variety of stakeholders with expertise in operating sporting events and specific sports-administration experience. In-depth interviews were conducted with study participants as part of a semi-structured data collection process. Thematic data analysis was used for the data analysis.

A feature of qualitative analysis is obtaining in-depth explanations and understanding of problems, perception of exploratory objectives and finding answers to questions "What?" and "How?". Positive aspects of qualitative analysis include a thorough comprehension of the problem, a unique perspective on participants, it is easier to manage control while approaching the target participants and working with non-standard and

narrower participants (Marshall & Rossman, 2014). However, the disadvantage of qualitative analysis over quantitative analysis is that it is more subjective and difficult to predict.

According to the research purpose and questions, qualitative analysis is more appropriate because similar papers in this area have been done with this method, and the research questions require individual experience and knowledge in the field of organizing mega sports events, as well as a deep understanding of the concept of sports administration and sports culture in Korea. According to Smith and Caddick (2012), qualitative interviews are an effective way for researchers to describe experiences in rich and detailed ways while also providing their point of view and interpretation of the experience.

To make the research more consistent and persuasive, the process of qualitative research, from the research question to the interpretation of the data collected, relies to some extent on subjective assessments and judgments. So, to ensure that valid information was collected, it is recommended that a peer debriefing method be used to increase the validity of the findings of a qualitative study. This method assisted this study in testing the research process from an outside perspective, looking at issues from different perspectives, being critical, and identifying biases and

assumptions made by the researcher. Additionally, it helped the research in better comprehending the approaches, explanations, and interpretation of the perplexing elements of the questions.

Furthermore, because member check procedure aided this study in validating participant responses and completing the member check method was used both during and after the interview. Questionable answers were asked additionally during the interview, after the interview to ensure that all data had already been presented and expressed correctly, participants reviewed the interview transcription.

3.2. Criteria for selecting interviewees

This study used one-to-one semi-structured interviews with 6 participants, most of them in sports administration and sports culture. The participants were selected based on their practical experience and possession of knowledge about the current state of sports in Korea, and Olympic managements understanding of the methods of developing sports in the country through sports events and a critical eye. Used a pre-planned interview guide to ask the participant specific, open-ended questions related to the research question. The semi-structured approach was selected because it was more effective in gathering qualitative and open-ended data.

Furthermore, this study area is useful for delving deeply into participants' opinions, beliefs, and feelings.

Due to the current global pandemic Covid-19 situation and the geographic gap among participants, online interviews were conducted through the Zoom meeting application for some participants who live outside of Korea, but for those who live in Korea face-to-face interviews were conducted. After getting the participants' permission, interviews were conducted while recording with audio one participant at a time, and depending on their nationality Korean or English was used.

The participants are a particularly valuable resource for understanding experiences and meaning through the conversation. Interviews provide new and rich perception of human capital legacy utilization, which helps in learning about the experiences and meanings of participants. Interviews can provide a comprehensive and in-depth view of respondents' decisions, values, beliefs, and perceptions (Smith & Caddick, 2012).

Qualitative research is an exploratory, unstructured research style that uses small samples to offer information and insights into the problem of topic (Malhotra et al., 2006). This study used a purposive sampling of qualitative research. To acquire the most important detailed information for

achieving the goals of this study, this sampling was selected. Furthermore, rather than drawing statistical inferences, the goal of this study is to gather comprehensive knowledge about a particular event. Additionally, the largest study in this study included the subjects listed below. The brief details of the participants are outlined in Table 1.

Table 1

List of participants

Participants	Age group	Continent	Stakeholder group
Participant 1	50	America	IOC
Participant 2	60	Europe	IOC
Participant 3	50	Asia	Central Government
Participant 4	50	Asia	Central Government
Participant 5	50	Asia	Local Government
Participant 6	60	Asia	Local Government
Participant 7	50	Asia	POCOG
Participant 8	40	Asia	POCOG

Participants were selected based on their experience of taking part in Olympic Games operation, experience and knowledge in the field of organizing mega sports events, as well as a deep understanding of the concept of sports administration and sports culture in Korea. The age of participants was from forties to sixties and stakeholder group distribution was IOC 2, Central Government 2, Local Government 2, the PyeongChang

Organizing Committee for the 2018 Olympic and Paralympic Winter Games (POCOG) 2.

3.3. In-depth individual interview process

For this study, in-depth strategy interviews were conducted. These interviews allow for the gathering of information about the overall context as well as the process. This strategy was chosen because the views and opinions of the participants by key stakeholders on human capital utilization should be revealed in the way that each different individual by stakeholders sees it, as well as how this study sees it, with detailed information for further discussion expected.

In-depth interviews allow the interviewer to establish relationship of trust with the respondent, which opens up the possibility of obtaining unique information that would be difficult to obtain using other methods. It is more appropriate to use this qualitative analysis tool when the goal of the research is to reveal and describe the participants' perspectives on specific events. Marshall and Rossman (2014).

Given the limitations of this qualitative analysis strategy, the researcher needs to be as attentive and tactful as possible during an in-depth interview: it should be conducive to a confidential conversation, arouse respect and trust in the interlocutor, and set the stage for natural behavior.

The interviewer should not be overly confident or express personal judgments about the respondent, as this can all have an impact on the quality of the information received.

The quality of information obtained during in-depth interviews is much richer because the responses are not influenced in any way by other people's opinions or statements. Participants can easily express their opinions and thoughts (Marshall & Rossman, 2014). Thematic data analysis of qualitative data was used in this study to identify common themes, ideas, and semantic patterns of data obtained through interviews. The following six steps of analysis were used to analyze the data:

1. Familiarization (transcription of data, making notes, reading, and re-reading in general)
2. Coding (doing memos with the main idea of each section, highlighting different and same ideas, categorizing each idea and expression)
3. Generating themes and sub-themes (lookup at all created coding and find same and different codes, the same coding combined to one theme, find special and unique ideas from data)

4. Reviewing themes (verify that the theme accurately represents the data, go back to the data, and compare it to the themes and subthemes.)
5. Defining and naming themes (define and naming each theme and sub-themes, confirm that each theme and sub-themes name describes data correctly)
6. Writing for presenting the study (translate quotations into English, write findings, and describe themes and sub-themes).

The interview questions were developed after reviewing academic articles with similar research objectives and methods and were followed by a semi-structured interview question. The interview included main questions, additional questions, and backup questions that assisted in answering three research questions for this study. At the start of each interview, participants got personalized questions containing general data and information about their professional character such as job position, work experience in sports, and so on, since this information was used to help to contextually characterize the participants' answers.

For a more thoughtful response and thoughts, the participants were informed on the main points of the interview questions prior to the

scheduled interview day. It was also reported that further questions may be asked for a more complete response. It was mentioned at the start of the interview that all ideas and thoughts expressed in the answers would be used only for the academic purposes of this study.

3.4. Interview guide and Ethics

The successful outcomes of the interviews depends on how well researchers expected and prepared for their part in ethical issues (Marshall & Rossman, 2014). According to related research (Malhotra et al., 2006), ethical concerns raised by respondents about qualitative research include disclosing the study's objective, conducting videotaping, assuring the respondents' comfort, and misusing the research's findings. So, before interview of this study, the main purpose of interview was reported, and it was also informed that the audio conversation would be recorded. Moreover, it was mentioned that all response and ideas of the participants will be used exclusively only for academic purposes in this study.

Chapter 4. Results

Thematic data analysis is used in this chapter to present the study's findings. The objective of this study was to find answers to three research questions. The responses to the research questions posed were summarized into concrete findings based on interviews with eight participants.

4.1. Overview

Based on thematic analysis, the coding of the main ideas of the participants' responses and the following themes and sub-themes are identified in Table 2.

Table 2

Coding of themes and subthemes

Research Questions	Themes	Sub-Themes
RQ1. What is the perception of human capital legacy from the viewpoint of the stakeholder?	Perception	Human capital legacy Current situation
RQ2. What was done to utilize human capital legacy by each stakeholder?	Effort Difficulty	Effort of IOC, Government, POCOG Difficulty of IOC, Government, POCOG

RQ3. How can human capital legacy be utilized sustainably?	Necessary elements	Governance, Recognition, Structure independence	Budget, Timing,
	Practical utilization	Utilize existing structure, establishing new system	

When conducting research, it is critical to collect relevant and correct data from carefully selected participants (Smith & Caddick, 2012), From Table 3, clearly shows that most of the participants have many years of experience in the development of sports and the PyeongChang Olympic operation as key stakeholders, and hold a leading or management position in the organizations. The general characteristics of the participants are presented below in Table 3.

Table 3

Participants' characteristics

Participants code	Job Position	Total work experience	Olympic management experience	Stakeholder group
Participant 1	PEM FA Director	20	15	IOC
Participant 2	Technical Director	30	20	IOC

Participant 3	Department head	27	3	Central Government
Participant 4	Department Head	30	4	Central Government
Participant 5	Team Head	22	9	Local Government
Participant 8	Director General	30	10	Local Government
Participant 7	Senior Manager	20	3	POCOG
Participant 8	Senior Manager	16	2	POCOG

The data coding analysis and frequency of responses from participant interviews are shown in Table 4. Furthermore, it is possible to find out how the data has been sorted by specific themes.

Table 4

Frequency of participants' responses

Themes	Participants							
	P1	P2	P3	P4	P5	P6	P7	P8
RQ1.What is the perception of human capital legacy from the viewpoint of the stakeholder?								
Perception of human capital legacy	x	x	x	x	x	x	x	x
Perception of current situation	x	x	x	x	x	x	x	x

RQ2. What was done to utilize human capital legacy by each stakeholder?

Responsibility-IOC								X	X
Responsibility-Central Government	X	X			X	X	X	X	X
Responsibility-Local Government			X	X	X	X	X		
Responsibility-POCOG	X	X	X	X	X	X	X	X	X
Effort	X		X		X			X	X
Difficulty	X		X		X	X	X	X	X

RQ3. How can human capital legacy be utilized sustainably?

