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Factors Leading to Sport Success: The Case of Korean Fencing

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Abstract

Factors Leading to Sport Success:
The Case of Korean Fencing

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This study explores the process of the development of fencing in South Korea. The objectives include (i) To contextualize the history of the last decade of the Korean Fencing in order to understand its actual status. (ii) To recognize the policy changes of the Korean Fencing Federation that led to achieve international success. (iii) To identify the key factors that let the Korean Fencing Team achieve the top positions worldwide.

The study is done within a qualitative methodology and utilizes in-depth interviews and document analysis to gather the information. The information is coded taking the SPLISS model as a reference and divided into 10 topics: Financial Support, Structure and Organization, Foundation and Participation, Talent Identification and Development, Athletic and post-
career support, Training Facilities, Coach Development, (Inter)National Competition, Scientific Research and Cultural Influence.

The results show that not all the factor in the International sporting success theory are present in the case of Korean fencing. Only Financial Support, Structure and Organization, Athletic career, Scientific Research and Cultural Influence are identified as key factors for the success of Korean fencing. It is concluded that the increase of financial resources helped to fully support the athlete’s needs; most importantly it increased the international participation and the knowledge of the athletes. However it is revealed that the development of the sport is closely linked to the influence of Korean culture and that all the methods used are possible because of the reality of Korean society.

Keywords: Korean fencing, Success factors, International sporting success theory, Korean culture

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Chapter 1. Introduction

1.1. Background

Modern societies are built with a cultural background that defines manners, attitudes, ways of thinking and moral behaviors; they are constructed within certain parameters, depending on the history and the needs of each country. The factors change over time and vary on the development of humanity; the creation and understanding of new concepts complement and change everyday life.

Historically, sports have always been a big part of society, used not only as a form of enjoyment but also as a way to solve rivalry between groups and nations. The sport as we know it today is considered a symbol of peace: after the two world wars, the Olympic Games became the major event for nations to clash and demonstrate superiority over the others in a peaceful way.

The urge of nations to show supremacy is still currently a great issue; many countries create their sport policy aiming for excellence of their athletes in order to demonstrate power and authority. In many cases, governments have gone to extremes to get what they want. For example, after World War II, East European sport systems were dominated by clubs of the secret police and army forces (Riordan, 1991). Another clear example
is the case of East Germany in 1976, when the country manipulated athletes with hormones to enhance performance, which resulted in their dominance of Olympic Games for at least a decade (BBC, 2013). Nations provide the environment needed to get the best of their athletes and that does not always mean in the safest and most harmless conditions. Every four years countries clash to demonstrate who is the best and who can get the highest quantity of medals in all sports and all of them have their own way to prepare their teams.

South Korea is no different to any other country- its sport policy is directed to achieve the best of their athletes. Nevertheless, to understand and analyze the development of any sport in any country is essential to also take into consideration the political, economical and sociological background of the country to understand the decisions and procedures that Korea as a society has had to go through in order to get where it is today (Hong, 2011).

Korean history plays a big role in the structure of the modern sport system. The difficulties suffered by the Korean society after being under Japanese control (1910-1945) and the problems that arose from the polarization of capitalism and communism that occasioned Korean War (1953), were important factors to understand the urge of South Korea to build a strong national identity (Park, 2011).
1.2. Justification

South Korea has shown professionalism and good performance in the international sporting events in the last 25 years. Since the 1988 Olympics the country began to reap the results of their hard work, demonstrating the quality of its athletes as strong opponents in competitions, from Regional Championships to World Championships and Olympic Games.

South Korea started showing results in 1984 in Los Angeles Olympics, where the country achieved the 10th place. From then on, the country has placed within the top ten, with the 1988 Seoul Olympics as its greatest achievement taking home twelve gold medals and reaching fourth place (Olympic, 2015).

In this research it is important to introduce the history and basics of fencing in order to understand the game and how it is divided. Generally fencing is a very complex sport that includes concepts of martial arts and fighting. The match comprises of two players that struggle to touch the other without being touched. The significance of a match is not primarily about physical fitness but of a full mind control accompanied by a set of strategies and tactics.
The purpose of this study is to find the principal factors that led South Korea to be one of the top nations in a sport like fencing. The analysis focuses on understanding the history of fencing in South Korea while considering the economical, political and social background of the country. The aspects mentioned before are key elements needed to find the reasons that brought the Korean Fencing Team to be what it is today. In order to find the factors of success a number of theories and authors have been analyzed and in result the SPLISS model is the most adequate tool to find the key factors of Korean success in fencing. The analysis of the case with this model will specifically point out the factors with which other countries will be able to make a comparison to their own system. It will also work as an example for developing federations that want to improve their performance.

Furthermore, the model will be tested using the sport of fencing. According to the literature this model includes all key factors needed to succeed and it assures that to achieve it all the elements should be present in the system. There are other studies that reject that premise and this study will also work as a demonstration to show if the SPLISS model is accurate or not.
On the other hand, the documentation that was possible to find on the development of elite sport systems from western countries and China is vast, although in the case of South Korea the information available in English is limited. Also the amount of information that is possible to find about a specific sport is not always easy, to find information on popular sports like football or basketball is very common but when it comes to a sport like fencing the information is always limited nationally and internationally, which is why the realization of this study is significant to the country and the sport itself.

1.3. Temporal Delimitation

The temporal delimitation of this study will be considered from 2000 to the actual days, the year of start is defined considering the performance of the South Korean fencing team on the international environment. Data collection and document analysis will be from this period of time but historical background and political factors will be consider from an early basis to fully understand its development. Green and Houlihan (2008) stated that in order to obtain a real perspective of change it is necessary to compile at least 10 years of data.
1.4. Objectives

● To conceptualize the history and path of Korean Fencing in order to understand its trajectory and its actual status.

● To identify the key factors that let the Korean Fencing Team achieve the top positions worldwide.

1.5. Questions

● Which have been the determinant changes in the Korean Fencing Federation that led to a fast development of the sport?

● From the athlete and coach perspective what have been the changes in terms of training conditions and procedures?
Chapter 2. Literature Review

The purpose of this study is to understand the process of development of elite sport in Korea specifically in fencing. When investigating the process of development is essential to take into consideration the sport policy of the country to understand its objectives and purposes. Therefore is crucial to examine policy-making theories and process to provide a conceptual background to this study.

2.1. Conceptual Framework for Sport Development Analysis

According to Bosscher (2006) the success of an athlete or a team not only depends on its performance but also depends on the national’s systems capacity and the efficiency on utilizing the resources that it has to benefit elite sport. The allocation of the budget will depend on the objective of the nations as there are countries that look for international success so the most rational option would be to make a high–level investment overall sport system, but some nations don’t have that option what results on the satisfaction of the basic needs of the sport and other countries simply have different priorities.

It is known that countries invest large sums of money in elite sport in order to compete with other nations and be internationally renown. It is clear
that in every country the application of policies is different depending on the social context and that it doesn’t exist a perfect model of sport policy that lead to international success. The determinants of success in elite sport policy depend on different areas that can be compared on a trans-national basis. (Bosscher, De Knop, Van Bottenburg & Shibli, 2006).

Performance at top-level sport is a combination of genetic qualities with environmental and physical circumstances in which an individual develops (Seppänen, 1981). Genetics can defined why a person is tall, small or fat, but clearly it can’t explain why African-Americans perform better in athletics than people from Nigeria, or why people from Norway are more active skiers than people from Italy. Considering that the determinant factors for top-level success in sports are divided in three levels as it shows in figure 1.
1) Macro–level is constituted by the social and cultural context in which people live and interact, at this level characteristics like economic welfare, population, geography, climate variation, degree of urbanization, political and cultural system should be consider.

2) Meso-level consider public policies, sport policies and politics. This is the level where countries play a key role on the development of sport in long-term.

3) Micro-level consist on the athletes as individuals considering genetic qualities and their close environment.

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1 De Bosscher & De Knop, 2003
The three levels explained above are all correlated and it is impossible to think that one factor can be totally isolated from the other two, the grey line between the Macro-level and the Meso-level represent other indirect factors that can not be controlled but that have a huge effect on elite sport development, these are: education system, the private sector as an associate with sport, mass media (Bosscher, De Knop, Van Bottenburg & Shibli, 2006).

Considering all the elements in the Macro-level section there is the belief that there is an equal distribution of sporting talent in the world and that every nation has equal opportunities to develop or produce competitive athletes (Veerle De Bosscher, Bruno Heyndels, Paul De Knop, Maarten van Bottenburg et SimonShibli, 2008). But there are studies that disagree with that belief, according to Johnson & Ali (2000) as other researchers agree hat there are two main variables to explain sporting success, these are GDP and the size of the population, this can be stated as the explanation of number of participants affects the number of medals. These two variables consistently explain over the 50% of the reasons of success during the period of 1964-1980.

However after this period the aspects to be consider increased, those are: income equality, literacy and life expectance at birth constitute
dimensions of a country’s welfare that need to be analyzed. The Human Development Index (HDI) established by the United Nation can be taken as a variable to explain and estimate the amount of medals won during the Olympic Games (Den Butter & Van Der Tak, 1995).

Meso-level factors are almost completely determined by politics and post policy. This is the most important level in regard of the athletes; elite athletes will have a greater chance of success subjected to the effectiveness of policy and investment decisions made in elite sport. Taking into account all the various factors that determine elite sports success, meso-level factors are the only ones that can be influenced and changed (Bosscher, De Knop, Van Bottenburg & Shibli, 2006).

In the Micro-level of the framework studies principally focus on personal genetics qualities and some give information of the main responsibilities of sports policies in an athlete’s pathway to reach the top. At this level a number of studies (Conzelmann & Nagel, 2003; De Bosscher & De Knop, 2003 and Van Bottenburg, 2000) to understand the factors that influence the individual success of an athlete, positive or negative.

In the studies made by Gibbons (2003) Gould (2002) and Duffy (2001) the authors developed a micro-level perspective where external factor where not take into account. The principal and common results were
that the most important and necessary condition for success is the personal
dedication and motivation of the athlete. Other factors that can be
categorized are the athlete’s personal environment, which include variables
such as parents, partner and coach.

In order to be able to obtain success as an athlete the elements of
micro-level and meso-level of the conceptual framework are closely related.
The standards of the coach and the environment that are directly related to
other important factors as the financial support, structural support and
training opportunities, training facilities and competition. All those factors
are included in the policy perspective (Bosscher, De Knop, Van Bottenburg
& Shibli, 2006).

2.2. Meso-Level Analysis of Sporting Success

After understanding the three levels of the model of relationship
between determinant factors it is accurate to say that the one that causes a
major impact among the three is the meso-level, because of the close
relation that has with the micro-level at the point of success of an individual
athletes that looks for perfection, which can never be achieved without the
right conditions. Which is why is important to go deeper on the explanations
of the meso-level and the policy factor that are needed to consider.
Scholars have traditionally focused on three domains (a) policy formation including elite versus mass participation and an international comparative analysis of sport policies (Chalip, Johnson, & Stachura, 1996; Sam & Jackson, 2006); b) the influence of political ideologies on sport policy (Booth, 1995; Green, 2007) and; c) elite sport policy and the elusive question of how and what policies contribute to the sustained international success of elite athletes (De Bosscher, De Knop, van Bottenberg, & Shibli, 2006; Green & Oakley, 2001; Green & Houlihan, 2005; Houlihan & Green, 2008). There is a growing body of knowledge in relation to sports policy and how it has evolved in a variety of countries (Shilbury, Sotiriadou & Green, 2008).

National sports organizations worldwide spend large sums of money in the quest for superior sport performance. Many authors have tried to create a framework that permits them to categorize the areas that should be compared as drivers of international sporting success. Authors like Broom (1986) Büggel (1986) and Riordan (1989) among others did a lot of research on the former communist states to explain their success during the cold war and they stated 7 common characteristics of the elite sport systems to achieve international success, which are:
1. Recognition of physical education and sport within constitutional law
2. Early talent spotting through schools
3. High training frequency embedded in the school system
4. Training and qualification systems of professional coaches
5. Financial support programs
6. High priority of applied scientific research
7. A network of sports medicine.

These factors are defined in researches made during and after the 80’s, but in more recent years the amount of investigators has increased and other models have been created. Some of the latest researches from Green and Houlihan (2005) explore the process of elite sport policy in three countries (Canada, the United Kingdom and Australia) considering also three different sports (swimming, athletics and yachting), the similarities that they found among the nations offering an in-depth analysis principally focus in four areas of elite sport policy:

1. Development of elite level facilities.
2. Emergence of full-time athletes.
3. Developments in coaching, sport science and sport medicine.
4. Competition opportunities for elite level athletes.
Oakley and Green (2008) also studied the determinant factors to achieve success in sport, their study take in consideration the eastern and western countries in the time when many of them were trying to show power over the other. In order to elaborate the determinants they took the antecedents of the elite sport in a global matter considering the western countries turned out on the generation of a tentative uniform model of elite sport development that consider the next 10 items:

1. A clear understanding about the role of the different agencies involved and an effective communication network, which maintains the system.
2. Simplicity of administration through common sporting and political boundaries.
3. An effective system for the statistical identification and monitoring of the progress of talented and elite athletes.
4. Provision of sports services to create an excellence culture in which all members of the team (athletes, coaches, managers, scientists) can interact with one another in a formal and informal way.
5. Well structured competitive programs with ongoing international exposure.
6. Well developed and specific facilities with priority access for elite athletes.

7. The targeting of resources on a relatively small number of sports through identifying those that have a real chance of success at world level.

8. Comprehensive planning for each sports needs.

9. A recognition that excellence costs, with appropriate funding for infrastructure and people.

10. Lifestyle support and preparation for life after sport (Oakley & Green, 2008).

The countries that were taken in consideration to generate the items above were United States, Spain, France, Australia, Canada and United Kingdom. The analysis took in consideration the participation of the countries in the Olympic Games from Seoul 1988 until Sydney 2000 and it magnifies the different approaches of the western states providing evidence on the efficiency of the production of Olympic medals (Oakley & Green, 2008).

The precedent list of determinants was generated considering the political tension of the world during the cold war, however a contemporary
model has been created considering all the models stated previously and many other studies with different authors and perspectives.

De Bosscher, De Knop, Van Bottenburg & Shibli (2006) created the Sport Policy Factors that Lead to International Sporting Success (SPLISS) model which is a tool that was first used in 2009 with 6 nations. The SPLISS model identifies nine groups of policy areas or ‘pillars’ that contain all principles stated before. In total the pillars contain 31 sub-dimensions and 126 critical success factors that are consider key elements within pillars that are necessary to improve the elite sport success of a nation. In the SPLISS research the results were compared between the six nations to understand the differences of each nation and the reasons why all achieve international success (Brouwers, Sotiriadou, De Bosscher, 2014).
Figure 2. The nine pillars of sport policy factors influencing international success

As it is reflected in figure 2 the financial support (pillar 1) and the integrated approach to policy development (pillar 2) are the base of the process of development, these two factors would provide the means to create the necessary conditions to guaranty progress in any given sport or to succeed in an athletic career. Other studies have showed that Nations that invest more on elite sport can create the ideal environment for the athlete’s development, which at the same time will create more opportunities for

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2 De Bosscher, De Knop, Van Bottenburg & Shibli (2006)
them (De Bosscher, De Knop, Van Bottenburg & Shibli, 2006).

Considering the previous studies using the nine-pillar model, the conclusions on Pillar 1 evidence that there is a strong relationship between the money invested in elite sport and the success of elite sport.

The pillar 2 is a clear reflection of the role of the government. The most appropriate role for the government is to facilitate rather than delivering. The government compromises to provide funding but with strings attached in the form of agreed objectives that must be achieved. The communication among organizations must be strong, clear and without interest conflict. Full-time professional staff is a key characteristic of an elite system, it is necessary that a high-performance managers provide services to increase expertise in the National Governing Bodies (De Bosscher, Bingham and Shibli, 2008).

In the first two pillars is very important to count with a long-term policy planning that is at least 4 years. Many of the countries count with a four-year plan and others have a longer planning like 8 year looking forward to get results of a long term planning. An important step to succeed is that athletes and coaches get involved in order to regularly evaluate the procedure, before and after the implementation of the policy and planning. Like this is easier to measure the quality of policies and decisions, which
assures that the steps of the organization will not find a dead end. (De Bosscher, Bingham and Shibli, 2008).

The figure show that pillars three, four and five are in a logical progression. The sequence starts when an athlete is firstly introduce to the sporting activity (initiation phase). If the athlete is identified as talented, he or she may receive special attention so they can develop their potential (talent development phase or pillar four). The ones who stay practicing the sport will have the chance to perform in an international level (perfection phase or pillar 5).

This career line has a pyramid form, and it is made that way because many athletes drop out before achieving the top level, the pyramid theory is often criticized because not always talents are found in the sport’s participants base, but it is recognize by the author that the model is not perfect and there can always be exceptions. In a regular basis most of the athletes are found in the base at sport for all stage (De Bosscher, De Knop, Van Bottenburg & Shibli, 2006).

Pillar 3 Foundation and participation refers on the amount of people who participate in the sport. The findings previous studies show that this pillar does not have a high correlation with the elite sport success, but that depends on the intensity, competitiveness and the degree of organization in
sporting practice. This pillar not only focuses on such relation but also includes the number of organized sports clubs members and the national initiatives to improve the Quality of sports clubs (Sport Northern Ireland, 2014).

There are a lot of variations in the way physical educations is deliver to society depending on the country; this is translated in the amount of time that the kids spend doing physical activity, the qualifications of the teachers and the organization of extracurricular provisions. The reasons that countries have to include Physical Education in their curriculums are different than nurturing the elite sporting system. Previous studies found that elite athletes often participate in several sports simultaneously in their formative years, before specializing in a sport (De Bosscher, Bingham and Shibli, 2008).

2.2.1. Pillar 4

Young talented athletes are identified initially through their clubs and beginning to receive special attention when they begin high school. But the age in when athletes are selected or identified depends on the sport. Considering that clubs are the principal stakeholders on identifying talent and developing an athletic pathway, it should be a good idea for the nation to invest on the development of quality management in clubs. Only a few
countries rely on the opportunity that early talent identification gives them and the ones that invest on it might have a short-term competitive advantage (De Bosscher, Bingham and Shibli, 2008).

Pillar 4 is the most important step considering that the way an athlete is nurtured will increase the possibilities of success in his or her career. This pillar includes 2 important aspects, first talent identification and second talent development. In the first aspect is included talent recognition by a monitoring system that has the required criteria. Talent detection is specified on the recognition of talented athletes that are outside of the sport’s participant base. Talent scouting, which is the process undertaking to identify young athletes, and finally the selection process that is used to select talents for an specific purpose such as competition or training activities.

The second aspect of pillar 4 is Talent Development that refers to the period when the athletes become highly committed to their sport and train more to become specialized. In this stage the athletes will experience different transitions that are often accompanied by psychological, social and academic burdens and the cumulative effects of these can create distress, therefore a strong support structure at a micro level is required to create a climate in which the athlete can develop effectively. The athlete is the center
of attention in the elite sport development and all the pillars focus on what is best for its progress (Wylleman & Lavalle, 2003).

2.2.2. Pillar 5

Pillar 5 is where excellence is built. At this stage the athletes would already be fully committed with clear objectives to achieve. He/she are consider elite which means that they are in a stage of excellence where they will be attained to public recognition either at club level or at international level. The moment a junior athlete transits to the group of seniors he/she will start at the bottom end in level of athletic achievement. In this transition a vast number of athletes wont progress to the next age category. Is more likely that athletes who have great achievements during the junior stage remain in the elite sport as senior athletes. This transition is also determined by the structural organization of the competitive sport depending on the internal system of each country (Wylleman & Lavalle, 2003).

For example we can see the difference in the sport systems of two of the most important regions in the world of sport. In United States sport deeply depends on the education system. Athletes confront transition when they go from high school to college or universities and their future as athletes is totally linked on their performance during their collegiate life (Leonard, 1966). The other example is the European context where the sport
is organized and athletes go from the clubs to the regional and national teams (De Knop, Wylleman, Van Houcke, & Bollaert, 1999).

To have a better understanding of the concept of the athletic career and the importance of this pillar is important to consider: individual lifestyle support available to athletes and the coaching provided to them; and the career termination considered as a significant experience in sport, which will provide personal competence, social recognition and numerous social relationships that are the result of a life competition in the international level. Athletic retirement has become a typical area of study in several nations which has resulted in the application of numerous programs that support the athletes on the transition out of the sport (De Knop, Wylleman, Van Houcke, & Bollaert, 1999).

The next stages training facilities (pillar 6), the provision and development of coaches (pillar 7), national and international competition structures (pillar 8), and scientific research and sports medicine support (pillar 9), all require special attention both at the development level (sport for all) and the elite level, as noted in Green and Houlihan’s (2005) research.

This pillars are crucial at the developmental stage of the athlete because sufficient high quality facilities as sufficient qualified coaches at all levels with a good competition structure will allow young talented athletes
to develop their skills before and during the talent identification period. Once athletes perform in a high level and have a regular training the need of more specialized equipment, services as psychological and physical assistance, coaches with expertise and knowledge at elite level and opportunities to international competition are required to assure the progress of the athletes and at the same time international success (De Bosscher, De Knop, Van Bottenburg & Shibli, 2006).

2.2.3. Pillar 6

Pillar 6 looks directly to sport facilities and infrastructure. Oakley and Green (2001) identified the access to facilities with priority to elite athletes as a one of the common characteristics found in elite sport development systems. The term “facilities” includes not only the training venues, it also includes elite sport institutes that are closely linked with education and sport medicine/science facilities. Research has found that large institute networks that include public and private partnership are more likely to have a regional network; that can be beneficial for the athletes and teams in terms of reducing distances, traveling time of the athletes between home and training venues and reducing homesickness. The studies reveal that smaller nations might have a competitive advantage because athletes
don’t have to travel far for training or other necessary activities (De Bosscher, Bingham and Shibli, 2008).

2.2.4. Pillar 7

Pillar 7 focuses on the coach provision and coach developments. The access of opportunities to career development for high-level coaches is important to ensure the best quality training for the athletes. The lack of knowledge of the coaches can provoke long-term injuries to the athletes or slow down their improvement. A poor physical preparation for the specific sport can be fatal for the athlete sporting life.

Coaches need to be well prepared at all levels of training to be able to provide an adequate instruction for young talented athletes and high level athletes. In the elite level it is important coaches to be aware of the development of new gear that can boost the athlete’s performance or new rules that modified the stile of playing.

In pillar 7 the quality and quantity of coaches is analyzed. In one hand it evaluates the impact the policy regarding the development of elite coaches, the quality of training certification system and the way nations attract the best coaches. On the other hand it works as an evaluator of the individual living circumstances of the coaches. In many countries professional coaches are not taken seriously by the system, just like athletes
they need to invest a major amount of time to become a world leading coaches. It is possible to perceive in previous studies that many nations have poor development on this matter De Bosscher, V., Van Bottenburg, M., & Shibli, S., Van Bottenburg, M. (2015).