Governance, budget			X		X			X	X
Recognition, timing	X		X		X	X	X	X	X
Others			X					X	X
Utilize existing structure		X	X		X	X	X	X	X
Utilize new system	X				X	X	X		

4.2. Perception from the perspective of stakeholders

Through the answers of the interview participants, it was possible to confirm the difference in perception of human capital from the perspective of key stakeholders in the operation of the Olympics. Most participants in

the study responded to human capital, saying, "the main characters who made the Olympics successful," "historical beings who made everything impossible possible," or "there is no Olympic game operation without human capital." In other words, human capital is an essential, valuable existence and positive evaluation in the operation of the Olympics. In particular, the study participants explained that the experience of operating the Olympics is not only an individual's asset but also a social and national asset through the memory of the PyeongChang Olympics.

However, different opinions could be heard when asked about the current situation of human capital use. Although human capital was recognized as a legacy and human capital itself was recognized as a positive factor by all respondents, the reality of sustainable use was negatively answered. This sub-chapter covers finding to RQ1 "What is the perception of human capital legacy from the viewpoint of the stakeholder?" Based on the response of the participants, it is described how human capital legacy is perceived from different viewpoints of stakeholders. Most interviewers rated the knowledge, experience, and skill acquisition gained from the operation of the Olympics as personal assets.

The Olympics changed my whole life. As a general public servant, I did a completely unfamiliar job, and it was a chance to feel great interest as I encountered a sports event rather than a general

administrative job. With the Olympics as an opportunity, I really wanted to study sports event management, so I went to Switzerland to study and returned after completing my master's degree course. (Participant 3)

The interviewees talked about their own experiences but also described the colleagues they observed. Employees who worked in the Organizing Committee (POCOG) talked about how the knowledge, experience, and skills they gained from running the PyeongChang Olympics were valuable in their lives. An employee who was in charge of HR work at POCOG (Participant 8) said of POCOG employees, "Hired employees (professionals directly hired by the POCOG until the end of the Games) had sufficient qualifications and even though they had not competed in the Olympics, the job The experience, degree, etc. to be able to do this were very sufficient. The qualities of such competent people are great." Regarding seconded employees (seconded employees dispatched from the affiliated organizations, including national and local-domestic governments), "employees dispatched from each central local government public institution have performed their duties sufficiently, and reference checks and personnel record cards are reporting and screening procedures were all completed. I tried to assign the right person as much as possible.

The team leader also had an interview. I double-checked it through a reputation check,” and highly evaluated the quality of POCOG's personnel.

Participant 6 highlighted that the workforce is the primary factor in the successful management of the Olympic Games. This is not only the case for the PyeongChang Olympics but also for other mega-sporting events. The expertise of professionals in related fields and the administrative competence of both state and local governments are crucial to the preparation, execution, and completion of the Games. Without experts in the field, the Games cannot proceed efficiently. The workforce, including both directly hired professional staff and those dispatched from various sectors, is a key factor for the successful management of the Olympic Games.

In particular, the interviewees talked about human capital as a being that should be used not only at the individual level but also at work of a similar nature in a mega-sport event to be held by the country. Participant 5 noted that:

I consider myself to be my biggest legacy when it comes to the Olympics. In fact, after I returned to my organization, I often heard from my colleagues, ‘You are PyeongChang Olympic legacy itself.’ After experiencing the Olympics, I came to understand the mega-sport event management system. Gangwon province did not have much work related to such an event. I have become an expert in this field. Even after the Olympics, he continues to be in charge of planning international sports events hosted by

Gangwon province and running businesses. In the future, even after retirement, I want to work in setting up sports programs.

Also, Participant 6 discussed how their involvement in the Olympics was a significant aspect of their professional life. Participant 6 stated:

I dedicated a significant part of my career, about one-third (roughly 10 years), to the PyeongChang Winter Olympics. This event encompassed my entire work life. As a public official, I regard this as an invaluable experience and opportunity. It's an unparalleled chance to strive for world-class excellence in managing a diverse workforce, including state and local officials, sports organizations, companies, public organization staff, private sector experts, and volunteers.

In addition, most of the actual participants said that the knowledge, experience, and skill acquisition of the Olympics continue to this day. Most of the participants are doing post-Olympic work related to sports marketing, sports administration, and other mega-sports events. Participant 3 said that the knowledge, experience, and skill acquired at the time of the Olympics are contributing not only to individuals but also to the development of local and national sports. Participant 8 mentioned that:

The department I am currently working in is the sports marketing team, so it is very helpful. In particular I got a personal net. In fact, I had no

experience in the field of sports, but I learned a lot of knowledge after working in the Olympics, and I came to know the situation of each sports institution well. Since I had this experience, after returning, the HR team assigned me to the sports department. Because I know how to approach the sports event business, it is very easy to promote my work. My colleagues who worked at POCOG like me also returned to the original Olympic organization and were often assigned to the sports department.

However, compared to their value as human capital, most of the respondents expressed regret at the reality that they could not be utilized by blaming other stakeholders for this situation.

In my personal opinion, it is very wasteful not to utilize the staff of the Olympic Organizing Committee (POCOG) in the current sports field. Since there was no process to pass on all of their experiences, it seems that there will be no scouting system in mega sports events held in Korea. For the future, no one was listing operational personnel information or managing the human resource pool in particular. (Participant 3)

In particular, professional people have got tremendous experience from the Olympic management and are national assets, and they have contributed greatly to raising the national prestige. I will continue to do mega events like this in the future, but these things will be similar, only the games will be different. It was very unfortunate that there was no entity to manage them. It is very regrettable that hired staff are out of a job in an instant. Seconded staff are likely to continue to do related work and feel the need to manage the staffing pool. It would have been nice if the government,

especially the Ministry of Culture, Sports and Tourism, managed this workforce pool and used it sustainably. (Participant 7)

4.3. Effort to utilize human capital legacy

According to Gratton and Preuss (2008), the OCOG's workforces achieve professional skills and knowledge in areas such as event operation, and project management by delivering Olympic Games. Moreover, knowledge development is one of the intangible legacy aspects, particularly among organizational employees. However, despite the fact that the sector of knowledge development of the workforce who deliver the Olympic Games is regarded as one of the intangible legacies, this sector has received little attention in the sports management field (Kaplanidou & Karadakis, 2010).

In the case of the PyeongChang Olympics, the human capital legacy was not systemically utilized well. Therefore, in this chapter, we will find out what efforts each key stakeholder made and in next chapter what limitations there were for the development of the human capital legacy of the Olympics. This sub-chapter covers finding to RQ2 “What was done to utilize human capital legacy by each stakeholder? Based on participants’ responses.

4.3.1. Effort of IOC

Each Olympic Organizing Committee (OCOG) is recommended to carry out Olympic operation tasks step by step based on the social situation of the country according to the technical manuals provided by the IOC while preparing for the Olympic Games. That technical manual has guidelines for each FA (Field Area), which shows the IOC's efforts to develop the Human Capital Legacy.

- Information, Knowledge and Games Learning (IKL) by Technology and Information Department: According to the Information & Knowledge Management (IKM) document by IOC (IOC, 2022), The IOC created Olympic Games Knowledge Management (OGKM) in 2003 to improve knowledge transfer to OCOGs, as well as an Information & Knowledge Management (IKM) unit to serve the IOC administration. In 2020, these were combined to form the current IKL.

IKL's mission is to "Promote and stimulate both innovative and integrated learning related to Olympic Games delivery." Among the key principles of IKL is the belief that knowledge is the IOC's most valuable business asset and that every individual working with the IOC is a knowledge worker with the right to access quality knowledge from a variety of information sources (IOC, 2022b).

The IKL unit works to: (1) Encourage and enable OCOGs to share their knowledge with each other; (2) Understand the context and learning requirements of each OCOG in order to develop flexible learning opportunities and services; and (3) Support OCOG discovery and capability through transfer of knowledge materials and learning opportunities.

The IKL unit includes: (1) Games reference materials, (2) Observational learning, (3) Debriefing, (4) Games Operations data and analytics

- Outplacement program by people management department: According to the Olympic technical manual of People management (PEM FA), it recommends to the next host OCOGs hire some staff from the previous host OCOGs. It is able to utilize human capital, and actually, Tokyo and Beijing organization committees hired 5 to 10 staff of PyeongChang. However, this case is just only for 5-10 people and in terms of human capital legacy utilization is only for the Olympic Games not as general sectors social or broad sports aspect.

4.3.2. Effort of Government

- Central government: The PyeongChang 2018 Legacy Foundation was established under the leadership of the central government. After the PyeongChang Olympics, the Ministry of Culture, Sports and Tourism

consulted with related organizations such as Gangwon province (Local government) on the issue of establishing a legacy foundation with the Olympic surplus, and eventually established it in 2019 and Gangwon province passed a revised ordinance to designate the PyeongChang Legacy Foundation as an investment organization and support it. The PyeongChang legacy Foundation has a mission to preserve and develop the legacy of the 2018 PyeongChang Olympic and Paralympic Games. Based on the vision of expanding the base of winter sports and spreading 'PyeongChang values', Olympic legacy projects (Dream Program for fostering winter sports in developing countries, Sohorang Bandabi Sports Camp, etc.) are being promoted. However, unlike the slogan of Sports, peace and people, there seemed to be no concern about the legacy of Human Capital.

- Local Government: International training programs for employees conducted. Participant 5 explained that local governments have shown efforts to utilize the human capital legacy. “Gangwon province is also an underdeveloped region and there are not many opportunities to hold international events. However, after the Olympics, a lot of staff experienced the Olympics and learned a sense of business. I think the mindset and capacity for international sports events have changed positively. I think that

experience can be very helpful in promoting future work such as revitalizing sports and managing other sports events.”

In particular, the governor at the time created an overseas training project for the purpose of internationalizing employees. In order to maintain the ability to operate international sports events in the future, Gangwon Provincial Government officials have been continuously trained and prepared for future mega-sport events. It is a rule for those who have been abroad to work in a related field (Sports marketing, event management) for three years.

Also, according to Participant 6, KSPO was established after the 1988 Seoul Olympic Games to manage the legacy of the Seoul Olympics and promote follow-up projects, which have been effectively advanced.

However, it is inefficient to separate legacy utilization between the Summer and Winter Olympics. Thus, revising related laws to unify these activities is urgently needed. The local government of Gangwon province has persistently proposed and consulted on this issue, but execution has been hindered due to obstacles such as budget constraints and the central government's passive stance.