2.2.5. Pillar 8

Pillar 8 evaluates the National and International competitions. Both have been identified as important factors in athlete and sport development. The organization of continuous national competitions can enhance the athlete performance on the elite level (Crespo, Miley and Couraud, 2001).

In this pillar is possible to evaluate the national policy and support for the organization of the events. To find the opportunities that athletes have to compete. For example if the country has a fixed system of competitions and what is the quality of the competitions. To find out if the they follow the international standards or not, and if the athletes have sufficient opportunities to participate in high-level international events. This also includes how many international competitions does the country hosts and what is its strategy on this matter.

Pillar 9 centers on Scientific Research and Innovation. Even if this is the last pillar is one on t
Finally medicine (pillar 9), applied research is always a factor for nations that want to overcome is important to invest on research so that the athletes and coaches can count with a save and complete process. However other factor as host international events can also improve the stated model, a proactive approach to host events give the opportunities to other athletes to be part of the international arena which can be a influence to young talented players (De Bosscher, De Knop, Van Bottenburg & Shibli, 2006).

This nine-pillar model is a model that can be identified as an open-system that is in relation with the environment, which can be classified as an input, throughputs and outputs system (Chelladurai, 2001). In this case the Inputs would be consider as the pillars 1,2 because th is are the ones that provide the material and human resources needed. The throughputs are the pillars 3,4,5,6,7,8,9, because those contain the structures, processes and human interactions. Finally what would be consider as the outputs is the actual performance of the athletes and the number of achievements in an international level (Bingham & Shibli, 2008).

The SPLISS is being used to compare systems of different countries. The evidence of the comparable outcomes is being achieved by different methods in each nation. None of the results mean that they are right or wrong; it is simply the case of finding the right set of ingredients that work.
effectively in a given context. The variety of factors is specific to each nation depending on their cultural and geographic context and their path dependency ensures that the underpinning concepts are contingency theory and localization (De Bosscher, Bingham and Shibli, 2008).

From all the elements mentions above, there are some that are key and positively associated with success. But at various points there have been situations where some nations have proved some particular point and others just contradict it. This is an example that the results can be achieved in different ways and there is not special formula to achieve success, it will always depend on the context of the country (De Bosscher, Bingham and Shibli, 2008).

2.3. Korean Context

2.3.1. Korean History

Korea is a small country located in a peninsula in East Asia and it is bordered by China, Russia and the Korean Strait or Sea of Japan. Historically this territory has been a Geopolitically important for its neighbors who have attacked, occupied and influence the territory for their own interests. It is important to understand the reality and background of Korea in order to understand the actual status of the country.
Korea in a country that has been victim of violence in several occasions one of them is the Japanese Occupation from 1910-1945, which resulted in the detriment of the country and the quality of life of the society (Jeon, 2011). Another clear example is the Korean War after the liberation of the Japanese regime that resulted in the division of the country between north under Chinese influence and south under the United Stated influence, this being a result of the international context of the 2nd World War (Ohn, 2010).

The war lasted from 1951 to 1953 and it finally ended by the signing of the Armistice Agreement between the United States and the Soviet Union in 1953. The Korean War ended without peace treaty, which resulted in political tensions between North and South that still remain (Ohn, 2010).

The violence that the Korean society suffered is clearly reflected on their further organization and governance, their urge to demonstrate superiority

2.3.2. Sporting System in Korea

President Park’s (1961) regime characterized for the development of a strong nationalism turned the Korean education system from the root and sport became part of the public policy strategy, president Park had a strong sporting ideology that was reflected on his speeches:
The main task of our nation is territorial reunification, and one way of achieving this goal consists in strengthening our national power. Considering that national physical strength is a measurement of national power, it is one of the most vital factors in our national progress. The spirit of unity and cooperation, and the virtue of courage and patience through sports activities, will give an important impetus to the resolution of all problems (quoted in Kim S, 2000: 83).

The authoritarian government of Park concentrated on health, hygiene and physical education (PE) and in order to raise physical standards the hours of PE in schools were increased. The slogans of the government “Strong People make a Strong Nation” and “Physical Strength is National Power” clearly expressed its intention to use sport and physical education to reinforce nationalism and to leave behind the pain and desperation that Japan and the War with North Korea left (Park, 2011).

Given the special interest that the government had for sport there were 3 principal spheres to develop: Sport for All (SFA), School Sport and Elite Sport. All of the spheres are correlated between each other and play an important role on developing young elite athletes (Park, 2011).

All the political process starts in 1961 with president Park and his vision to develop the country with a public sport policy, this resulted on the creation of “The National Sports Promotion Law”

2.3.2.1. School Sport
The creation of the law resulted on the foundation of new schools that promoted the education of the people to contribute to economic growth establishing moral structures, values and norms in order to stimulate the knowledge of national history and like that build the new image of South Korea (Park, 2011).

Considering that the pursuit of sporting excellence was to attain success against Japan and North Korea, the “Athletic Specialist System” was perfect to achieve that objective, the purpose of the new system was to allocate scholarships on athletes who reached semi-final level on teams sports and on individual sports the first 3 places at National Athletics tournaments. The government was offering the opportunity to excellent student athletes to go to a high quality school regardless of the result of the academic performance. The system was very good on finding talented athletes, but the problem was that the athletes start spending excessive hours of intensive training trying to achieve sporting success disregarding academic achievements (Park, 2011).

In the 80’s Korean political system was in a difficult position after the Park regime people were expecting a democratic government but on the contrary society witnessed oppressive and authoritarian government, which at the end brought the creation of anti-government movements, and its
legitimacy was seriously threatened. In order to control and deflect the attention of the public on political problems, the authoritarian government of Chun Do Hwan used sporting events to make up things, what resulted on the bid for the 1988 Olympic Games.

The winning of the bid pressured the government to develop elite sport, which turned out on the creation of the Ministry of Sport in 1982 that was in charge of the creation and application of sport policies in the entire country. By this time the engagement of the government was clear with some of the slogans of president Chung like the prosperity of the nation through sport” and “the establishment of the nation on the basis of Sport” (Koh, 2005).

The development of school sport relied on the support of the potential elite athletes and team and not really on the general students, which caused a dual system that fragmented the structure because the development of the school-based sport clubs and the improvement of the general physical education program in schools were uncoordinated. It was difficult for normal students of the school to use gymnasiums or other sport areas because student-athletes were always there training. The government was interested on building an elite sport system through schools but not
really involved on the physical education policy for general students (Ohn, 2010).

Later on in 1990 with the regime of Roh Tae-Woo the Ministry of Sport was changed to the Ministry of Sport and youth and the school sport area was eliminated, which caused the system of school sport to freeze because neither the Ministry of Sport and Youth or the Ministry of education were responsible for the school sport policy. The confusion and uncertainty about the political responsibility of school sport generated the reduction of hours of physical education in middle and high schools and the elimination of the physical aptitude test to get into college in 1994. In this period other problems came along like the lack of sport facilities were children didn’t had a proper place to change cloths or a decent playground to run around (Ohn, 2010).

School sport decay in the 90’s but in the middle of 2000’s with the administration of Roh Mu.Hyun the situation start changing, the policy document “A Fundamental Direction of School sport” aimed to the development of school sport was published by the Ministry of Education and Human Resources Development in 2006. More recently in 2008 with the administration of president Lee Myung-Bak the document had slights changes and its main objectives are: The promotion of school sports clubs,
The reinforcement of educational administration for school-based athletic teams, the managerial faithfulness of the curriculum of PE, the introduction of a minimum academy ability system for student-athletes, and the expansion of school sports facilities. This plan has been consider to be a link to the other sectors of sport, SFA and elite sport (Ohn, 2010).

2.3.2.2. Sport For All

Sport for all includes two different concepts that are not really correlated, in terms of development it depends on what is the real objective of the country. It usually goes on a spectrum that varies from development through sport to development of sport. It is undisputed that the participation in sport is good and that contributes to build a healthy community physically and socially speaking. In development through sport becomes the tool to build social cohesion, bonding and capacity. And contrasting it with development of sport that concentrates on the need of sporting organizations to ensure sustainable development and future by the recruitment of participants that are willing to progress through the system and represent the sport in a Elite level (Shilbury, Sotiriadou & Green, 2008).

The case in Korea is closer to be a development of sport kind of way, the introduction of the concepts comes around 1970 with Park’s regime where a National Sport Deliberation committee part of the Korean Sport
Association (KSA) was created to promote national sport, physical education, sport facilities, and sport funds that later on it became Korea Sport Council. In 1976 the committee announced a five-year plan for mass participation on sport activities that included a National gymnastics program that emphasis on increasing the awareness of the necessity of sporting activities in order to not only promote health but also to improve labor productivity and efficiency (Park, 2011).

Policy development is an instrument that manipulates the environment to follow or to implicitly apply a certain idea. Policy process provides new insights, innovations and changes it follows fundamental questions, ends or purposes that at the end are only supported by ideas, which drive, shape and determine the pathway of society. It is constantly analyzed and questioned because it not only reflects public values but also demands of interest groups and it also shapes public expectations and standards (Sam, 2003).

The five year plan didn’t had the impact that was expected, people weren’t interested on spending time or money on sport activities because the economic and social situation of the population at that time wasn’t the best one, most individuals were concerned about improving their economic status (Park, 2011). The government of president Chun Doo-Huwan
promoted the establishment of the baseball and football professional leagues in the beginning of the 80’s and it was clearly to relieve political tension, as it was the host of two major international events. Even if in his period the socio-economic environment was difficult he is remembered and recognized as the president who has increased Korea’s image by the success of hosting these events, which clearly shows the effectiveness of his regime on managing sport events in a political matter. With this, the government handled the manifestation of the democratic movements that were rising against and it was easily ignored by the public because of the acclamation for the Asian Games and The Olympic Games (Koh, 2005).

In the mid 80’s South Korea evidenced a dramatic economic development presenting growth in GNI index from $1770 in 1984 to $3120 in 1988 (Cho, 2009). By 1996 the data increased to $12,197, which showed how international mega-events had the capacity to trigger economic effects. This rapid development brought the proliferation of the middle class and also the reduction of working hours, which increased leisure time. After the Asian games and the Olympic games Korean people started to show interest for the cultivation of sports, people recognized their leisure time as an active consumption of their free time rather than a passive rest from producing,
therefore they were identifying on participating on healthy fitness activities what showed the need of sport-for-all space at a national level (Koh, 2005).

After the games SFA had a concrete and clear plan, in 1993 the first civilian government published the 5 Year National Sport Promotion Plan (Ministry of Culture and Sport, 1993), which indicated the goal of the government on increasing the participation rate over 50% by 1997. Later on with Kim Dae-Jung administration (1998-2003) the government posed 5 main directions for SFA through a new plan established by the Ministry of Culture and Tourism in 1998, this plan contained (i) creating a friendly environment for community-centered sports activity; (ii) expanding the sports programs for underprivileged classes such as handicapped people, working classes and low-classes; (iii) upbringing of SFA instructors; (iv) scientific support for the care of national physical fitness; and (v) encouraging private-led SFA initiatives. (Ministry of Culture and Tourism, 2003). Kim’s government was aware of the importance of grass-root level and despite the decrees of the budget in 1999 they keep promoting the SFA.

Table 1. Change of Sport for All participation: Surveyed every three years

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<td>Participation (%)</td>
<td>19.4</td>
<td>27.2</td>
<td>34.7</td>
<td>37.6</td>
<td>38.8</td>
<td>33.4</td>
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3 Ministry of Culture and Tourism (2005, 2006)
The rate of participation in sport participation for two or three years has a clear increase over the years with a slight decrease in 2000 because of the financial crisis (Ministry of Culture, 2005). With the new administration of Roh Mu-Hyun (2003-2008) a new 5 year Promotion Plan was announced following the same path it has been having and aiming to raise SFA participation above 50% (Ministry of Culture and Tourism, 2003).

2.3.2.3. Elite Sport

In terms of elite sport the “National Sports Promotion Law” worked as a strategy to develop high performance sport. Even if the purpose of the law was to promote the sport in general it gave priority to elite sport. The law was intended to assure the development of elite-sport in order to give Koreans a sense of national superiority through the success of the athletes.

Green and Houlihan (2005) demonstrated that the poor performance of Australia at the 1976 Montreal Olympics served as an incentive to increase national funding and support. The same happened to South Korea with Tokyo Olympics in 1964 where the country had 165 athletes and only got 3 medals. Min, Kwan-Sik, head of the Korean national team asserted that “Sport could not exist without science and facilities”.
That lesson reflected on the creation of a 5 Year Plan for the revival of the sport. Its objectives included: “(i) to improve the quality of the coach/instructor; (ii) to construct sport facilities; (iii) to conduct effective and rational training; (iv) to make sport provision more scientific and (v) to identify hidden sporting talent”. One of the main intentions of this plan was to increase the pride of Korea, and for that the main challenge was to place the country in the Top ten in every Olympic Games (Lee H, 2003).

After the Korean Amateur Sport Association (KASA) was created in 1968 the focus on elite sport development was clear. The government started to prioritize the international sporting success, which was clearly evidenced with the increment of the budget on the years when the important International events occurred. Another clear evidence was the “Lifelong Pension System” announced by KASA in 1974 for medal winners in international sport events. The system was designed to encourage the high performance athletes.

Table 2. Points evaluation for medal winners “lifelong pension”
The creation of the Ministry of Sport in 1982 made a huge impact on the development of elite sport. The inauguration of Roh Tae Woo as the

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4 Korea Sport Promotion Foundation (KSPO) http://www.kspo.or.kr/
Minister of Sport revived the talent identification policy that was ended for lack of budget. The KASA instructed the Korean Institute of Sport Science to establish the talent identification criteria, 4395 students among 100,000 were selected in the first year.

However the project didn’t have the desired outcome due to insufficient parental enthusiasm and the lack of professional coaching in schools. During 1980 to 1993 a number of specialized sport schools were established to nurture and promote talented athletes in selected sports such as athletics, judo, shooting, gymnastics and swimming. These schools played a key role to develop excellent athletes in unpopular sports.

Later on in the 80’s the Korea Institute of Sport Science was designated as the first Class Athlete Coaches Training Institute. Previous to that the Armed Forced Athletic Corps (called Sangmu) was established, which was a critical factor for elite sport development due to the special situation in which every Korean man must undertake military service. The sport development system of this time was reinforced by the impact of hosting the 1986 Seoul Asian Games and the 1988 Seoul Olympic Games.

After the performance of the Olympic Games in 1988 South Korea came into a political shift. The Government was no longer a military regime but a civilian government, which resulted in the reduction of budgeting
during the 90’s. Not only because of that but also because of the economic crisis that the country was going through. The IMF intervention and the social discomfort decremented the elite sport development. Private enterprises that had economic problems cut off their sport teams, especially unpopular sports like athletics and gymnastics.

The financial crisis provoke that the burden to promote and develop the sport was transferred to municipal governments and local sport councils. While private businesses were terminating their teams, municipal governments were committed to create a lot of small-scale sport teams in pursuit of the sporting success in the National events.

The financial crisis and the new steps of the civil Korean government resulted in the sustained decrease of support to elite sport. This was clearly reflected on the Sydney Games on 2000 where the Korean team got the 12th place in the medal ranking. With the crisis and the disorganization of sport the situation seemed hopeless. In response to that the government introduced the selection and concentration system with the publication of “Vision 21: A Mid- and Long term Plan for New Athletic Performance Improvement” (2005-2014). Which would reestablish the development of elite sport.

2.3.3 Korean Fencing History
The process of fencing in South Korea starts in 1940 with the foundation of the Jeseon Fencing Federation and its first president Yun Chi-young. Ten years later the in 1950 the Federation is renamed to Korean Fencing Federation. During these years the evolution of the sport is slow because of all the internal problems occurring in Korea by that time (KFF, 2014).

Is not until the 60’s that the Federation starts having an international approach and becomes a member of The International Fencing Federation in 1960. Continuing its trajectory becoming a member of the Korean Olympic Committee in 1961. The first time that the country participates in the Olympic cycle is at the 18th Olympic Games in Tokyo in 1964. The Federation becomes member of the Fencing Confederation of Asia in 1972 (KFF, 2014).

During the 80’s the sport of fencing doesn’t really has any impact at international level demonstrating the slow development of the sport. In 1998 fencing experience the support of the major company Daewoo and hosts a FIE Grand Prix competition for the first time in Asia, consequently with the first World Championship in Seoul and in Asia in 1999 (KFF, 2014).

After the country’s recovery of the crisis the country starts hosting international events more frequently, hosts the World Youth Fencing

Finally in 2012 the hard work stars giving results with a bunch of medals the firsts gold 2 Olympic medals in Women’s Individual Sabre with Kim Ji-Yeon and in Men’s Team Sabre, 1 silver in Epee Team Women’s and 3 bronze medals in Individual Men’s Foil with Choi Byungchul, Individual Men’s Epee and in Men’s Team Foil (KFF, 2014).

In 2013 the Korean team gets two bronze medals in the World Championship in Budapest with Kim Jiyeon in Women’s Individual Sabre. In 2014 a great amount of achievements come along for the Korean team getting 4 silver medals in the World championship in Kazan and taking control of the Incheon Asia Games with 8 gold medals, 6 silver medals and 3 bronze (KFF, 2014).
Chapter 3. Methodology

3.1. Research Method

According to Corbin and Strauss (2009) the qualitative research is a form of research designed to collect, process and interpret data in which the researcher becomes part of the research as much as the participant and the data provided. Therefore the researcher should focus on the context and understand the point of view of the participant in the stated situation. Crewswell (2009) stated that to understand the participants it is important to analyze or observe them in their natural environment.

Considering the previous statements in order to understand the real context of fencing in Korea and find out the reasons of the international success of the sport in a short period of time as well as to understand the athletes and coaches perspectives on the process of development and the achievements they have made so far, it is appropriate to conduct a qualitative research. Many researches on sport development in Korea have been done but regarding to the specific sport of fencing there is no such study, so it is important to use a qualitative approach in order to be able to understand the personal perspectives of the participants in a field that hasn’t been studied.
3.2. Research Procedure

The study focuses on understanding the process that the sport has to be where it is today. In order to achieve that objective a historical research was done to understand the political, social and economical context that drove the process of sports in Korea in a general basis. Literature review and historical background starts with a rapid explanation of the Korean sporting system and later on a deeper analysis provides the researcher a total complete picture of the context. Consequently the history of Korean fencing is included with a temporal delimitation considered from the first international result until the most recent data available.

The next step was to create the questions that will be asked to the participants, the questions are open-ended questions and they look for the necessary information to understand the situation of the participant, its context, its perceptions and feelings.

3.3. Research Participants

To select the participants the researcher created a specific profile that provides meaningful information to the study. The study is looking for the reasons of the fast development of the sport that has led the country to international success, considering that to answer that question a number of
different approaches were needed. It was important to consider different perspectives to fully understand the process; the different profiles are:

- **Administrative staff**: So the researcher is able to comprehend the process from an organizational point of view, where future projection and procedures are set in order to achieve the objectives proposed.

- **Coaches**: They will provide the researcher a technical understanding of the situation. This will refer to styles of training and coaching, the researcher will try to find the changes that the team has had to go through in terms of health and if there is any on physical science.

- **Athletes**: The athlete point of view will give the researcher the perception of the real impact of the previous given information. The athletes are the main characters of the situation, they are the ones who suffer the consequences of the decisions made by the other two subjects and they are the most vulnerable to changes, which provides a deep and sensible understanding of the process.

- **Referee**: To get a referee point of view will provide information regarding the changes that the Korean Fencing team is subjected to in order to meet international requirements that are constantly updated.
Considering the four sections stated previously is necessary to set a suitable profile to each section. In a general basis the all the participants must be involved in the sport for at least five years, since that assures the researcher that the subject has the necessary background to answer the questions and provide meaningful information.

In a specifically basis the administrative staff of the Federation has to be in a position where is able to provide information and where is demanded to understand the organizational and planning process so is possible to understand the current path and the projection. Be able to find participants that are able to provide the information needed.

In the case of the coaches it would be better to select a coach that is or has been part of the national team or any high division since they understand the protocol and the formal procedures that the athletes are exposed to and they also know the challenges and opportunities that the athletes go through.

In the case of athletes it will be consider the time that they have been involved in the sport, which means that the longest the better and of course the level of achievements that they have. It is important to consider an athlete that is or has been part of the national team because they are the ones who have physically been in the process and the ones that have suffer the
impact of any of the decisions taken in the administrative and/or technical field.

In the referee section is important to select a person who has experience in the international field so that he/she can provide information considering the relation between the international and national environment. Like that it will be feasible to understand the changes or process that the Korean Fencing system had in order to adjust to the international requirements.

3.4. Data collection

To understand the different perspective of the sport the researcher approached the Federation in a friendly and a respectful way so that they were wiling to help. To do that the researcher assisted to the international competition that be held the 28 and 29 of march of 2015, the classification of the competition was a grand prix in the modality of sabre. By this way the researcher started approaching the federation and other subjects that were important to the research.

After analyzing the environment and the system the researcher looked for suitable participants that met the requirements of the previous stated profile. The number of participants depended on the conditions of the environment and the willingness of the subjects to cooperate, but it was
important to obtain at least one participant per group. The researcher used all the possible options in order to get the information needed.

3.5. Semi-structured Interviews

Semi-structured interview is a technique utilized in qualitative research to collect data that is related to experiences, opinions, knowledge and beliefs of the participants in a situation where the participant fell free to express his/her point of view, this is also known as “a conversational purpose” (Lincoln & Guba, 1985). It is preferable if the interview takes place in an environment where the subject feels comfortable and familiar with the topic of conversation so it’s easier to engage a personal and sensitive atmosphere where the person can get more involved with its memories and experiences.

The researcher count with a recorder and a journal; both elements will help to successfully collect all the data needed. The recorder will permit the researcher catch all the words and maybe the feelings of the participants and the journal will work as a support tool to add notes, ideas or thoughts of the researcher along the interview. The length of the interview should be less than an hour.

The questionnaires for the athletes, administrative staff and coaches are related with the SPLISS model and take in consideration all the factors
included in the model. The questions were formulated following the
requirements of the pillars of SPLISS and adapted to the context of Korean
fencing.

3.6. Data Analysis

The data that was gathered during the interview process must be
cohercnt and make sense when explaining what was just uncovered, should
be compile in sections or groups of information by themes or codes. (Turner,
2010). According to Kvale (2007) these themes or codes are consistent
phrases, expressions or ideas that were common among the participants.

The data will be transcript and organized to facilitate its analysis, the
researcher will read through all data to be interpreted using the chosen
theoretical background to finally start writing the results and conclusions.