- Central and Local government: It seems that the government had a desire to specially manage employees who returned after performing

Olympic duties. The reason is that staff with Olympic experience were assigned to the sports development department or to the TF team in charge of planning and operating other international sports events. Efforts to continuously utilize the government's human capital legacy, such as sending dispatches to other international sports organizing committees, were also confirmed. However, it seems that government agencies only cared about the management of public officials, and no special efforts were made by the organizing committee or directly hired professional employees.

4.3.3. Effort of POCOG

- Revision of special law: As indicated in Chapter. 3, in the case of the Seoul Organizing Committee for the 1988 Olympic Games, after the event was over, KSPO was newly established to outplace the staff of the Seoul Organizing Committee. So, in the POCOG, similar ways were discussed.

A summary of Participant 7 statement is as follows.

After the 1988 Seoul Olympics, the KSPO was created and absorbed the personnel of the organizing committee. I hope that a structure or organization will be created to fully utilize the talented Pyeongchang Olympic personnel and use Pyeongchang's personnel for the development of Korean sports like the current KSPO. This idea was ordered by the director general of people management. So, this attempt to amend the law could be pushed forward quickly. We often had meetings with the staff of the Ministry of Culture,

Sports and Tourism. The director-general also noted that employees with experience in the Olympics are so good, and the expertise of these personnel needs to contribute to the development of Korean sports. However, the Ministry of Culture, Sports and Tourism objected. The Ministry of Culture, Sports and Tourism did not agree that lawmakers should revise the law and proceed to the next procedure only when the Ministry of Culture, Sports and Tourism, which is in charge of the ministry, was led. We should have proposed a business by presenting data logically and academically, but we failed. There are few of research data on how to use the people who have experienced the Olympics, and the 1988 Olympic Organizing Committee case was the only precedent to refer to. It would have been nice if there was enough data to emphasize the importance of human capital regency itself or its value. These projects should be done by a powerful central government, and I felt that the organizing committee lacked power. Rigging the law required a complete political approach. I felt that the previous administration only used this event, but was not interested in post-use. I even felt like sports were used as a political tool.

However, concerning the enactment of the special law, Participant 4 indicated that the Ministry of Culture, Sports, and Tourism might have opposed it due to issues of fairness with other mega sports events and equity in the public recruitment process.

- Outplacement: The PyeongChang Olympic Organizing Committee carried out a re-employment recommendation project for the next Beijing and Tokyo Olympic Games. In particular, the outplacement business was

promoted by contracting with an agency that supports the re-employment of directly hired employees. However, in the case of this business, it was only at the level of providing job information and self-introduction service, so it was not practical help for professional contract workers, most of whom had experience. In addition, the number of people who can be hired as the next organizing committee is small, so it is difficult to see that it has had an impact on the actual practical utilization of general aspect of Human Capital Legacy.

- Production of white paper: After the Olympics, the PyeongChang Olympic Organizing Committee produced a white paper for the PyeongChang Olympics, which recorded how the Games were operated from hosting to closing. However, like Participant 3 opinion, the white paper is about how the Olympics was managed. Usually, when referring to other international events, we always look for white papers first. We also looked for white papers related to other mega sports events. I wanted to contact the people in charge at the time, visit the area myself, or find information from people who had held the event. The PyeongChang Olympics also lacked examples of post-utilization of human capital legacy promoted by other organizing committees. It would have been of great help to the organizing committee of the next Olympic Games if the

PyeongChang Olympics had detailed examples of post-utilization of the human capital legacy promoted. We didn't have enough to write about because we didn't play much of a practical role. Usually, the white paper highlights only the good points.

4.4. Reason for the difficulty of sustainable use

In the previous chapter, this paper looked at what efforts each key stakeholder made to utilize the Olympic Human Capital Legacy, but despite such efforts, it can be seen that the actual effect was insufficient. In fact, considering that the utilization plan, countermeasures, and system, which are still in the uncertain works, have not been prepared, this paper tried to ascertain why this is so through the opinions of key stakeholders in the Olympics. Each stakeholder had different opinions. Therefore, the diagnosis of the problem was also different.

4.4.1. Difficulty of IOC

Regarding the question of what responsibility, the IOC has for the issue of using the Human Capital Legacy, participants 1 and 2 described that the matter of utilization of human capital legacy is responsible for host country rather than for IOC. “Any efforts at post-games legacy in this area are up to the host” (Participant 1), “The IOC will not do it. IOC has to go

forward to host the next Olympics. OCOG that does not exist anymore so it is legacy foundation or other governments in Korea can do it together with the organization employed by these people.” (Participant 2)

As for the reason, Participant 1 said that the IOC lacked awareness of the use of human capital. In other words, although the IOC recognized that human capital itself has important value, it was found that it lacked practical ways, effort, and thought necessity to utilize for the host country.

This is a new area that IOC should take note in, such as workforce management and its legacy utilization after games, so there may be something in the future. Since the labor law and practices vary widely from country to country, the IOC's interest in examining them and securing a strong human capital legacy seems to have not been great until recently.

4.4.2. Difficulty of Government

- Central Government: Central government tends to blame this situation on the other stakeholder groups.

Participant 3 asserted that “Participation in the Olympics was not forced by the state, and participants did not participate while giving up their interests or rights but participated voluntarily replied. Judging from these answers, the central government recognized the PyeongChang Olympic

Games as an example like any other event and responded that it was not a matter of responsibility for the central government.”

In other sports events (Incheon Asian Games, Daegu World Championships in Athletics, etc.), we know that human capital is not well managed after such international sports events. Why should only Pyeongchang be given special preferential treatment? Also, we have already spent huge national budgets on running the Olympics. However, spending additional budget for this human capital management is impossible.

Additionally, Participant 4 noted that since the Olympic Organizing Committee is dissolved a few years after the Olympic Games, the management of the entire legacy of the event, including human capital legacy, should be planned and supervised by the Gangwon Provincial Government, a local authority.

Based on the opinion of regarding the management of human capital legacy from Participant 3 and Participant 4, Drawing on the insights of Participant 3 and Participant 4 regarding the management of human capital legacy, it appears that, despite the Olympics being principally hosted by local governments who play the central role, Korea still perceives the Olympics as a state-led event. Therefore, there is a strong tendency to depend on the state from preparation for the Games to follow-up

management. "I think the management of Human Capital legacy is the role of the Olympic Organizing Committee (POCOG) rather than the role of the central government. The Organizing Committee should have actively managed human legacy from the beginning in the process of preparing for the Games, but I think it was insufficient." This explained that the responsibility of human capital legacy utilization lies with the POCOG or the local government, Gangwon province, rather than with the central government.

In summary, the attitude of the local government, which arbitrarily wanted to host a mega-sport event, to rely on the central government for major issues (Legacy management, Budget, etc.) made the local government passively think about practical ways to utilize the legacy.

- Local Government: The local government cites awareness, sense of belonging, legacy, and financial resources as key challenges in utilizing human capital.

Participant 6 mentioned that after the PyeongChang Olympics, the management of the human capital legacy has been virtually nonexistent. The reasons for this are:

Firstly, there is an issue with awareness. "As someone with Olympic experience, I noticed that after the event, there was neither interest nor

opportunity to make use of the experience. The importance was simply not recognized." In order to utilize the human capital legacy, it's necessary to presume that sports promotion can develop in a broad sense in Korea, or that the experience from the Winter Olympics can be used for other major sports events.

Secondly, there is the issue of belonging. Once the event concludes, personnel dispatched from the national and local governments, as well as related organizations, return to their original roles, and professional staff directly hired by the PyeongChang Organizing Committee for the Olympic Games (POCOG) no longer have a sense of belonging to the event. Thus, they have fewer opportunities to continue related work unless they join a similar organization or acquire a related job position.

Thirdly, the legal and financial mechanisms to manage and operate the human capital legacy have been neglected. Considering the Olympic Games experience as an international and professional undertaking, it would be appropriate to implement these tasks at the level of the Ministry of Culture, Sports and Tourism. Managing, transmitting, and preserving and developing resources through a specific organization is insufficient. While the central government and local governments collaborated to host mega-sports events from the bidding process, the issue of legacy utilization should

be principally managed by the Ministry of Culture, Sports and Tourism. Because various public organizations, companies, and sports organizations have extensively participated in managing the Olympics, it will be difficult for the task to be managed solely at the local level. Access, operation, and follow-up management need to be centrally coordinated at the national level.

In addition, managing these efforts at the central government level is efficient for successfully hosting future predicted mega-sporting events or for the overall development of the Korean sports sector by utilizing the human capital legacy. To this end, sustainable management of the human capital legacy is required. Specifically, there is a need to devise a plan to maximize its utilization, particularly when necessary, through collaboration between the central and local governments in areas like sports marketing, mega sports event planning, and management.

In summary, the reasons why the central government did not manage human capital legacy well could be summarized as (1) equity issues with other mega sports events (2) issues of additional budget costs (3) perception of lack of independent operation by local governments.

Participant 5 mentioned that, “I think this is a matter of governance after all. The 1988 Seoul Olympics was promoted by the state, and because it was a first-time event on a large scale, it was possible to create an

organization (KSPO) to absorb employees who worked in the organizing committee. However, during the 2018 PyeongChang Olympics, there was no power due to the promotion at the local government level, and I think that I was in a hurry to hold the event and did not pay attention to follow-up management.”

Regarding the reasons why the human capital legacy is not being utilized well in the aspect of local government, it can be summarized as (1) the lack of sufficient support from the state (Include central government) from the beginning of the operation to the post-contest due to the promotion of local governments (2) the lack of governance (Main actor who do action and has legal and financial foundation (3) the lack of awareness of human capital legacy

4.4.3. Difficulty of POCOG

There was a ‘sustainable use team’ within the organizing committee, but it seemed that they were only concerned about eco-friendly strategies related to venues and infrastructure, and less concerned about human legacy. Even the IOC TM (Technical Manual) did not point out how to manage the Olympic workforce (Human capital). Outplacement projects, job fairs, employment consulting, etc. were promoted for the welfare of employees, not for the purpose of utilizing human legacy. It can be seen as mainly a

morale boost for the employees of the HR team. POCOG arranged and applied for outplacement as a morale-boosting project, but the results did not meet expectations and the satisfaction of the employees was not that high.