3.7. Methodological Limitations

Considering that the investigation is being held in South Korean and
the researcher has no ability to communicate in Korean language. The
limitations at the moment to collect and analyze the data will be notable
which might result in not so accurate results. The researcher will need
special assistance from a third party to be able to complete the investigation,
that meaning a translator who can fully express in Korean and English.
Chapter 4. Findings

This chapter is intended to show and discuss the results obtained in the semi-structured interviews conducted with 5 interviewees and in the analysis of official documents from the federation. The findings are reported in the importance of the SPLISS pillars that were explained previously. The findings also include other observations not included in the theme selection of the SPLISS model, but are relevant to understand the case of Korean fencing.

4.1. Financial Support

Financial support is the base of every sporting system in order for it to succeed. In Korea, many companies fund sports in order to increase popularity or improve their image among the public. The case of fencing is no different. Since the early 2000’s, fencing has been financed by some of the biggest companies in Korea. The president of the Korean Fencing federation, Kil Seung Son, part of the Daewoo financial group, was the person who had a personal interest in developing the sport and supported the federation. After that, Mr. Kil changed from Daewoo to SK group.

From 2003, Fencing Federation officially asked the SK group to fund the sport and considering that that the SK group was known for funding unpopular sports, fencing was the perfect candidate. From that year
on, SK group has invested a great quantity of money, which has helped to fully develop the sport and achieve the latest, highest results.

Not only the company supports the sport; the government also provides some budget, however it is very limited.

Well the government pays the allowance and SK covers the entire expenses for competitions, prize money for winning and equipment. (Participant A)

The budget that the federation gets is used only for the elite athletes. Considering this, there are 5 groups that are considered elite: Cadet, Junior, Under 23, National Junior and Senior Team. From these categories only the National team athletes are the ones who get fully sponsored by the federation.

The local government and the parents of the athletes finance the grassroots level of the sport. In the case of Korea, that is the middle schools and high schools. In some cases, the schools give some equipment to the students or pay the fee for some competitions, but mostly all the support comes from the parents.

Apart from the schools and the national team, there are other teams that are called city teams. Local governments, public companies and private companies sponsor these teams; the athletes that belong to these are
professional players and they get paid monthly. The salary of the athlete depends on the skill level they have.

4.2. Structure and Organization

The structure of the Korean fencing system is divided in two: the Amateur and the Elite. The former is created with private clubs, where the general public can go and learn the sport. The federation has almost no contact with the clubs; the only thing it does is to organize an official competition, the SK tournament, where all the amateur athletes and all the people who don’t belong to any Elite team can participate and some prizes are given for the first positions.

The second system is the elite, in which the athletes are built as professional players. The pathway of development starts in middle school teams, then they go to high school teams, then to university teams and finally to professional teams called city teams, where the athletes get paid. The National Team is selected from the city teams depending on the ranking; the players that get the best positions in the national competition get to be part of the national team.

The thing is that in Korea the system is divided between the elite and the amateur. The amateur have several clubs and normal people can go to these clubs to learn fencing, and the other part is the elite system where the athletes start their education in middle school and then they can go to professional
teams in universities or in the provinces. (Participant B)

The Korean Fencing Federation has a full time manager and staff. In terms of structure, the Federation is hierarchically organized. The president is located at the top of the pyramid and supported by the Assembly, the board of directors and the secretary general. Under that are the Commissions that discuss the important matters in different aspects of the sport and come up with solutions. The solutions, recommendations or requests go through the board of directors who make the decisions that have to be approved by the president.

The Korean Fencing Federation is structured by commissions and they discuss the problems or different issues. When they come to a solution, they submit it to the directors and then the directors decide and then the president gives the final decision. (Participant B)

The Federation has a number of commissions that represent the different sections of the sport that need attention to fully achieve its objectives and develop the sport. According to the literature of the SPLISS model, this pillar is necessary to analyze the interaction between all the parts of the structure and the representation of all stakeholders that are related to the sport in different ways.
Figure 3. Structure of the Korean Fencing Federation

In the previous graph it is possible to appreciate that the Federation does not include all the stakeholders. For example, the athletes are not represented as a commission, which means that they don’t include the athletes’ perspective in the matters that should be considered. The institutions can benefit from the athletes’ representation in different ways,
such as improve decision making by providing a fresh perspective, straight
from the field of play as well as the ability to communicate directly with the
athletes and collect feedback and new ideas. They can also provide
credibility in the case of being scrutinized (IOC, 2014).

Interviewer: Do you have any communication with
the federation?
Athlete: No, no really we don’t have any contact
everything goes through our coaches. (Participant D)
The communication within the system is very important to consider.

The level of communication defines how much the federation is including
and considering all the stakeholders of the organization.

The Federation has a coach commission, but not all
the coaches are included there. (Participant A)
Beside the communication and representation, it is necessary to
include the planning process. According to the documents, the federation
has an eight-year plan that is linked to the national plan. This plan is called
“UP-GRADE K-FENCING 2020” (Appendix 2) It includes the objectives
and the processes in which the athletes will work from 2009 until the Tokyo
Olympics in 2020. It also includes an analysis of Korea in the international
spectrum, identifying its weaknesses and making possible to find viable
solutions using all the available resources.
4.3. Sport Participation

Sport participation in Korea starts in middle school, which means it has a limited number of students that can participate in the sport. The children that decide to join a sport team in school are already thinking and deciding the path that they want in life. It they go for sports this means that they want to become professional athletes and works like that in all sports.

Children who decide to be student athletes demonstrate interest in sport from early ages and many of them have tried other sports before going for a specific sport. In the majority of times, children have no knowledge about the sport and they start because of external influences, this being parents, friends or coaches. According to the Federation’s information, 80% of the children join fencing because of their parents influence (Appendix 2).

Because I was a hockey player, I was in a club and my coach told me that I should go to a school with hockey, so I said: ok I have to think about this, but my friends say no, no, don’t do it because it doesn’t pay so much. So, I told my coach I didn’t want to do it. And then I just changed and went to fencing. (Participant D)

Well I’ve always liked to do exercise, and in my school there was a fencing team, so my professor asked me if I wanted to join, and I did. (Participant E)

In terms of hours of participation, the Korean system runs intensive programs from the beginning. The children make the decision to go the sport pathway, they understand that from that moment on most of their time
will be invested in practicing the sport. Children undergo several hours of training in a very tight schedule.

![Number of Fencing Athletes](image)

**Figure 4. Number of Fencing Athletes**

The above graph shows the amount of fencers that Korea had from 2004 until 2013. The low increment in participation over the years is clear, except the years after the Olympic games. Korea got its first Olympic medal in fencing on 2008 with Nam Hyunhee in female foil category. Then the other major increment is in 2013 after the South Korea’s success in London Olympics with 6 medals, 2 gold, 1 silver and 3 bronzes. This clearly shows how Korean society is motored by success and how the acquisition of national stars helps to develop the sport.

Before there were only like three, SNU, Yonsei, Korea University club competitions. And then from

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6 Korean Fencing Federation, 2015
2012, there were a growing number of clubs. Olympic Fencing Club, Easy, Gangnam. So many. And then later that expanded to other regions as well. Now, the club team athlete number is almost as much as elite athletes (Participant C). By the statement of participant C it is possible to perceive that participation has increased not only at the elite level but also at the amateur level, demonstrating how important role models are for Korean society.

4.4. Talent Identification and Development

The program of talent identification in Korea done in the different levels of development are:

1. Middle school (7th-9th) for the Youth National Team.
2. High school (10th-11th) Junior National Team.
3. University (Freshmen) National Team Runner up.

The top four to six students from each group in each specialty are chosen to attend a special session of training twice a year for 20 days with 6 coaches and trainers. The athletes selected on the Talent Identification Program will form the National Teams of each category: Cadet (13-17), Junior (17-20) and Under 23.

The coach commission chooses the different coaches that will attend to the Talent Identification program as well as the venue where it will take place. The Government covers all the expenses of the National Identification Programs.
Talented athletes only receive this service- there is no information provided in terms of health, nutrition or lifestyle. The small amount of knowledge that they get comes from the coach’s experience.

Student athletes in Korea follow a tight schedule, they are subject to intense hours of training during their entire academic period.

My school is the best on the zone and we used to train 7 hours a day from 2:30 to 9:30. (Participant D)

I used to go earlier at 7:00 to train by myself for one hour and then I would train with the team from 8:00 to 9:00. After that I would have class from 9:00 to 12:30 then I would train with the team from 2:30 to 5:30 and then at night I would train by myself again. (Participant E)

The students concentrate on training, an average of 7 hours a day, spending more time doing physical activities than studying. Considering how strict the system of Korea is, it is possible to see the limitation on increasing participation. School teams have a limited number of spaces that depends on the number of students and facilities available.

The development pathway of Korean fencers is laid out clearly from middle school until city teams. The amount of hours of training and the process itself is made to identify and create elite and professional athletes. There is no space for normal students to try the sport and play for fun or as a hobby.
4.5. Athletic Career and Post Athletic Support

As it was mentioned in previous pillars, the athletes in Korea have a set pathway of development from middle school. When they get to university the only support they get is professional medical support provided by the university. Considering the previous experience of the athlete, it is expected that he/she have their weaknesses and strengths already identified. Coaches advise their athletes on their training but at the end it is the decision of the athletes to work on their weaknesses outside the fencing training.

In the city and company teams the athletes get paid for training which means that they have to maintain their physical condition and improve if they want to get to the top in the ranking. If they get services from the teams or not depends on the funding that the local governments or companies provide.

The athletes that get to be part of the city teams are professionals who get paid; the amount of money they get depends on their abilities, skills and popularity. It is important to remember that the local governments and private companies fund the city teams which means that local businesses can increase their image by being associated to an Olympic champion.

For example Nam Hyunhee the first female medalist got bronze in 2008 Olympics. She belongs to the
Seoul Nam city team. The team pays her like 6,000,000 won a month. And the national team pays her 1,500,000 won and some other bonus from the city for being in the A team. She is the first in the yearly payroll, from there it starts going down.” (Participant A)

The athletes who get to be in the National Team get full support from the federation. They get a monthly stipend that is provided by the government and are concentrated to train full time (4 times a day) at the Taeneung National Training Center where they get all their needs covered, including food and housing. In the case of the university student athletes, they get daily transportation from the center to their universities.

They also get full professional physical and psychological services, a full monthly checkup to assure that they are in the best conditions for the sport. If the athlete shows any type of decrease in their physical levels the specialized trainers prescribe a different training in order to re-establish the numbers. The athletes also receive specialized psychological and physical training before and during the season; for example, they undergo intense training to overcome fear and be mentally stronger to be in total control of their emotions during the combats; they also get to go specialized training camps offered in other parts of the world.

In the after career aspect neither the government nor the federation provide any assistance. After they retire the only choice they have is to work
in the sports field as a fencing coach if they are lucky enough to find a place for them or they have to become physical education teachers. The current popularity of fencing has provoked the appearance of many private clubs, which probably belong to former professional fencers. According to Participant B, “there has been an increase of at least 10 clubs since the London Olympics”.

4.6. Training Facilities

Local governments provide the facilities for the city teams and financially support the schools that are specialized in sport. In the case of the National Team they are concentrated in The National Training Center that is fully supported by the national government.

In all cases athletes have full-time access to the facilities where they train. The standard of the facility depends totally on the investment of local governments; as for the case of the National Team they have high quality training facilities with all they need 24 hours a day.

4.7. Coach provision and Coach Development

Korea has a systematized procedure to qualify the coaches and assure that all of them are aware of the rules and the latest changes. Every year the coaches take a seminar that finishes with an exam that provides an official certification. This seminar is provided to all coaches and referees;
once they have the official certification the federation sends some of them to participate in international competitions so they can get the experience that they need.