Based on participant 8 explanation, this problem appears to stem from a lack of systematic central government support. Since the financial key lies with the central government, the Ministry of Culture, Sports and Tourism should have supported the issue of utilizing this Human Capital legacy. The Ministry of Culture, Sports and Tourism had to make a 'surplus Olympics' unconditionally by thinking only of the logic of absolute surplus. In other words, only what was seen was important and urgent. But intangible values such as human legacy were so neglected. The IOC is also focusing on hosting the Games. The IOC also focused only on hosting the Games and shouted that the legacy of the Olympics was important, saying that the management of it was entirely up to the host country.

I strongly agree that the responsibility of the host country is the greatest, but some recommendations or manuals were also needed at the IOC level. In the TM (Technical Manual) that we often see, refer to, and study, the importance of human capital legacy should have been emphasized. If so, the plan to utilize human capital would have gained more strength and been actively pursued. Since the

Organizing Committee is a group of people gathered for “Olympic operation” in the short term, it is difficult to promote follow-up management. Eventually, the Organizing Committee was dissolved. If the management of human legacy should have been promoted, based on the manual, which department should be in charge at the initial stage of the organizing committee operation, it should have been planned in an effective way with grounds based on support from the central government and the IOC.

In summary, the difficulty of not well managing human capital legacy by POCOG could be summarized as (1) the lack of sufficient support from the other stakeholder (IOC, Central government) (2) the lack of IOC's institutional basis for support Recognition of the importance of utilizing Human Capital and its utilization manual

4.5. Necessary elements for human capital legacy utilization

Based on the participants' explanation, it could be seen each stakeholder's willingness to recognize human capital as valuable and utilize the legacy from their point of view, but that was not connected in a practical way. In the previous sub-chapter, it was possible to point out why it is difficult for stakeholders to utilize human capital. This sub-chapter covers the finding to RQ3 “How can human capital legacy be utilized sustainably?” Based on the participants' answers, it was possible to reveal what essential

elements are needed for legacy utilization and what practical utilization plans are.

4.5.1. Governance and Budget

The answer to the issue of utilizing human capital legacy was that there was no "Central operating body" in common in the answers of the three stakeholders. It can be said that there was a lack of governance to play that role. In particular, among stakeholders, the Government and the POCOG group agreed that it was difficult to proceed with the work because there was no system for "Subject", "Time", and "Method". Even the IOC said that the issue of using human capital legacy is up to the host country. In other words, "Korean government and POCOG needed to be the subject of the entire Olympic legacy, including human capital legacy." Kang (2017) stated that the government of the hosting country should prepare legacy development and establish good governance between the central government, local government, and business sectors in his speech during the Olympic Games Pyeongchang Legacy Symposium. Additionally, create a "Proactive, strategic, integrated legacy plan" and a "Framework for successful and efficient implementation."

There was nobody to manage the utilization of the Olympic legacy. No one would have felt responsible

because there was no governance. (Participant 5)

Based on the opinion of participant 7, the organizing committee and the government may have been concerned about governance as a whole, but after the events, the issue of utilizing the legacy should have already been prepared before the events began. Governance on budget and planning was prepared in advance and had to be continued. However, as soon as the event was over, all the work was cut off, so it was not possible to suddenly discuss the issue of utilizing the legacy. The people who had to solve the problem were all gone after the Olympics.

Most of the Summer Olympics' venue facilities are used very well, but the Winter Olympic venue facilities are very expensive to maintain. Local governments' finances are not enough and it is very difficult to manage them entirely. That's why the central government should take care of it. Not only venue but also operating personnel are linked to the budget, so planning and operation should be promoted centrally. The Korea Sports Promotion Foundation is also a governmental organization under the Ministry of Culture, Sports and Tourism. In particular, the POCOG was also an organization that disappears, and the organizational employees have no power. External support would have been very necessary for them to create a system for themselves. (Participant 5)

The focus was only on the opening and successful hosting of the Olympics, so all administrations and budgets were designed to be spent during the Olympics. Therefore, he neglected the work that had to be organized after the events. In particular, after the events, the seconded employees dispatched from the governments, just escaped like low tide to return to their original institutions and all disappeared.

4.5.2. Recognition and Timing

As discussed in the previous sub-chapter, POCOG planned the enactment of a special law to utilize human capital reagency and officially submitted it to the Ministry of Culture, Sports and Tourism, which is a higher organization. However, the Ministry of Culture, Sports and Tourism rejected the proposal because of "Equity with other mega sports events" In this regard, participant 7 stated that it was difficult to promote the project due to the lack of awareness of human capital legacy and that the timing of the promotion was missed.

I think that the prerequisites for us to promote human capital legacy projects are the thorough collection of policy needs, logic, and data. Therefore, there should have been many materials, workshops, or academic conferences to justify the business, such as papers and journals related to human capital reagency. So, if the government had also reflected these arguments as national policies and supported

the project with interest, a good policy would have come out.

In addition, another participant regretted that if the IOC recommendation or technical manual following the operation of the Olympics had specified the use of Legacy, it could have been considered in various ways earlier.

The IOC is the organizing body of the Olympics, which only gives licensing, supervises and leaves after the event, and the organizing committee will lack precedent on how to utilize this legacy and will not know where and how to promote it. I wish there were any recommendations in the technical manual. Everyone probably didn't know where to start and how to start. (Participant 8)

The IOC (Participant 1) said “This is the key that the host country has enough attention. All legacy-related projects not only for Human capital legacy, must need the host country’s attention” and asked for the host country’s attention. However, the government and POCOG groups seem to have missed the timing of promotion because the issue of using human capital legacy was overlooked for reasons such as (a) insufficient precedent data (b) lack of awareness (c) lack of experts in the human capital legacy field.

4.5.3. Structural independence

Earlier, it was stated that the responsibilities of each key stakeholder in the Olympics were unclear due to the lack of governance and system.

A Mega sports event is basically an event hosted by a local government who is the main character. Nevertheless, as Korea still recognizes events such as the Olympics as state-led events, there is a strong tendency to rely on the state from preparation for the Games to legacy management. (Participant 3)

As the central government (Participant 3) answered, both local governments and POCOG repeatedly answered that they lack active support from the central government when asked about their responsibilities. Accordingly, the issue of human capital legacy in the PyeongChang Olympics can also be seen as the attitude of the POCOG and the host cities of the Olympics depending on the central government.

4.5.4. Protection from political purpose

Finally, there was an opinion that one of what needs to be improved for human capital utilization was that the Olympic event served a political purpose other than its own pure purpose.

It felt that some political leaders were using the Olympics as their own political tool. Especially during the Olympics, there was a lot of interest, and

they seemed to care about the Olympic operation, but after the Olympics, their interest all disappeared. (Participant 7)

4.5.5. Practical human capital legacy utilization plan

In this sub-chapter, the necessity of presenting practical plans for utilizing the sustainable human capital legacy based on the responses of previous research participants will be presented. Summarizing the responses of the participants, the type of practical human capital legacy utilization project should cover the following items. Namely, (a) management and maintenance of the human pool, (b) business cooperation and outplacement with other competition organizing committees/other mega event organizations, (c) outplacement (d) job maintenance link training (e) human capital legacy awareness training, etc.

4.5.6. Utilize existing structure

Among the reasons why human capital legacy utilization was difficult as pointed out above, a way to solve problems of governance, subject, and budget is to promote human capital legacy utilization projects by utilizing existing organizations. In particular, the organization commonly mentioned by the participants is the PyeongChang 2018 legacy foundation. There was an opinion that this foundation is promoting the Olympic legacy

project under the mission of sustainable preservation and development of the legacy of the 2018 PyeongChang Olympic and Paralympic Games, and the vision of expanding the base of winter sports, and spreading the 'PyeongChang value'.

The second organization suggested is the World Union of Olympic cities. The World Union of Olympic Cities is an association exclusively composed of cities that have hosted or will host the Olympic Games or that have bid or are in the process of a bid for the Olympic Games.

Therefore, it seems possible to promote sustainable human capital legacy utilization business by utilizing this organization. In particular, this association should issue certificates for staff who ran the Olympics to guarantee their qualifications, and allow them to directly utilize their knowledge, experience, and skills in the organizing committee for the next Olympics or in the sports field of their country. Participant 5 said it would be a worthwhile business just by managing and updating them.

The last organization mentioned is the Olympic sponsor company. One research participant strongly suggested that it would be a good example to promote legacy utilization itself and Olympic sponsor marketing by promoting projects such as human capital developing programs and outplacement using sponsors. Because the Olympic sponsor has enough

budget and governance to take on new projects for the long term, and also especially Olympic sponsor can improve their positive brand image of how Olympic sponsor much involved actively in the Olympic game for social purposes.

For this, you need some financial resources and this can come from the government or from sponsors or surplus of the Olympics. And the nature organization, KOC, sponsors, there were many sponsors in PyeongChang not only Hyundai but also Samsung and smaller ones. You should build a program together with these people. Because they should be interested in developing the human capital for themselves that is for their organization. But also, in terms of sponsorship So, this is good for the image of that company. Maybe this should be started with some key companies which are top sponsors because they have a lot of money like Hyundai, Samsung, or branches of other companies like Coca-Cola. (Participant 2)

4.5.7. Utilize new systems

The following is about the formation of new systems as another practical way to utilize the sustainable human capital legacy. The way, which can also cover governance, subject, and budget issues, is to create a virtual organization. In particular, one participant suggested that it is a desirable method to organize a Social Network Service community and enable sustainable management in a third-party organization linked to the

Olympics with support from places such as the United Nations and the government. (Participant 3)

As discussed in common above, it is important to see a practical way for human capital legacy utilization and its utilization plan. The workforce type of POCOG is divided into two types. That is, (a) professionals directly hired by the POCOG until the end of the Games and (b) seconded employees dispatched from the affiliated organizations, including national and local-domestic governments, (c) seconded employees dispatched from sponsor institutions, partner companies.

First of all, it will be necessary to help people who will not have a job immediately after the end of the Olympics develop new jobs and the knowledge, skills, and elements of experience gained from running the Olympics. Existing or new organizations must continuously collect and manage the information of employees who have experienced the Olympic Games, such as personal information, education, and other careers. Through this, efforts should be made to ensure that this human capital legacy is sustainably be utilized by planning educational programs and outplacement programs in cooperation with other sports event planning, operation, and marketing companies.