The official certification is obligatory for all the coaches that have athletes in the competition system. If the coach doesn’t have their certificate, he/she can’t get in to the zone of play with their athletes. In this way, the federation assures that everything is being taught at all stages of the development pathway within the international standards. Also, they assure that the athletes will have knowledge of the international rules.

When I was on the national team in 1991 and we would go to these international tournaments, but we didn’t have anyone who was a referee. And because we look different, as we are Asians, there were disadvantages. And we didn’t know the international rules. They were different. And when we thought we won, it wasn’t like that. (Participant C)

With the statement of participant C it is possible to detect a clear change in the Korean coaching system. The lack of information and preparation of the work force can be the reason of future failure; the knowledge of the international field is necessary to survive in it. The changes of the system happened principally because of the increment in the budget and the opportunities to go to international competitions and get experience as a nation.
The graph shows the amount of coaches from 2005 to 2013. It is possible to perceive a great increment between 2006 and 2009, probably because of the increase of awareness of the sport after the first Olympic medal in Beijing with Nam Hyunhee. It is important to point out that the amount of coaches has had a sustained increase through the years, which means that the sport has been in constant development for the past 10 years. The majority of athletes have had at least 4 different coaches during their career.

When the budget of the federation increased it was possible to hire international coaches that imparted new techniques and ways of training.

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7 Korean Fencing Federation, 2015
However, there was a problem- Korean fencers couldn’t keep up with European techniques because of the differences of the development pathways. Nowadays Korea doesn’t need to have international coaches, because of their rapid development they are capable to satisfy their internal demand.

The process to choose the National Team’s coach start when the Federation publishes a notification on the website, then the coaches apply and the Coaches commission analyses the candidates and the final verdict is given by the president. The commission’s analysis is based on the coach’s career, experience, knowledge of the rules, leadership and language skills.

In Korea, to be a coach of a professional team in any of the stages is well seen and recognized. The complexity of the knowledge that a person needs to be a professional team’s coach is well acknowledged by the government and the society.

4.8. (Inter)national Competitions

The competition pillar is important to analyze the amount of national competitions organized and the number of international competitions attended. The amount of competitions that an athlete attends gives them the opportunity to strive and maintain consistency at the elite level.
The Korean competition circuit doesn’t provide the athletes enough competitions compared to other countries. Korean athletes participate in 15 competitions a year while in France the range is around 120 and in Russia exceeds 600 competitions. (Appendix 2)

The small amount of competitions doesn’t provide the opportunity to a lot of athletes to be selected to be part of the national team; usually the National Team is selected in only one of the competitions, the importance of this competition gives too much pressure to the athletes and doesn’t allow possible stars to shine in the sport.

Interviewer: Do you think you have enough competitions?
Participant D: Yeah I think is enough. But I think we should have more competitions to select who is going out.

In Korea the most important competition is the National Festival where all the provinces get to confront each other and prove their superiority among the others. “It is like the Korean Olympic Games, that’s how important it is.” (Participant C).

Right now Korea attends all international competitions possible; this wasn’t possible before the funding of SK and the president’s personal concern on supporting the athletes to attend at least 10 competitions per year. The more competitions the athlete goes to, the more experience they get. “It
doesn’t matter how good they are, they will always lose the first time they attend an international competition.” (Participant C)

In the sphere of hosting international competitions, Korea is the number one country in Asia. They have hosted the Asian Games five times since 2001 and Gwangju Universiade 2015. Besides that Korea hosts a Grand Prix competition every year in March where athletes from all around the world attend. They organized the Junior and Cadet World Championship in 2007 and they will host it again in 2019.

4.9. Scientific Research and Innovation

Scientific research in Korea is under the Korea Sport Promotion Foundation, an organization that does scientific research in all sports. According to participant B who has been in the field of fencing over 22 years, scientific research started after the Seoul Olympics in 1988. Even if this is true there are no results after to corroborate that.

Korean fencing is known for their speed in the footwork. () According to all participants Korean fencing concentrated a lot of its work on building faster athletes on the piste. Before Korea started to bring international coaches the athletes weren’t capable of adjusting to all the techniques that the new coaches were teaching them. This was because in other countries the athletes start learning in elementary school while in
Korea they start in middle school and the athletes don’t have the sensitivity necessary. Korea needed to find out its strong point to start working on it.

So the only way that Korean athletes could win at international competitions is by learning speed and changing some techniques. That’s why it has been a success lately. (Participant C)

The fencing experts started with serious research in footwork in 2006 but from 2010 they have been working on it more and more, until it finally started to bring results.

For the UP-GRADE K-FENCING 2020 plan to work successfully SK is doing a lot of preparation, they are doing surveys and videotaping French fencers in order to analyze training methods. The Korean team has a video director who analyzes the movements and that’s where SK invests the most.

So, now in Korea, if you fence for three to five years, you can get a medal in international competition. This is because the trainers and researchers found the know-how of learning the techniques best for Korean athletes. So it’s like the Korean Style. (Participant C)

Korea has invested so much in scientific research that it looks like they have built their own style and they are recognized more and more internationally. After the 2012 London Olympics Korea is under the microscope of other countries.
4.10. Cultural Influence

It is important to consider the cultural factor of the scenario. There is a lot of information that can be applied to the SPLISS model, but there is also some other information that doesn’t fit in the model. The culture of Korea permits them to develop in a different way. The long training schedule at such a young age is something that should be considered. Korea has only recently become a developed country so fencing is quite new in comparison to other countries where fencing has been a part of the system for decades.

The development path of the athlete is also something very odd, considering that before there was no space for people that didn’t want to be elite athletes to practice and learn the sport. That is also a fact that gives the Korean fencers an opportunity to have fast development; they have to consciously commit to the sport at a very young age. The hierarchical system in which Korean society is built makes it possible to push the athletes at their maximum in a short period of time, something that in other countries is rare to see.
Chapter 5. Discussion

The findings of this study show the development of fencing in Korea in the past 15 years and are organized in 9 different topics taking the SPLISS model as a reference. There is one extra topic that is not considered in the model, cultural influence, which is crucial to understand the methods of the Korean system.

According to the administrative staff, coaches and referees, the most important change in Korean fencing has been the increase of funding; because of it, the possibilities to travel and bring new knowledge to develop Korean fencing were possible. As is confirmed in the study using the SPLISS model, we can establish that the best predictor of outputs is the amount of funding allocated to elite sport (De Bosscher, De Knop, Van Bottenburg & Shibli, 2006). The information of the budget of the federation was not available, but according to other factors it is possible to perceive the increment of investment, probably more so after the first results in 2008 and 2012. The increment in scientific research and the amount of competitions that the Korean athletes attend now triples the number from 12 years back, which could not be possible without an increase of financial resources.

The organizational performance is defined as “the ability to acquire and accurately organize human, financial and physical resources to achieve
the goals of the organization” (Madella et al., 2005). This definition points out the importance of how the resources are used and structured, and not only if they are available. The findings in the case of Korean fencing show the significance of the president of the federation who is directly linked with the SK Company. The coaches interviewed shared their perception of the personal commitment of the president with the sport. SK is well recognized for supporting unpopular sports, which means that the development of such sports will increase the image and popularity of the financial group. This is associated with Houlihan’s (2005) framework of policy analysis that states that the relationship between the State’s infrastructure and the non-state interests is caused by the interaction of beliefs, interests and ideas. This is translated as policy-taking, which denotes the pursuit of a set of policy objectives that are shaped to pursue other objectives.

It is evident that the success of Korean fencing is directly linked to the amount of investment, but not only that, the Korean fencing team has been able to take alien information and use it to its benefit. According to the findings, the time that older athletes have invested has helped to create a base of knowledge that is helping younger athletes to develop faster. To build a base of knowledgeable athletes takes a lot of time and resources, but finally for Korea it has given results.
The Korean system is also a key factor to achieve success; the elite development pathway of Korean athletes is built from middle school to city teams where they can get paid and actually become professional players, which differs from the systems in other countries. Following the traditional sport development pyramid of foundation, participation, performance and excellence the athlete has to move up by passing through performance decision points, which allows the individual to leave, stay or reenter depending on their aspirations over time (Sotiriadou, Shilbury, Quick, 2008). The pyramidal model is totally applicable to the Korean case, with the exception that the system does not allow the athletes to reenter. The environment obligates the athlete to make the decision of professionalism from low levels, not permitting a horizontal transition where the athlete has a leisure option. Korean culture and society are based on a hard-working and competitive system in which the athletes have to undergo intensive training.

From the beginning the athletes put their studies as a secondary matter, which becomes a problem after the athletes retire. The lack of options for retired athletes is a well-known issue among Korean society and is something that stands out in comparison to Western countries where the
system is not professionalized and does not allow the athletes to make a living out of fencing.

In terms of participation (Pillar 3), the rigid system limits the amount of participants in comparison with other countries (Appendix 2). Korea has a very small amount of athletes participating, since the sport is not promoted in a sport for all bases, and is made only for elite players. The same justification can be used for the amount of clubs and the number of competitions. The pyramid pathway in the Korean case has a top-down effect: the resources are located at the top and assert that successful performance will increase participation at the bottom of the pyramid (Green, 2005), which explains the increase of athletes in the periods after the Olympics, 2008 and 2012 when Korean fencing achieved international awareness. However, the inflexible system does not allow the fast increase of participation, unless there is an increase in schools that include fencing in their sport programs.

Nevertheless, in the amateur pathway of development, the top-down concept works perfectly. The increase in popularity of the sport in Korean society has resulted in the proliferation of private clubs and number of memberships.
In terms of competition, Sotiriadou et al. (2014) noted that the access to quality national and international competitions is a factor that directly influences international success. Korea has an alarmingly low number of national competitions in comparison to other developed countries. This takes away the opportunity to shine for many athletes. The experience in competition is what makes the athlete stronger, the fact that the National Team is selected only by a small number of competitions does not create the environment to develop a stronger base of athletes. Only the limited number of athletes that are selected to participate in international competitions are the ones who benefit from the external knowledge and the preferential treatment from the federation, so it is more likely for them to stay at the top for a longer time. Athletes themselves suggested that the change of the selection process would be beneficial. The increase of internal competition could be the step to spread the knowledge of the National Team’s members and develop a higher quality base of athletes; in this way, the possibilities to stay in the National team for a long time will be reduced and other athletes will have the opportunity to participate in international competitions.

Scientific research is also one of the key factors for the international success of the Korean fencing team. A lot of time and money has been invested to find out which elements the Korean athletes can improve to gain
a competitive advantage. From 2006 scientific research gained importance, which resulted in the findings of the disadvantages of the Korean anatomy in comparison with athletes from Western countries in terms of size. It was also understood that the introduction of the athlete to the sport at the age of fifteen was too late, considering that in other countries the athlete starts their formation around the age of seven. This is a cultural difference that explains why it was so difficult for Korean athletes to get used to foreigner coaches. The techniques and methods of training are different when the athlete starts at a young age, which also denotes the importance of developing national high quality coaches and why currently there are no more foreigner coaches working with the Korean team.

Thanks to the scientific research and the development of coaches Korean fencing was able to find those key elements that it had been looking for. Presently Korean fencing focuses on the physical characteristics of the athlete that can be improved no matter the age. Their training has a special focus on developing speed and footwork from the earliest stage. Because of this strategy Korea has been recognized as one of the fastest teams in international competitions, which has clearly proven to be successful considering the latest results.
From now on the priority of Korea is the Tokyo 2020 Olympics and they are using all their resources to keep improving and benchmarking, from videotaping analysis to regular checkups of their athletes; Korea is clearly focused on succeeding from now on. In the strategic plan, Rio Olympics functions as a preparation for the main objective, Tokyo 2020.