In addition, as mentioned by participant 5 above, in the case of government employees who were dispatched for Olympic work and then returned, the HR team referred to their work experience and appointed them to the sports, local marketing, and event departments, or other sports held by the local government. He said that there are many cases where dispatches are sent to the event management and organizing committee. This is a practical utilization way, and it can be assumed that seconded employees are similarly utilized in each organization. Based on this, the Ministry of Personnel Innovation, a central administrative agency in charge of human resources and human resources development for public officials in Korea, should have a new system that can immediately utilize these human resources in preparation for future mega-sport events.

Through a kind of standing system for mega sports event, not only human capital legacy utilization, but also budget and time for workforce composition and training can be reduced if the state plans another mega-sport event.

4.6. Summary

The aforementioned reasons are supported by Kaplanidou et al. (2021) research, which believes that the legacy of "human capital" provided by highly specialized management skills to workforce is one of the most

important and necessary legacies that a country should develop. Furthermore, developing and sustaining human skills as a result of hosting a major sporting event is an important legacy aspect that is frequently overlooked.

- Human capital is an essential, valuable existence and positive evaluation in the operation of the Olympics.
- In particular, the experience of operating the Olympics is not only an individual's asset but also a social and national asset through the memory of the Olympics games.
- Having strongly trained and capable sports administrators and experts will contribute to developing sports itself and improve international sports relationships. This human capital legacy is a valuable asset of the country.

However, although human capital was recognized as a legacy and human capital itself was recognized as a positive factor, the reality of sustainable use was negatively indicated. It is expressed regret at the reality that they could not be utilized by blaming other stakeholders for this situation.

In the IOC aspect, all legacy-related projects not only for Human capital legacy, must need the host country's attention. Also, the issue of

using human capital legacy is up to the host country. In other words, Korea government and POCOG needed to be the subject of the entire mega sports events' legacy, including human capital legacy.

- The IOC considers all stakeholders involved in the Olympic management of the host country to be responsible for the use of legacy, including all human capital legacy utilization issues.

In the central government aspect, mega sports events should be hosted by a local government who is the main character. Nevertheless, as Korea still recognizes events such as the Olympics as state-led (Central-led) events, there is a strong tendency to rely on the state from preparation for the Games to legacy management.

- The central government believes that POCOG and local governments (Gangwon province) are responsible for this current situation.

In the local government aspect, local government's finances are not enough and it is very difficult to manage them entirely. That's why the central government should take care of it. Not only venues but also operating personnel are linked to the budget, so planning and operation should be promoted centrally. Also, the local government noted that these

projects should be done by a powerful central government, and explained that the organizing committee lacked power.

- The local government and POCOG considers the central government to be responsible for the human capital legacy utilization issue.

It was very unfortunate that there was no entity to manage them. It is very regrettable that hired staff are out of a job in an instant. It would have been nice if the government, especially the Ministry of Culture, Sports and Tourism, managed this workforce pool and used it sustainably. (Participant 7)

As the central government's opinion, both local governments and POCOG repeatedly answered that they lack active support from the central government when asked about their responsibilities. Accordingly, the issue of human capital legacy in the PyeongChang Olympics can also be seen as the attitude of the POCOG and the host cities of the Olympics depending on the central government in the central government aspect.

Based on participants' explanation, it is regarded the human capital legacy was not systemically utilized well in the case of the PyeongChang Olympics, however, there were efforts to utilize human capital legacy by key stakeholders.

- Each Olympic Organizing Committee (OCOGs) is recommended to carry out Olympic operation tasks step by step based on the social

situation of the country according to the technical manuals provided by the IOC while preparing for the Olympic Games. That technical manual has guidelines for each FA (Field Area), which shows the IOC's efforts to develop the Human Capital Legacy.

Information, Knowledge and Games Learning (IKL) by Technology and Information Department: The IOC created Olympic Games Knowledge Management (OGKM) in 2003 to improve knowledge transfer to OCOGs, as well as an Information & Knowledge Management (IKM) unit to serve the IOC administration. In 2020, these were combined to form the current IKL. The IKL unit includes: (1) Games reference materials, (2) Observational learning, (3) Debriefing, (4) Games Operations data and analytics OCOGs to share their knowledge with each other for next OCOGs

Outplacement program by people management department (PEM FA): According to the Olympic technical manual of People management, it recommends to the next host OCOGs hire some staff from the previous host OCOGs. It is able to utilize human capital, and actually, Tokyo and Beijing organization committees hired 5 to 10 staff of PyeongChang.

- However, both projects run by IOC in terms of human capital legacy utilization is only for the Olympic Games and for few numbers of staff not as general sectors social or broad sports aspect.

In case of Central government (the Ministry of Culture, Sports and Tourism), after the PyeongChang Olympics, consulted with local government (Gangwon province) on the issue of establishing legacy foundation with the Olympic surplus

- The PyeongChang 2018 Legacy Foundation was established under the leadership of the central government.
- However, unlike the slogan of Sports, peace and people, there still seemed to be no concern about the legacy of Human Capital.
- The fundamental problem is that, unlike KSPO, the 2018 Legacy Foundation lacks a sufficient legal and financial foundation, and is actually entrusted to the local government.

In case of local governments have shown efforts to utilize the human capital legacy after the PyeongChang Olympics. In order to maintain the ability to operate sports event in the future, government officials were continuously trained to prepare for future mega-sport events.

- International training programs for employees conducted run by local government

It seems that the government had a desire to specially manage employees who returned after performing Olympic duties. Government officials with Olympic experience were assigned to the sports development

department or to the TF team in charge of planning and operating other international sports events.

- Efforts to continuously utilize the government's human capital legacy, such as sending dispatches to other international sports organizing committees, were also confirmed.
- However, it seems that government agencies only cared about the management of public officials, and no special efforts were made by the organizing committee or directly hired professional employees.

To utilize human capital legacy, POCOG tried to revise of special law to establish the PyeongChang Olympics Commemoration Korea Winter Sports Promotion Foundation (tentatively named) like KSPO way. However, because of objection of central government, it could not be proceeded. It could be seen that the Ministry of Culture, Sports and Tourism regarded the PyeongChang Olympic Games as equal to other events case, and maintained an attitude of avoiding additional budgetary expenditures after the Olympics.

- Director-general of people management FA noted that employees with experience in the Olympics are so valuable, need to contribute to the development of Korean sports

- However, the central government did not agree that lawmakers should revise the law and proceed to the next procedure only when the Ministry of Culture, Sports and Tourism, which is in charge of the ministry, was led
- It would have been nice if there was enough data to emphasize the importance of human capital legacy itself or its value

It can be seen that the actual effect was insufficient, despite such efforts. This sub-chapter tried to ascertain why this is so through the opinions of key stakeholders in the Olympics. Each stakeholder had different opinions.

- The IOC recognized that human capital itself has important value, but it was found that it lacked practical ways, effort, and thought necessity to utilize for the host country.
- The reasons why the central government did not manage human capital legacy well, It could be summarized as (1) Equity issues with other mega sports events, (2) additional budget costs issue, (3) perception of lack of independent operation by the local governments.
- Regarding the reasons why the human capital legacy is not being utilized well in the aspect of local government, (1) the lack of

sufficient support from the country (include central government) from the beginning of the operation to the post-contest due to the promotion of local governments and (2) the lack of governance.

- The difficulty of not well managing human capital legacy by POCOG could be summarized as (1) the lack of sufficient support from the other stakeholder (IOC, central government) (2) the lack of IOC's institutional basis for support recognition of the importance of utilizing Human Capital and its utilization manual

Chapter 5. Discussion and conclusion

5.1. Discussion

This chapter is devoted to a deeper understanding, importance, and relevance of the findings that have been found through data analysis. Further, the findings will be explained in relation to the literature review of this study. In the end, this study will present the limitation of the study and further research opportunities in relevant circumstances and conclusions.

It demonstrates that human personnel with basic strategic planning, organizational, and leadership skills who have participated in a mega international sporting event are important and create a valuable resource for the city or host country. The legacy of "human capital" provided by highly specialized management skills to workforce is one of the most important and necessary legacies that a country should develop (Kaplanidou et al., 2021).

However, when it comes to the cause of the current situation concerning the Human Capital Legacy and the entity that should implement the Human Capital Legacy utilization project, all stakeholders tend to point to others rather than taking responsibility themselves. In relation to this issue, it is believed that a more detailed and practical plan for legacy

utilization, identifying the responsible party for implementation, and securing financial resources should have been established during the initial planning stages of the mega sports event.

Based on the analysis, it is revealed that the human capital legacy was not systemically utilized well in the case of the PyeongChang Olympics due to showed factors in the previous chapter, however, there were efforts to utilize human capital legacy by key stakeholders. Even though there were limitations in their effort, it helped to find the way to sustainable utilization of human capital legacy after the Olympic Games.

The essential elements include governance, budget, recognition of the importance of utilizing human capital legacy and timing of the plan, and structural dependence on the country are required for human capital legacy utilization.

Among stakeholders, Government and the POCOG group indicate that it was difficult to proceed with the work because there was no system for "Who", "When", and "How". Also, there was a budget problem, the focus was only on the successful opening and operation of the Olympics, so all administrations and budgets were managed to be spent during the Olympics. Therefore, POCOG neglected the related legacy management work that had to be organized after the events.

The POCOG and the Government may have been concerned about governance on budget and planning was prepared in advance and had to be continued. However, as soon as the event was over, all the work was concluded, so it was not possible to suddenly discuss the issue of utilizing the legacy.

The government and POCOG groups seem to have missed the timing of promotion and management because the issue of using human capital legacy was overlooked for reasons such as (1) insufficient precedent data (2) lack of awareness (3) lack of experts in the human capital legacy field.

For IOC, it was difficult to promote the project due to the lack of awareness of human capital legacy, and the timing of the promotion was missed. In fact, the major reason is IOC seems not concerned deeply about the problem of legacy utilization after the Olympic Game since IOC has to move on for hosting the next Olympic Games.

Both local governments and POCOG repeatedly answered that they lack active support from the central government when asked about their responsibilities. Accordingly, the issue of human capital legacy in the Pyeongchang Olympics case can also be seen as the attitude of the POCOG and the host cities of the Olympics depending on the central government. In

particular, POCOG tried to establish the Pyeongchang Olympic version of KSPO or outplace it to other sports-related organizations through the enactment of a special law, which is a practical utilization plan, but because of the central government's opposition (issue of fairness with other mega sports events and equity in the recruitment process with the public) failed.