Considering the later findings it is possible to see that the SPLISS model might be a guideline to understand the international sporting success of the countries, but it is evident that all the factors contemplated to imply success are not always needed. However, the cultural factor is crucial to understand the process of each country. De Bosscher, De Knop and van Bottenburg (2009) argue that the cultural background of the country must be taken into account when making policy. The cultural patterns are fundamental in sport policy and it is what may drive elite success. In the specific case of Korean fencing it is needed to comprehend the low level of participation and competitions as well as to understand that the post-career problems come from a flaw in the system.

Sotiriadou et al. (2014) call attention to the overlap between the different pillars in the SPLISS model and consider the difficulty to understand the pillars as separate elements. In this case study it is possible to see the interrelationship between the individual factors, but to understand
the international success of Korean Fencing it is important to grasp the whole picture, from the cultural background to the specific methods of training.
Chapter 6. Conclusions

The aim of this study was to define the principal factors for the international success of Korean fencing by understanding its development in the past decade. According to the findings, the main factor that led Korea to achieve international success is the increase of investment that has been allocated to specific elements. These elements include the increase of participation in international competitions, which permitted the creation of a base of experienced athletes and coaches that help to develop the new young talents.

The preparation of coaches and referees following the international standards helped South Korea to increase the value of the internal workforce, which made the presence of foreigner coaches unnecessary. The teamwork between the knowledgeable coaches and the scientific research team came up with the creation of specialized training that satisfy the needs of Korean athletes. The specialized training includes psychological methods to reinforce the self-esteem of the athletes, so that they can have a better management of the situations when they are under pressure. The physical training involves methods that exploit the characteristics of Korean athletes to gain competitive advantage.
The factors considered in the SPLISS model are present in the Korean case but at different scales. The most important ones are Financial Support, Organization and Structure, Athletic Support, Coaching Development and Scientific Research. The other ones act as secondary factors, although Foundation and Participation (Pillar 3) is influenced by the cultural factor and (Inter)national Competition (Pillar 8) is very weak at the national level.

As is recognized by Sotiriadou et al. (2014), the SPLISS model hinders the analysis of the environment when it is separated in different elements. It is also noted that to maintain awareness of the interrelation of the factors is fundamental to understand the system, as well as to be aware of the cultural background that helps to understand certain facts and changes of the specific case. In the organizational spectrum Chelladurai (2001) states that “organizations are open systems in that they influence and are influenced by the social, cultural, and economic conditions of the community in which they operate”. Considering this, it is recommendable to include a tenth factor where cultural influence is considered in order to fully analyze and understand any other case.

The international success of Korean fencing is the result of a clear eight-year strategic planning, in which all the resources were managed
effectively. Certainly South Korea is now being watched and analyzed by its rivals and will have to keep up with the hard work to maintain its positions in the next years.
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Appendix 1

INPUT

Pillar 1A: Financial support

1.1 There is sufficient financial support for sport
   CSF1: Total national expenditure on sport (cash terms) (incl. elite sport)
   CSF2: Total national expenditure on sport per head of population
   CSF3: Total government expenditure on sport (as a proportion of total Government expenditure)
   CSF4: Increase / decrease in total national expenditure on sport during the last 4 years

1.2 There is sufficient financial support for elite sport
   CSF5: National expenditure on elite sport (cash terms)
   CSF6: National expenditure on elite sport per head of population
   CSF7: National expenditure on elite sport as a proportion of total national expenditure on sport
   CSF8: Increase / decrease in national expenditure on elite sport during the last 4 years

Pillar 1B: Financial support for National sport organisations (NSOs)

1.3 National sport organisations (NSOs) receive sufficient financial support for sport
   CSF1: Total financial support for NSOs for sport (cash terms)
   CSF2: Total financial support for NSOs for sport per head of population
   CSF3: Total financial support for NSOs for sport: average funding per recognised governing body

1.4 National sport organisations (NSOs) receive sufficient financial support for elite sport
   CSF4: Financial support for NSOs for elite sport (cash terms)
   CSF5: Financial support for NSOs for elite sport: average funding per recognised elite sport governing body

Remark: sport specific analysis is required to analyse whether National sport organisations have sufficient budget for sport and elite sport development in their sport

THROUGHPUT

Pillar 2: Structure and organisation of sports policies: an integrated approach to policy development

2.1 There is strong coordination of all agencies in elite sport, with a clear task description and no overlap of different tasks
   CSF1: There is an (one) organisation at national level with specific responsibility only for elite sport (as a core task) and not sport for all
   CSF2: Coordination of financial inputs (horizontal direction): expenditure on elite sport at the national
level is centrally recorded and coordinated, so that no overlap takes place
CSF3: Coordination of financial inputs (vertical direction): expenditure on elite sport regional/district level, if there is any of major importance it is nationally recorded and coordinated
CSF4: Elite sport is recognised as a valuable political task: there is a (cabinet) minister and a ministry of sport

2.2 There is simplicity of administration*

CSF5: Ranking score on the research of Public sector efficiency (European Central Bank, 2003) (and other existing studies, if any are available)

2.3 Resources are targeted on relatively few sports through identifying those that have a real chance of success at world level

CSF6: Number of NSOs that are subsidised for elite sport purposes

2.4 Effective communication: there is an unbroken line up through all levels of sport agencies*

CSF7: NSOs receive information and support services (other than financial) on different aspects to develop their management capability
CSF8&9: Athletes and coaches receive information from national sport organisations on different aspects
CSF10: Athletes and coaches are represented within the national sport organisations
CSF11-12: satisfaction of athletes and coaches on information received from NSOs
CSF13-14: satisfaction of athletes and coaches on involvement in policy from NSOs

* Oakley and Green (2001) and Clumpner (1994)

Pillar 3: Sport participation

3.1 Children get opportunities to participate in sport at school, during Physical education or extra curricular

Physical Education (PE) in Nursery education
CSF1: there is a national statutory amount of minimum time for PE
CSF2: there is a sufficiently high weekly average amount of time for PE (in minutes per week)

Physical Education (PE) and extracurricular school sport in primary education
CSF3: there is a national statutory amount of minimum time for PE
CSF4: there is a sufficiently high weekly average amount of time PE (in minutes per week)
CSF5: regular (at least 2 times/month) extra curricular school sport competitions (extra mural) are organised

Physical Education (PE) and extracurricular school sport in secondary education
CSF6: there is a national statutory amount of minimum time PE
CSF7: there is a sufficiently weekly average amount of time PE (in minutes per week)
CSF8: regular (at least 2 times/month) extra curricular school sport competitions (extra mural) are organised

3.2 There is a high general sport participation rate
CSF9: participation in sport at least once a week (non-organised and organised)
CSF10: Organised participation in sport: percentage of the population participating in a sports or
outdoor club
CSF11: Organised participation in sport: total number of sport club members and per inhabitant
CSF12: Organised participation in sport: percentage of population participating in a sports or outdoor club
CSF13: Sport organisation: total number of registered sport clubs

3.3 Total quality management in sport clubs is encouraged
CSF14: Total quality management projects in sport clubs are promoted

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**Pillar 4: Talent identification and development system**

4.1 There is an effective system for the detection of young talent, so that the maximum number of potential top level athletes are reached at the right time (age)\(^b\)

CSF1: There is a systematic talent selection process (non sport specific)

\(^b\) Other CSF need to be analysed at a sport specific level

4.2 Young talents receive career support for the combination of sports development and academic study during secondary education (12-16/18 years) (for sports where such system is required)

CSF2: There is a nationally coordinated system in secondary education (so that student/athletes do not depend on individual school initiatives), measured by:

- There is a legal framework whereby young talents have their elite sport status recognised contractually by the ministry or national sports & education administration
- The system has been in existence sufficiently long so as to be stable and all current athletes have been able to make use of it
- This support system covers all ages (12-18 years), depending on the specific requirements of each sport
- This system provides a nationally determined range of high quality services to athletes including:
  - extra free time during the school day to train
  - technical sport support (from federation/clubs/top level experts)
  - assistance in organising their academic studies (study coordinator)
  - flexible exam arrangements
  - flexible arrangements for absence from school for international competitions
- Government or national sport agencies recognise the costs for this elite sport and study system and provide the necessary financial support

4.3 Young talents receive career support for the combination of sports development and academic study during higher education (16/18\(^e\) and older)

CSF3: There is a nationally coordinated system in higher education (so that student/athletes do not depend on individual college/university initiatives), measured by:

- For this combined elite sport/academic study system, financial support is provided for:
  - the coordination of study support by the colleges/universities
  - the provision of technical and sport science support by National sport organisations (NSOs) or sport clubs
study support costs for the young athletes
The system has been in existence sufficiently long so as to be stable and all current athletes have been able to make use of it
The system has been in existence sufficiently long so as to be stable and all current athletes have been able to make use of it
CSF4-5: Nature of extra attention young athletes received from NSOs and clubs (more frequent training, training in separate groups, strength & condition training, financial reimbursement, equipment, transport, participation in international competition, mental coaches, dietician,…)
CSF6: NSOs receive information and support services to develop talent programmes

4.4 Athletes receive sufficient support and extra attention during the talent development stage
CSF7-8: satisfaction of athletes and coaches on the support provided
CSF9-10: satisfaction of athletes with extra attention received from club and NSO
CSF11: age at which athletes received extra attention is considered appropriate

Most of these criteria should be analysed on a sport by sport basis
The age depends on the study systems in countries; e.g. in UK, secondary education is until the age of 16, whereas this is 18 in Belgium

Pillar 5: Athletic and post career support

5.1 The individual living circumstances of athletes are good so that they can concentrate on their sport fulltime
CSF1: Athletes receive direct financial support (monthly wage) to become a fulltime athletes
CSF2-3: Athletes’ monthly income (total gross annual income) in general and income from their sport activities is sufficient (compared to other nations)
CSF4: The employer is supportive towards the athlete’s career

5.2 There is a coordinated support programme for elite athletes
CSF5-6: There is a coordinated support programme for elite athletes (apart from financial support) including:
  - career coaching, legal advice, media training,…
  - coaching support (specialist coaches)
  - training and competition support (training facilities, training camps)
  - sports science support (strength & conditioning, nutrition, mental coaching)
  - sports medicine support (medical specialists, physiotherapists,…)
CSF7: athletes are satisfied with the support package that they receive

5.3 Athletes can make use of a high level of coaches
CSF7-10: athletes are satisfied on the level of their sport specific coaches, (para)medical coaches and social & business support

5.4 Athletes can receive post career support and are adequately prepared for life after their sports career
CSF11: Government/national sports bodies offer a post career support programme to prepare and assist for life after sports, such as:
  - financial support (during the first years) after their sports career
advice and personal assistance (during the first years) to find a suitable job after their sports career

**Pillar 6: Training facilities**

6.1 CSF1: There is a network of high quality national/regional elite sports centre(s)/facilities, where athletes can train under good conditions at any point in the day, including:
   - an administrative headquarters
   - hotel facilities/sleeping opportunities
   - a close link with sports medics
   - a close link with sports scientists / cooperation with universities
   - a close link with the education of younger athletes
   Athletes can get priority access in certain regular sport facilities at any moment of the day
   Time spent on travelling for athletes and coaches is reduced to a minimum

6.2 National coordination plan: sport facilities and elite sport facilities throughout the country are recorded and the needs of athletes and coaches are known and clearly mapped out
   CSF2: There is a database of sport for all and elite sport facilities and their characteristics

6.3 CSF3-4: Athletes and coaches spend less than 10 hours a week or 2 hours a day on travelling for training

6.4 CSF5-10: athletes and coaches are satisfied on the quality and availability of training facilities and the cooperation of technical staff

**Pillar 7: Coaching provision and coach development**

7.1 There is a sufficient number of well trained and experienced elite coaches in the country
   CSF1: There exists a database of coaches & elite coaches
   CSF2-4: Most elite coaches are qualified: they have undertaken governing body training or other, refresher training, training specifically in elite sport and/or a training course at international level
   CSF5: Coaches have experience at the elite level in their own career as an athlete

7.2 Coaches get sufficient opportunities to develop their training career to become a world class elite coach
   CSF6: There is a well developed coach education system, nationally coordinated, including an elite coach qualification, regular refresher courses and support for NSOs
   CSF7: There are several services (such as coach platform, information exchange opportunities) and resources supporting the continuous professional development of coaches
   CSF8-10: coaches are satisfied on the frequency and quality of NSO-coach development programmes and refresher courses

7.3 Coaches individual living circumstances are sufficient for them to become professional
   CSF11: Coaches general monthly income (total gross annual income) plus income from their sport activities is sufficient (compared to other nations)
   CSF12: coaches receive reimbursements from NSOs and club
   CSF13: Employers take account of the training needs of elite coaches
CSF14: Coaches have a written work contract for training activities
CSF15: Coaches are able to spend enough time with their athletes and upcoming talents

7.4 The status of coaches: the job of coaches is recognised as valuable

CSF16-17: The job of a coach is recognised in the country and the career prospects are high
CSF18: The job of a coach is contractually recognised and protected

Pillar 8: (Inter)national competition

8.1 There is a national strategy for the organisation of international events in the country

CSF1: NSOs can receive funding to bid for and stage major international sports events
CSF2: There is national coordination and long-term planning of event organisation and funding
CSF3: NSOs can receive assistance with, and advice on, the organisation of major international sports events

8.2 Athletes have sufficient opportunity to take part in international competitions

CSF4-5: Athletes can take part in international competitions on a regular basis, according to their needs

8.3 The national competition structure provides opportunities for young talent and established athletes to compete regularly at a high level

CSF6-7: Athletes have sufficient opportunity to take part in high level national competitions

Pillar 9: Scientific research

9.1 Elite sport development is supported by scientific research at all levels

CSF1: A national research centre oversees the scientific schematic of elite sport
CSF2: Scientific research is centrally co-ordinated and there is a network to communicate and disseminate scientific information to coaches/governing bodies
CSF3: There is strong co-operation between universities and research centres concerning applied research and this is nationally co-ordinated.
CSF4: There are specific subsidies for scientific research and innovation in elite sport.

CSF5: coaches receive scientific information from NSOs
OUTPUT: international sporting success

There are various methods by which the outputs of an elite athlete production system can be measured, for example:

- absolute medals or top eight places during Olympic Games, World Championships, European Championships or other international events that are aimed to compete in elite sport
- market share of nations (medal points as a proportion of total number of medal points to be won)
- relative success, controlling for population and wealth
- the number of athletes qualifying to take part in elite championships
- the number of athletes qualifying to contest the final of an event
- an improved elite sport climate in the country
Appendix 2
3. 기존사업 분석 프로세스

1. 현황 분석

 중장기 플랜

- 2009년부터 추진중인 펼칭 중장기계획은 런던 올림픽 성과에 기여
- 따라서 큰 폭은 유지하되, 성향변화에 따른 사업계획 보완이 바람직
1. 현황 분석

2. 45개 과제의 재편 필요성

- 4개 부문 45개 과제는 장기계획 하에 추진 중이지만 "선택과 집중" 이 요구됨

3. 현상분석

4. 한국 펜싱의 재편

- 2009년 이후, 펜싱저변은 큰 변화가 없었음
- 펜싱 독점의 매력포인트를 강조하는 훈련서념 변화가 필요함
- 펜싱 교습 프로그램 확장으로 펜싱을 접할 기회 확대 필요

- 펜싱은 "귀족" "고금"을 연상시킴
  - 대표선수 다수 응답
- 펜싱을 시작하게 된 동기로는 선생님의 권유(87%), 부모님의 권유(8%) 등이 대다수
- "올림픽 금메달이 훈련증가의 주요 원인" - 펜싱클럽 운영자
- "고교, 대학, 간 테니스" - 대표팀 코치 스태프
- "예외적 시 헤트을 목적으로 부모들이 권유" - 펜싱 관계자
### 현황 분석
#### 경쟁국가 펜싱 선수정리

*자질 있는 대표선수가 나오 확률은 5년 전과 큰 변동사항 없음*
*“자질 있는 선수 찾아 잘 키운” 결과인 런던 개기는 ‘리오’도 동일할 것으로 판단됨*
*“선발방식과 훈련방식 Up-Grade” 필요*

<table>
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<th>국가</th>
<th>휘마등록선수수 (리어스타취득자)</th>
<th>휘마등록 팀수</th>
<th>연간 국내대회</th>
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</tr>
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</table>
1. 현황 분석

6. 국가별 세계 대회 성적 현황 (2009~2013)

- 전통적으로 유럽의 강세 속에 한국과 중국이 따라가고 있는 상황
- 2012년 이후, 러시아, 우크라이나의 성장이 뚜렷하게 나타남

이탈리아, 러시아, 독일, 프랑스, 미국, 우크라이나, 일본, 중국, 한국

1. 랭킹: 세계선수권, 올림픽, 월드컵
2. 점수 환산 기준
   - 세계선수권, 올림픽: 금 10점, 은 5점, 동 3점
   - 월드컵: 1위 10점

[그림: 그래프와 텍스트]
## Appendix 3

### Coaches and Administrative Staff

<table>
<thead>
<tr>
<th>Pillars</th>
<th>Questions</th>
</tr>
</thead>
</table>
| **Introductory Questions** | - What is your Current position?  
- How many years have you been coaching?  
- Were you an athlete? Did you compete? At what level?  
- How did you become a Coach? What was the process that you went through? |
| **Pillar 1** | - Why does SK finance fencing so much? |
| **Pillar 2** | - How does the structure of fencing work in Korea?  
- Does the federation manage a strong communication with the clubs?  
- Does the federation have a Strategic Plan? What is the length of this plan?  
- Who makes the decisions for the elite sport?  
- Are policies evaluated with athletes and coaches?  
- Does the federation have a full-time manager?  
- Is there an international cooperation strategy for training? |
| **Pillar 3** | - Document Analysis |
| **Pillar 4** | - What is the talent identification process?  
- Does the federation receive special funding for talent identification?  
- Do the athletes have any kind of contractual duty with the federation?  
- Is there a national coordinated system that facilitates the combination of elite sport and academic studies? |
| **Pillar 5** | - What is the monthly income of the athletes on the National Team? Who pays it?  
- What is the development pathway that athletes have to go through to be on the National Team?  
- Where does the national team train? |
<table>
<thead>
<tr>
<th>Pillar 6</th>
<th>Do elite athletes have fulltime access to high-level training facilities?</th>
</tr>
</thead>
</table>
| Pillar 7 | What is the system to choose the coaches of the national team?  
Do coaches receive any kind of seminars or certified courses regularly?  
Are coaches part of the decision-making process in the organization?  
Has the federation hired international coaches before?  
Is that different now? |
| Pillar 8 | What is the structure of the competition system?  
How many competitions are held in a year?  
How many international competitions does Korea attend?  
What is the main competition for the Korean team?  
Korea has hosted many international competitions in the recent years. Has that had an impact on performance?  
Does the federation plan to host any further competitions? |
| Pillar 9 | Since when does Korea do scientific research in fencing?  
What have been the results? |
Appendix 4

Athletes Questionnaire

1. When did you start fencing?
2. Why did you choose fencing?
3. Where did you start training?
4. How many hours did you use to train when you started?
5. When did you decide to it professionally?
6. How much time do you spend on your current training?
7. How much time do spend training % and how much studying %?
8. The way of training has change over the years?
   a. If yes, what? How?
9. How many coaches have you had?
   a. Have they had different styles of training?
   b. What is the skill you think you have developed the most with fencing?
10. Have you trained outside Korea?
    a. Is the training different in other countries?
    b. Do you how much time (hours) athletes in other countries train?
11. How does the selection process for the national team works?
12. Has the process change over the years?
13. Do you receive information from the federation about training plans, nutrition, doping, scientific research, policy changes?
14. Does the federation have an athlete’s commission?
15. Does some athletes receive extra training or coaching? Why?
16. Do you access to training facilities all the time?
17. What are the differences between being and not being in the National team?
18. If you get to the national team what is different?
19. Do you get any kind of payment or allowance for being in the National Team?
20. How often do you compete nationally?
21. Have you been in international competitions?
22. Do you get financial support when you compete internationally?
23. Do you think there are enough competitions hosted by Korea?
24. Do you know about scientific research for fencing made in Korea?
25. What is your biggest achievement?
26. If you win the first place in an international competition what do you get from the government?
   a. Has it always been like that?
27. Right now Korea is one of the toughest opponents at an international level, why do you think is that?
28. Do you think fencing has developed a lot in the past 10 years? Why?
국문초록

스포츠 성공 요인 분석: 한국 펜싱 사례연구

Paola Olmedo
글로벌스포츠매니지먼트 전공
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한국펜싱의 성공사례는 최근 올림픽에서 시작되었고 역사를 비 교적 짧기 때문에 국내 펜싱이 성장해온 과정을 연구하였다. 연구목적
은 (1) 지난 10년간 한국 펜싱의 역사 맥락과 관련하여 국내펜싱의 실태
를 이해하는데 있다. (2) 한국펜싱이 국제무대에서 좋은 성과와 결과를
달성할 수 있게 기여한 한국펜싱협회의 정책변화를 알아보았다. (3) 대
한민국 펜싱 팀이 세계적으로 상위권에 도달 할 수 있게 만든 주요한
요인들을 확인했다.

본 연구는 심층 인터뷰와 자료분석을 통해 한국펜싱의 성공 요
인을 파악하기 위한 질적 연구이다. 이와 같은 질적 연구 방법을 통해
SPLISS (Sport Policy Factors that Lead to International Sporting Success)
모델을 기반으로 코딩을 하였으며 주제는 다음과 같이 10개로 나누어진다: 재정적 원조, 구조와 조직, 재단과 참여, 재능발굴과 발달, 선수와은퇴후의 지원, 훈련시설, 교육발달, 국가경쟁, 과학연구와 문화적 영향.

분석 결과 한국펜싱은 국제 스포츠 성공이론의 (International sporting success theory) 모든 요인들을 포함하지는 않은 점을 알 수 있다. 한국펜싱의 성공요인들을 살펴본 결과 재정적 원조, 구조와 조직, 선수생활, 그리고 과학연구와 문화적 영향이 존재한다는 것을 알 수 있다. 도출된 결과로는 재정적 원조가 잘 이루어져서 선수들의 필요를 충족시켰다; 가장 중요한 것은 국제적인 참가와 선수들의 지식을 증가시켰다. 그러나, 스포츠 발전은 SPLISS 모델 이외에 한국문화 영향에 밀접한 관계를 도출하였으며 한국사회 현실 때문에 많은 방법들이 가능하였다.

주요어: 한국펜싱, 성공요인, 국제 스포츠 성공이론, 한국문화
학번: 2014-25196