A way to solve problems of governance, subject, and budget is to promote human capital legacy utilization projects by utilizing existing organizations. Existing organizations or new systems must continuously collect and manage the information of employees who have experienced the Olympic Games, such as personal information, education, and other careers. Through this, efforts should be made to ensure that this human capital legacy is sustainably utilized by planning educational programs and outplacement programs in cooperation with other sports event planning, operation, and marketing companies.

The type of practical human capital legacy utilization project should cover the following items. Namely, (1) management and maintenance of the human pool, (2) business cooperation and outplacement with other sports-related organization/other mega event organizations, (3) outplacement (4) job maintenance link training (5) human capital legacy awareness training, etc.

PyeongChang 2018 Legacy Foundation is promoting the Olympic legacy project under the mission of sustainable preservation and development of the legacy of the 2018 PyeongChang Olympic and Paralympic Games. Also, The World Union of Olympic Cities is an association exclusively composed of cities that have hosted or will host the Olympic Games or that have bid or are in the process of a bid for the Olympic Games. According to this organization's website (IOC, 2022a), the mission of the World Union of Olympic Cities is to facilitate and qualify an ongoing dialogue between former and future Olympic Host Cities Through an active collaboration with the IOC, the Union contributes to inventorying legacy activation initiatives and helping cities to fully take advantage of their uniqueness as an Olympic City. It seems reasonable to manage human capital legacy of utilization tasks in these associations according to participants' opinions.

This association should issue certificates with job maintenance training for staff who ran the Olympics to guarantee their qualifications, and allow them to directly utilize their knowledge, experience, and skills in the organizing committee for the next Olympics or in the sports field of their country. It could be a worthwhile business just by managing and updating them.

It would be a good example to promote legacy utilization itself and Olympic sponsor marketing by promoting projects such as human capital development programs and outplacement using sponsors. But also in terms of sponsorship so, this is good for the image of that company. Maybe this should be started with some key companies which are top sponsors because they have enough budget and strong governance system.

Through a kind of standing system for mega sports events, not only human capital legacy utilization but also budget and time for workforce composition and training can be reduced if the country plans another mega-sport event. In other words, public servants with Olympic experience usually work at their own organization, and dispatch them immediately when necessary for in case of managing mega sports events, based on the Olympic experience employee pool managed by the Personnel Innovation Office.

The Ministry of Personnel Innovation, a central administrative agency in charge of human resources and human resources development for public officials in Korea, should have a new system (Standing system for mega sports events) that can immediately utilize these human resources in preparation for future mega-sport events.

After the successful hosting of the Olympic Games, it is essential to cultivate a specialized workforce to capitalize on the human capital legacy. To this end, specialized training programs should be developed in cooperation with educational institutions and experts, and personnel who can manage and utilize the human capital legacy should be continuously cultivated. Furthermore, ongoing management and evaluation can improve the utilization of the human capital legacy.

In order to utilize the human capital legacy, it is important for various stakeholders to work together and communicate. Governments, local governments, Olympic organizing committees, public corporations, businesses, and civil society organizations need to work together with common goals to find sustainable ways to utilize human capital legacy.

Kang (2017) recommended in his speech during the Olympic Games PyeongChang 2018 legacy symposium that the government of the host country should plan sustainable legacy development from the initial stage of operation, and create good governance between central governments - local governments - private sector to find the way of practical utilization. Also, noted that the host city should build an effective and efficient implementation structure for legacy development in the long term.

It is also necessary to analyze successful cases of human capital legacy utilization, benchmark them, and create models that can be applied in domestic Olympic host cities. To this end, research and joint projects by domestic and international researchers and experts should be promoted, and a platform for sharing various cases should be established.

In addition, it is necessary to continue to promote and raise awareness of the importance and potential of human capital legacy. To this end, various media can be utilized to inform citizens about the value of human capital legacy and how to utilize it, and to call for participation and cooperation.

Therefore, systematic planning and implementation of human capital legacy utilization is needed in future Olympic host cities, and various stakeholders should work together to find sustainable ways to utilize human capital legacy. For this purpose, various stakeholders such as the government, local governments, Olympic organizing committees, public corporations, private sectors, and civil society organizations need to work towards a common goal that sustainable legacy utilization after the Olympic Games.

Furthermore, research and case analysis on the use of human capital legacies after the Olympic Games should continue. This will allow us to

learn from the efforts, successes, challenges, and failures of human capital legacy utilization so that host city and country can continue to improve and develop the strategy of sustainable legacy management. Cooperation with various stakeholders and continuous research in related fields, these efforts are expected together to lead to the sustainable utilization and development of the human capital legacy after the Olympic Games.

In conclusion, by actively introducing and implementing the above various strategic measures, it is possible to promote the sustainable utilization of human capital legacy after mega-sports events such as the Olympics Games. Through these efforts, host city and country can create a human capital legacy that can be of great benefit to the development of communities and countries long after the Games are over. Furthermore, the utilization of this human capital legacy is expected to have a positive impact on the preparation for the next Olympic Games.

5.2. Limitations and Future research opportunities

This study is limited to a lesser number of participants, eight, with common backgrounds in sports administration and academics. To increase validity, reliability and to provide academic trustiness the participants' selections were based on their years of experience in the field of sports administration, academic level, and management positions in their

respective areas countered the limitation since participants were representatives of IOC, central government, local government, organizing committee for Olympic Games.

However, the Academy of Korea means that the opinions of different stakeholders were collected for the purpose of answering this study's research questions. Furthermore, for a qualitative method of analysis, six-seven participants are considered relatively sufficient to collect qualitative data (Marshall & Rossman, 2014).

Further research could also be done by including more stakeholders of the Olympic Games as participant groups. The Olympic management has many stakeholders that have a say in what happens, so it might be beneficial to include the perspective of International Federations (IF), Korean Sport & Olympic Committee (KOC), Olympic Sponsors, various social organizations related to Olympics management, and others. By expanding the size and range of sample data, it could be possible to uncover more about this study area.

In collecting data, this study encountered issues that some participants were not able to specifically answer certain questions related to the real task responsible structure of human capital legacy utilization and the practical strategy of cooperation between Olympic Games stakeholders for

legacy management. But it made it known that the topic of “the way of sustainable human capital legacy utilization” from hosting the Olympic Games is still needed further studies.

Also, since the interview method was different (Online and face-to-face interview) depending on the participants’ area, there could be different results if compared with the same interview method,

All participants were guided that the importance of human capital legacy and the information that it can bring to the host country. Also, how it can be successfully developed in the future, who can manage it, who should take responsibility, when should start to make a plan, how to successfully implement it, and other specific questions should be more developed.

This study will provide academic opportunities to the future research area to enhance academic evidence that hosting Olympics and legacy management by studying not well-researched study area which is human capital legacy, and it will contribute to the development of not only help to develop actual mega sports management field but also legacy related sports administration.

Also, this study will stimulate various different stakeholders in the sports industry and mega sports event operation field to reflect on

understanding the importance of the development of human capital legacy and sustainable human capital legacy utilizations.

5.3. Conclusion

This study is essential for the sustainable utilization of the Human Capital Legacy. The findings obtained are significant and therefore valuable for the following various grounds.

The findings based on this study, assumed that because the human capital legacy from the Olympic Game was not previously organized after the 2018 PyeongChang Olympic Winter Games, the human capital legacy topic was forgotten or did not reflect. This study provides evidence that the human capital legacy has been neglected after the 2018 PyeongChang Olympic Winter Games.

Also, introducing the concepts of “human capital legacy perception and utilization” from hosting sports events in Korea, will stimulate different stakeholders in the sports industry to reflect on the human capital legacy and understand the importance of human capital legacies. In addition to the theory of Olympic legacy management with the concept of the human capital legacy of the Olympic Games, which will increase the effectiveness of the development of mega sports event management and sports administration field.

The results of the study show that if Korea is planning to host the next mega sports event like the Olympic Games, it will have a significant contribution to the development of not only Olympic management but also the sports administration development of the country through legacy management. Legacy of the next mega sports event like Olympic Games as experience and knowledge of human capital which will be trained and educated, financial incomes from media, international investments and sponsors, winter sports development, and social awareness will play an important role in the development of sports.

All of the key stakeholders' perceptions of the importance of human capital legacy were confirmed, and specific utilization ways were needed. Based on the case of the PyeongChang Olympics, it was confirmed what efforts each key stakeholder made to utilize the Human Capital Legacy and what limitations they faced. In particular, it was confirmed that sustainable utilization is possible for seconded employees with structural continuity, and it was confirmed that the governing body, budget, recognition of the importance of utilizing human capital legacy, and timing are essential elements to solve the utilization problem. Also, this paper suggests practical ways of utilizing existing structures and establishing a new system.

Furthermore, in the framework of legacy management, this paper will contribute to achieving the main goal of sports development through human capital legacy. Legacy plans must be aligned with the city's long-term goals, which necessitates appropriate governance structures that ensure the active participation of all stakeholders in the country (Bob & Kassens-Noor, 2012).

From the viewpoint of stakeholders, the successful development of human capital legacy, should carry out a proper practical strategic plan in different terms in the early time, establish governance, create budgeting and financial sources for development and close cooperation between key stakeholders (IOC, Government, & OCOGs) discuss how to proceed this task and decide responsibility how each stakeholder will take this current utilization way.

Reference

- Agha, N., Fairley, S., & Gibson, H. (2012). Considering legacy as a multi-dimensional construct: The legacy of the Olympic Games. *Sport Management Review*, 15(1), 125–139.
- Al-Emadi, A., Kaplanidou, K., Diop, A., Sagas, M., Le, K. T., & Al-Ali Mustafa, S. (2016). 2022 Qatar World Cup: Impact perceptions among Qatar residents. *Journal of Travel Research*, 56(5), 678–694. <https://doi.org/10.1177/0047287516652502>
- Amin, M., Khairuzzaman Wan Ismail, W., Zaleha Abdul Rasid, S., & Daverson Andrew Selemani, R. (2014). The impact of human resource management practices on performance: Evidence from a Public University. *The TQM Journal*, 26(2), 125-142.
- Baum, T., Kralj, A., Robinson, R. N., & Solnet, D. J. (2016). Tourism workforce research: A review, taxonomy and agenda. *Annals of Tourism Research*, 60, 1-22.
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago press.
- Bell, B., & Gallimore, K. (2015). Embracing the games? Leverage and legacy of London 2012 Olympics at the sub-regional level by means of strategic partnerships. *Leisure Studies* 34, 720-741.
- Black, M. H., Mahdi, S., Milbourn, B., Thompson, C., D'Angelo, A., Ström, E., & Bölte, S. (2019). Perspectives of key stakeholders on employment of autistic adults across the United States, Australia, and Sweden. *Autism Research*, 12(11), 1648-1662.
- Bob, U., & Kassens-Noor, E. (2012). An indicator framework to assess the legacy impacts of the 2010 FIFA world cup. *African Journal for Physical Health Education, Recreation and Dance*, 18(sup-2), 12-21.
- Bontis, N. (1996). There's a price on your head: managing intellectual capital strategically. *Ivey Business Journal*, 60(4), 40.

- Bull, C., & Lovell, J. (2007). The impact of hosting major sporting events on local residents: An analysis of the views and perceptions of Canterbury residents in relation to the Tour De France 2007. *Journal of Sport & Tourism*, 12(34), 229-248.
- Burbank, M., Andranovich, G., & Heying, C. H. (2001). *Olympic dreams: The impact of mega-events on local politics*. Lynne Rienner Publishers.
- Byun, J., & Leopkey, B. (2020). Exploring issues within post-Olympic Games legacy governance: The case of the 2018 PyeongChang winter Olympic Games. *Sustainability*, 12(9), 3585.
- Capron, L., & Hulland, J. (1999). Redeployment of brands, sales forces, and general marketing management expertise following horizontal acquisitions: A resource-based view. *Journal of marketing*, 63(2), 41-54.
- Chappelet, J., & Junod, T. (2006). A tale of 3 Olympic cities: What can Turin learn from the Olympic legacy of other alpine cities? In *Proceedings of workshop on Major Sport Events as Opportunity for Development* [Workshop]. Valencia, Spain.
- Chappelet, J. L. (2008). Olympic environmental concerns as a legacy of the Winter Games. *The international journal of the history of sport*, 25(14), 1884-1902.
- Chappelet, J. L. (2012). Mega sporting event legacies: a multifaceted concept. *Papeles De Europa*, 25(25), 76-86.
- Chelladurai, P., & Madella, A. (2006). *Human resource management in Olympic sport organisations*. Human Kinetics Publishers.
- Chelladurai, P., & Kim, A. C. H. (2022). *Human resource management in sport and recreation*. Human Kinetics Publishers.
- Cokins, G. (2009). *Performance management: Integrating strategy execution, methodologies, risk, and analytics*. John Wiley & Sons.

- Cornelissen, S., Bob, U., & Swart, K. (2011). Towards redefining the concept of legacy in relation to sport mega-events: Insights from the 2010 FIFA world cup. *Development Southern Africa*, 28(3), 307-318.
- Fredline, E. (2005). Host and guest relations and sport tourism. *Sport in Society*, 8, 263-279.
- Gargalianos, D., Toohey, K., & Stotlar, D. K. (2015). Olympic Games complexity model (OGCM). *Event Management*, 19(1), 47-55.
- Getz, D. (1997). *Event Management & Event Tourism*. Cognizant Communication Corporation
- Gold, J. R., & Gold, M. M. (2016). The enduring enterprise: The Summer Olympics, 1896–2012. *Olympic Cities: City Agendas, Planning, and the World's Games* (pp. 41-83). Routledge.
- Grant, R. M. (1991). The resource-based theory of competitive advantage: implications for strategy formulation. *California management review*, 33(3), 114-135.
- Gratton, C., & Preuss, H. (2008). Maximizing Olympic impacts by building up legacies. *The international journal of the history of sport*, 25(14), 1922-1938.
- Heere, B., & Xing, X. (2012). BOCOG's road to success: Predictors of commitment to organizational success among Beijing Olympic employees. *European Sport Management Quarterly*, 12(2), 161-181.
- Hiller, H. H. (2006). Post-event outcomes and the post-modern turn: The Olympics and urban transformations. *European sport management quarterly*, 6(4), 317-332.
- Holton, E. F., Swanson, R. A., & Naquin, S. S. (2001). Andragogy in practice: Clarifying the andragogical model of adult learning. *Performance improvement quarterly*, 14(1), 118-143.
- Horne, J. (2007). The four 'knowns' of sports mega-events. *Leisure studies*, 26(1), 81-96.

- Huselid, M. A., Becker, B. E., & Beatty, R. W. (2005). *The workforce scorecard: Managing human capital to execute strategy*. Harvard Business Press.
- Hwang, J., & Jang, W. (2020). The effects of job characteristics on perceived organizational identification and job satisfaction of the Organizing Committee for the Olympic Games employees. *Managing Sport and Leisure*, 25(4), 290-306.
- International Olympic Committee. (2007). *Olympic charter*. https://stillmed.olympic.org/Documents/Olympic%20Charter/Olympic_Charter_through_time/2007-Olympic_Charter.pdf
- International Olympic Committee. (2013). *Roles and responsibilities during the Olympic Games*. <https://olympics.com/ioc/documents/olympic-games/roles-and-responsibilities-during-the-olympic-games>
- International Olympic Committee. (2017). *Legacy Strategic Approach*. https://stillmedab.olympic.org/media/Document%20Library/OlympicOrg/Documents/Olympic-Legacy/IOC_Legacy_Strategy_Executive_Summary.pdf
- International Olympic Committee (2021). *Olympic Agenda 2020*. <https://olympics.com/ioc/documents/international-olympic-committee/olympic-agenda-2020>
- International Olympic Committee. (2022a). *World Union of Olympic Cities*. <https://gaisf.sport/members/world-union-of-olympic-cities/>
- International Olympic Committee. (2022b). *Factsheet - Information, Knowledge and Games Learning (IKL)*. <https://stillmed.olympics.com/media/Documents/Olympic-Games/Factsheets/Information-Knowledge-and-Games-Learning.pdf>
- Kang, J. H. (2017). Legacy portfolio development for mega sport event. *Olympic Games Pyeongchang Legacy* [Symposium]. Seoul, South Korea.
- Kang, M., & Kim, H. (2019). Global and local intersection of the 2018 PyeongChang Winter Olympics. *International Journal of Japanese Sociology*, 28(1), 110-127.

- Kaplan, R. S., & Norton, D. P. (2004). The strategy map: Guide to aligning intangible assets. *Strategy & leadership*, 32(5), 10-17.
- Kaplanidou, K., & Karadakis, K. (2010). Understanding the legacies of a host Olympic city: The case of the 2010 Vancouver Olympic Games. *Sport Marketing Quarterly*, 19(2), 110.
- Kaplanidou, K. (2012). The importance of legacy outcomes for Olympic Games four summer host cities residents' quality of life: 1996–2008. *European Sport Management Quarterly*, 12(4), 397-433.
- Kaplanidou, K., Al Emadi, A., Sagas, M., Diop, A., & Fritz, G. (2016). Business legacy planning for mega events: The case of the 2022 World Cup in Qatar. *Journal of Business Research*, 69(10), 4103-4111.
- Kaplanidou, K., Giannoulakis, C., Odio, M., & Chalip, L. (2021). Types of human capital as a legacy from Olympic Games hosting. *Journal of Global Sport Management*, 6(3), 314-332.
- Karadakis, K., Kaplanidou, K., & Karlis, G. (2010). Event leveraging of mega sport events: a SWOT analysis approach. *International Journal of Event and Festival Management*, 1(3), 170-185.
- Kenton, W. (2020a). Human Resources. Investopedia. Retrieved August 28, 2020, from <https://www.investopedia.com/terms/h/humanresources.asp>
- Kenton, W. (2020b). Human capital. Investopedia. Retrieved August 28, 2020, from <https://www.investopedia.com/terms/h/humancapital.asp>
- Khasawneh, S. (2011). Human capital planning in higher education institutions: A strategic human resource development. *International Journal of Educational Management*, 25(6), 534-544. <http://dx.doi.org/10.1108/09513541111159040>
- Kim, H. (2020). *Sustainability of the PyeongChang 2018 Winter Olympics* (Publication No. 2467511761) [Doctoral dissertation, Manchester Metropolitan University]. ProQuest Dissertations and Theses Global.

- Kim, S. H. (2013). *A study on the effect of international sports event organization committee leadership types on the organizational effectiveness*. [Unpublished master's thesis]. Korea University
- Kim, W. (2018, February 27). *It is a problem that there's no problem foreign media favorable reviews*. The JoongAng. <https://www.joongang.co.kr/article/22395820>
- Leopkey, B. (2009). *2008 post graduate grant final report: The historical evolution of Olympic legacy*. Lausanne: International Olympic Committee.
- Leopkey, B., & Parent, M. M. (2012). Olympic Games legacy: From general benefits to sustainable long-term legacy. *The international Journal of the History of Sport*, 29(6), 924–943.
- Leopkey, B., & Parent, M. M. (2017). The governance of Olympic legacy: process, actors and mechanisms. *Leisure Studies*, 1–14. <https://doi.org/10.1080/02614367.2016.1141973>
- Lepak, D. P., & Snell, S. A. (1999). The human resource architecture: Toward a theory of human capital allocation and development. *Academy of management review*, 24(1), 31-48.
- London Assembly (2007). *London Olympic Games and Paralympic Games: the employment and skills legacy*. Greater London Authority, London.
- Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. *Business Horizons*, 47(1), 45-50.
- MacAloon, J. J. (2008). 'Legacy' as managerial/magical discourse in contemporary Olympic affairs. *The international journal of the history of sport*, 25(14), 2060-2071.
- Malhotra, N., Hall, J., Shaw, M., & Oppenheim, P. (2006). *Marketing research: An applied orientation*. Deakin University.
- Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications.

- Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, 13(6), 522-526.
- May, V. (1995). Environmental implications of the 1992 Winter Olympic Games. *Tourism Management*, 16(4), 269-275.
- McGahan, A. M. (2021). Integrating insights from the resource-based view of the firm into the new stakeholder theory. *Journal of management*, 47(7), 1734-1756.
- McIntosh, M. J. (2003). The Olympic bid process as the starting point of the legacy development'. In the legacy of the Olympic Games 1984–2000, ed. M. Moragas et al., 450–456. Lausanne: International Olympic Committee.https://library.olympics.com/Default/doc/SYRACUSE/177863/the-olympic-bidding-process-as-a-starting-point-of-the-legacy-development-m-j-mcintosh?_lg=en-GB
- Merriam-Webster Dictionary. (n.d.). Workforce. In *Merriam-Webster Dictionary*. Retrieved August 24, 2020, from <https://www.merriam-webster.com/dictionary/workforce>
- Moragas, S., Miquel, d. (2003). *The legacy of the Olympic Games: 1984-2000: International symposium, Lausanne*, Olympic Studies Centre. https://library.olympics.com/Default/doc/SYRACUSE/68159/the-legacy-of-the-olympic-games-1984-2000-international-symposium-lausanne-14th-15th-and-16th-novemb?_lg=en-GB
- Nafukho, F. M., Hairston, N., & Brooks, K. (2004). Human capital theory: Implications for human resource development. *Human Resource Development International*, 7(4), 545-551.
- Odio, M. A., Walker, M., & Kim, M. (2013). Examining the stress and coping process of mega-event employees. *International Journal of Event and Festival Management*, 4(2), 140-155.
- Owen, J. G. (2005). Estimating the cost and benefit of hosting Olympic Games: what can Beijing expect from its 2008 Games. *The industrial geographer*, 3(1), 1-18.
- Oxford dictionaries. (n.d.). Human capital. In *Oxford dictionaries*. Retrieved August 24, 2020, from

<https://www.oxfordlearnersdictionaries.com/definition/english/human-capital?q=human+capital>

- Parent, M. M. (2008). Evolution and issue patterns for major-sport-event organizing committees and their stakeholders. *Journal of sport management*, 22(2), 135-164.
- Poynter, G., Blake, A., MacRury, I., Roberts, E., Jaunky, G., & Berzins, K. (2007). *A lasting legacy for London? Assessing the legacy of the Olympic Games and Paralympic Games*. <https://dspace.stir.ac.uk/handle/1893/33602>
- Preuss, H. (2007). The conceptualisation and measurement of mega sport event legacies. *Journal of sport & tourism*, 12(3-4), 207-228.
- Preuss, H., & Hong, S. P. (2021). Olympic legacy: Status of research. *Journal of Global Sport Management*, 6(3), 205-211.
- Ritchie, J. B., & Smith, B. H. (1991). The impact of a mega-event on host region awareness: A longitudinal study. *Journal of travel research*, 30(1), 3-10.
- Ritchie, J. B. (2000). Turning 16 days into 16 years through Olympic legacies. *Event management*, 6(3), 155-165.
- Smith, B., & Caddick, N. (2012). Qualitative methods in sport: A concise overview for guiding social scientific sport research. *Asia Pacific journal of sport and social science*, 1(1), 60-73.
- Smith, K. G., Collins, C. J., & Clark, K. D. (2005). Existing knowledge, knowledge creation capability, and the rate of new product introduction in high-technology firms. *Academy of management Journal*, 48(2), 346-357.
- Solberg, H. A., & Preuss, H. (2007). Major sport events and long-term tourism impacts. *Journal of sport Management*, 21(2), 213-234.
- Storey, J. (1995) *Human resource management: A critical text*. London International Thomson.

- Sweetland, S. R. (1996). Human capital theory: Foundations of a field of inquiry. *Review of educational research*, 66(3), 341-359.
- Theodoraki, E. (2007). *Olympic event organization*. United States Taylor & Francis Group.
- Toohey, K., & Veal, A. J. (2007). *The Olympic Games: A social science perspective*. Cabi.
- Tripolitsioti, A. (2017). Human resource management characteristics of the Olympic sports organizations. *Global Journal of Human Resource Management*, 5(6), 61-72.
- Tuck, J. (2003). Making sense of emerald commotion: Rugby union, national identity and Ireland. *Identities: Global Studies in Culture and Power*, 10(4), 495-515.
- Unlu, C., Serarslan, M. Z., Yamaner, F., & Sahin, S. (2012). Comparing of human resources management sports enterprises and the other service enterprises. *Procedia-Social and Behavioral Sciences*, 46, 4808-4812.
- Veal, A. J., Toohey, K., & Frawley, S. (2012). The sport participation legacy of the Sydney 2000 Olympic Games and other international sporting events hosted in Australia. *Journal of policy research in tourism, leisure and events*, 4(2), 155-184.
- Waite, G. (2003). Social impacts of the Sydney Olympics. *Annals of tourism research*, 30(1), 194-215.
- Weerakoon, R. K. (2016). Human resource management in sports: A critical review of its importance and pertaining issues. *Physical Culture and Sport. Studies and Research*, 69(1), 15-21.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic management journal*, 5(2), 171-180.
- Whitson, D., & Horne, J. (2006). Underestimated costs and overestimated benefits? Comparing the outcomes of sport mega events in Canada and Japan. *Sociological Review*, 54(2), 73-89.

Xing, X., & Chalip, L. (2009). Marching in the glory: Experiences and meanings when working for a sport mega-event. *Journal of Sport Management*, 23(2), 210-237.

Yarbrough, C. R. (2000). *And they call them games: An inside view of the 1996 Olympics*. Macon, GA: Mercer University Press.

Zidan, S. S. (2001). The role of HRD in economic development. *Human Resource Development Quarterly*, 12(4), 437-443.

Appendix

Interview Questions

<p>Introduction:</p> <p>Thank you for agreeing to conduct an interview with me today about the Utilization of Human capital legacy after the Olympic Games. My name is Soobin Park. Currently, I am studying at Seoul National University in Dream Together Program Global Sports Management. Now I am doing my thesis research on the study of sustainable utilization of Human Capital legacy after the Olympic Games: Focusing on the viewpoint of key stakeholders* in the operation of the PyeongChang 2018 Winter Olympic Games. The interview will take your time only one hour. Please remember that all your opinions and answers will be kept confidential or will be shared outside of this research. Your name will not show in any sources. I would like to inform you that there are no right or wrong answers to interview questions. I am looking for only your opinion on a certain topic for this research. If you will be not familiar with some meanings, please ask me. You can refrain from answering the question. Before I begin, I need your permission to do this interview's audio/video recording.</p> <p>*Key stakeholders: IOC, Government, POCOG(PyeongChang Organizing Committee for Olympic games)</p>	
Research Questions	Primary interview questions
Demographic	<ul style="list-style-type: none"> ✓ Age and Gender ✓ Education ✓ Job position and Working experience ✓ Olympic experience and dissertation topic
RQ1: What is the perception of human capital legacy from the viewpoint of the	<p>Could you explain from your experience (being part of the Olympics management), what is the main reason for countries to organize Olympic?</p> <p>In terms of personal/national aspects, what kind of benefits did you (your organization) gain from organizing the PyeongChang Olympic?</p> <p>What is the human capital legacy of the Olympics from your organization's point of</p>

stakeholder?	view or from your perspective?
	Why is important to develop the human capital legacies?
	Could you explain the current situation of human capital utilization?
RQ2: What was done to utilize human capital legacy by each stakeholder?	How do you think human capital legacy is being utilized?
	What practical measures did your organization take to utilize human capital legacy during and after the PyeongChang Olympics?
	In your opinion, who should be the real actors who can manage the plan of utilizing the Olympic human capital legacy?
	What problems did your organization face while promoting the human capital utilization task?
RQ3: How can human capital legacy be utilized sustainably?	What are the plans that can be managed for sustainable development and utilization of human capital legacies?
	What do you think should be systemically improved for the utilization of the human capital legacy?
	What kind of strategies should be done for successful implementation?
	Could you suggest practical ways for the development of human capital legacies utilization?
<p>Conclusion:</p> <p>Thank you very much for your opinion and time. After meeting I will contact you with transcription once more to final check that your opinion was correctly expressed. If you have additional opinion or thought regarding this topic, please contact me. (soobin.park@snu.ac.kr)</p> <p>Thank you so much, all the best.</p>	

국 문 초 록

2018 평창 동계올림픽 인적자본 유산의 지속적 활용: 주요 이해관계자의 관점에서

박수빈

글로벌스포츠매니지먼트 전공

체육교육과

서울대학교 대학원

개최도시는 메가스포츠이벤트를 개최 함으로서 올림픽 레거시를 통해 국가적, 사회적 기능 등을 한층 발전시키고 있다. 메가스포츠 운영은 ‘성공적인 운영 개최’ 라는 공동의 목표를 실현하기 위해, 개최도시를 비롯한 다양한 이해관계자들이 각기 다른 목적을 가지고 제한적인 기간 동안 집약적인 협업이 요구된다는 특징을 가지고있다. 특히, 이러한 대회운영에 직접 참여한 운영인력들이 얻은 경험·지식·기술이 레거시라고 정의되었음에도 불구하고 그의 중요성에 비해 관련 연구는 많지 않은 것이 현실이다.

본 연구는 인적자본유산의 지속적인 활용방안에 대한 고찰

을 목적으로 2018 평창 동계올림픽 운영에 참여한 주요 이해관계자들의 인적자본유산에 대한 관점을 비교하고, 이해관계자별 인적자본유산 활용 노력, 지속 가능한 인적자본유산 활용 전략을 연구과제로 삼아 반구조적 인터뷰를 통한 질적연구를 실시하였다.

인적자본유산의 활용을 위해서는, 전략적 계획을 수립하고, 거버넌스, 예산, 실질적 활용방안, 그리고 각 이해관계자들의 긴밀한 협력이 필요함을 확인했고, 조직위원회 해산 이후 관련 유관기관을 활용하여 인적자본유산 운용 사업을 추진하는 방안, 새로운 시스템을 구축하는 방안에 대해서도 논의하였다.

2018 평창 동계올림픽대회 사례를 바탕으로, 올림픽 운영 이해관계자들의 인적자본유산에 대한 관점, 노력, 한계, 활용방안에 대한 본 연구가 바탕이 되어 추후 국내·외 메가스포츠 유치 및 운영 시 성공적 레거시 활용에 기여하고, 보다 발전적인 향후 연구과제의 디딤돌이 되길 기대해 본다.

주요어: 올림픽, 메가스포츠, 2018 평창, 레거시, 인적자본유산

학 번: 2020-21568